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# TEXES

## Art EC-12 (178)

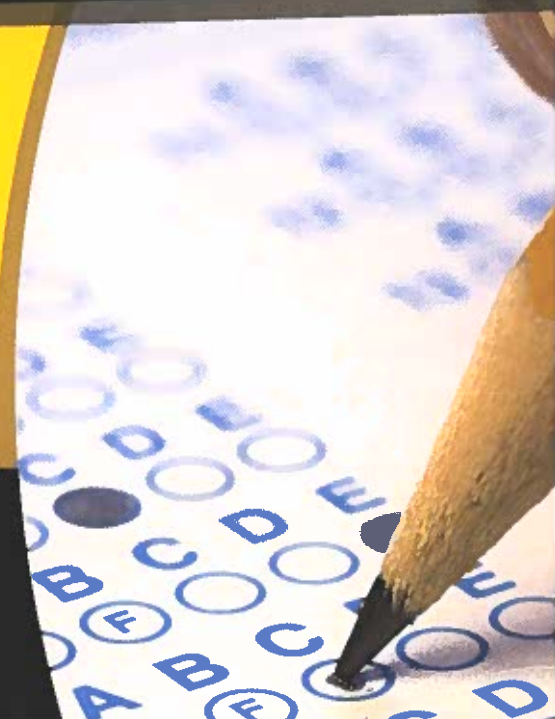
# SECRETS

## Study Guide

Your Key to Exam Success

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TEXES Test Review for the  
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# **TEXES**

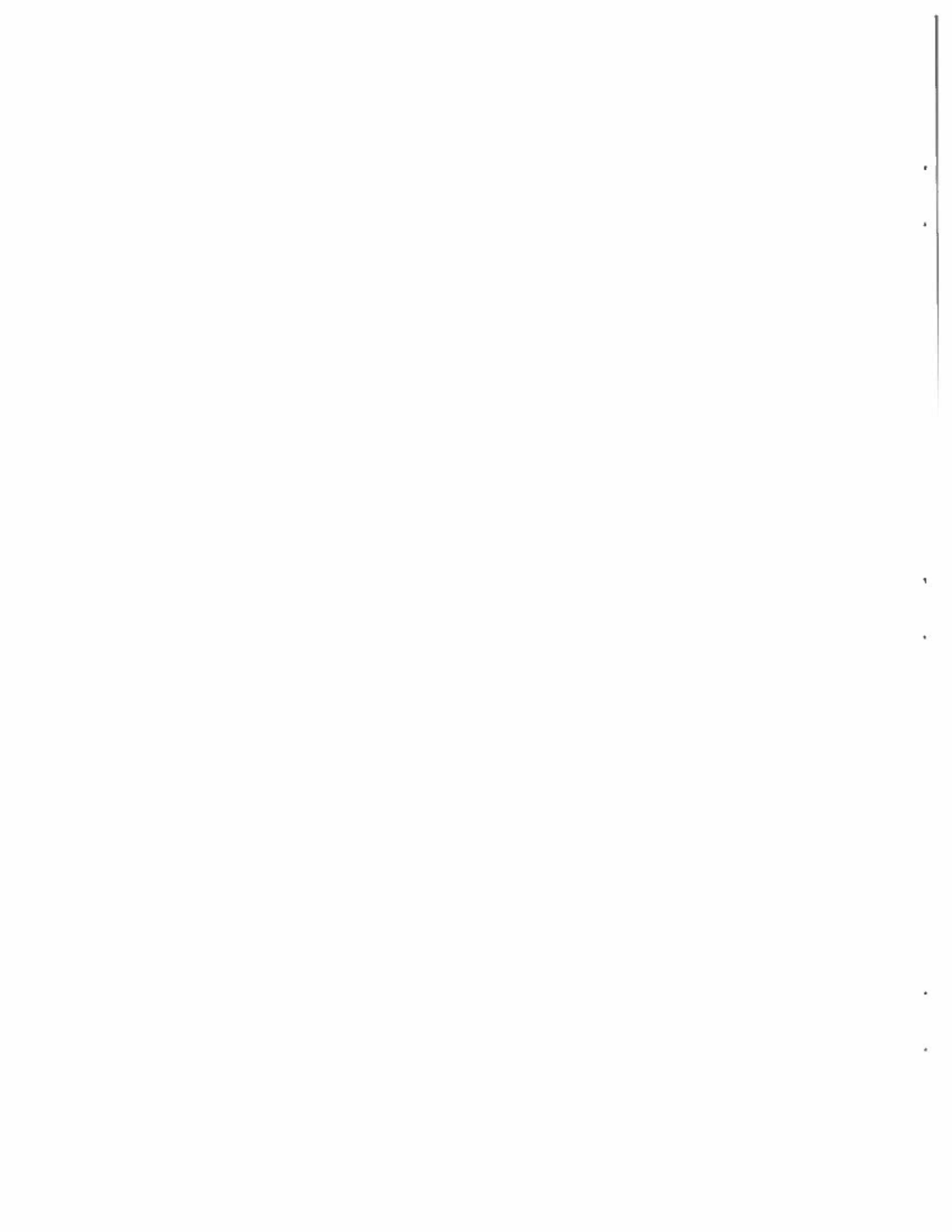
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# **SECRETS**

**Study Guide**

Your Key to Exam Success

**TEXES Test Review for the  
Texas Examinations  
of Educator Standards**



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First of all, **THANK YOU** for purchasing Mometrix study materials!

Second, congratulations! You are one of the few determined test-takers who are committed to doing whatever it takes to excel on your exam. **You have come to the right place.** We developed these study materials with one goal in mind: to deliver you the information you need in a format that's concise and easy to use.

In addition to optimizing your guide for the content of the test, we've outlined our recommended steps for breaking down the preparation process into small, attainable goals so you can make sure you stay on track.

We've also analyzed the entire test-taking process, identifying the most common pitfalls and showing how you can overcome them and be ready for any curveball the test throws you.

Standardized testing is one of the biggest obstacles on your road to success, which only increases the importance of doing well in the high-pressure, high-stakes environment of test day. Your results on this test could have a significant impact on your future, and this guide provides the information and practical advice to help you achieve your full potential on test day.

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Thanks again for your business and we wish you continued success!

Sincerely,  
The Mometrix Test Preparation Team

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## TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	<b>1</b>
<b>SECRET KEY #1 – PLAN BIG, STUDY SMALL</b> .....	<b>2</b>
INFORMATION ORGANIZATION .....	2
TIME MANAGEMENT.....	2
STUDY ENVIRONMENT.....	2
<b>SECRET KEY #2 – MAKE YOUR STUDYING COUNT</b> .....	<b>3</b>
RETENTION.....	3
MODALITY.....	3
<b>SECRET KEY #3 – PRACTICE THE RIGHT WAY</b> .....	<b>4</b>
PRACTICE TEST STRATEGY .....	5
<b>SECRET KEY #4 – PACE YOURSELF</b> .....	<b>6</b>
<b>SECRET KEY #5 – HAVE A PLAN FOR GUESSING</b> .....	<b>7</b>
WHEN TO START THE GUESSING PROCESS.....	7
HOW TO NARROW DOWN THE CHOICES .....	8
WHICH ANSWER TO CHOOSE .....	9
<b>TEST-TAKING STRATEGIES</b> .....	<b>10</b>
QUESTION STRATEGIES .....	10
ANSWER CHOICE STRATEGIES .....	11
GENERAL STRATEGIES.....	12
FINAL NOTES.....	13
<b>CREATING WORKS OF ART</b> .....	<b>15</b>
<b>ART, CULTURE, AND HISTORY</b> .....	<b>56</b>
<b>AESTHETIC KNOWLEDGE AND ANALYSIS OF ART</b> .....	<b>112</b>
<b>ART EDUCATION</b> .....	<b>130</b>
<b>TEXES PRACTICE TEST</b> .....	<b>145</b>
<b>ANSWERS AND EXPLANATIONS</b> .....	<b>170</b>
<b>HOW TO OVERCOME TEST ANXIETY</b> .....	<b>181</b>
CAUSES OF TEST ANXIETY .....	181
ELEMENTS OF TEST ANXIETY.....	182
EFFECTS OF TEST ANXIETY .....	182
PHYSICAL STEPS FOR BEATING TEST ANXIETY.....	183
MENTAL STEPS FOR BEATING TEST ANXIETY.....	184
STUDY STRATEGY .....	185
TEST TIPS .....	187
IMPORTANT QUALIFICATION.....	188
<b>THANK YOU</b> .....	<b>189</b>
<b>ADDITIONAL BONUS MATERIAL</b> .....	<b>190</b>



# Introduction

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**Thank you for purchasing this resource!** You have made the choice to prepare yourself for a test that could have a huge impact on your future, and this guide is designed to help you be fully ready for test day. Obviously, it's important to have a solid understanding of the test material, but you also need to be prepared for the unique environment and stressors of the test, so that you can perform to the best of your abilities.

For this purpose, the first section that appears in this guide is the **Secret Keys**. We've devoted countless hours to meticulously researching what works and what doesn't, and we've boiled down our findings to the five most impactful steps you can take to improve your performance on the test. We start at the beginning with study planning and move through the preparation process, all the way to the testing strategies that will help you get the most out of what you know when you're finally sitting in front of the test.

We recommend that you start preparing for your test as far in advance as possible. However, if you've bought this guide as a last-minute study resource and only have a few days before your test, we recommend that you skip over the first two Secret Keys since they address a long-term study plan.

If you struggle with **test anxiety**, we strongly encourage you to check out our recommendations for how you can overcome it. Test anxiety is a formidable foe, but it can be beaten, and we want to make sure you have the tools you need to defeat it.



## Secret Key #1 – Plan Big, Study Small

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There's a lot riding on your performance. If you want to ace this test, you're going to need to keep your skills sharp and the material fresh in your mind. You need a plan that lets you review everything you need to know while still fitting in your schedule. We'll break this strategy down into three categories.

### Information Organization

Start with the information you already have: the official test outline. From this, you can make a complete list of all the concepts you need to cover before the test. Organize these concepts into groups that can be studied together, and create a list of any related vocabulary you need to learn so you can brush up on any difficult terms. You'll want to keep this vocabulary list handy once you actually start studying since you may need to add to it along the way.

### Time Management

Once you have your set of study concepts, decide how to spread them out over the time you have left before the test. Break your study plan into small, clear goals so you have a manageable task for each day and know exactly what you're doing. Then just focus on one small step at a time. When you manage your time this way, you don't need to spend hours at a time studying. Studying a small block of content for a short period each day helps you retain information better and avoid stressing over how much you have left to do. You can relax knowing that you have a plan to cover everything in time. In order for this strategy to be effective though, you have to start studying early and stick to your schedule. Avoid the exhaustion and futility that comes from last-minute cramming!

### Study Environment

The environment you study in has a big impact on your learning. Studying in a coffee shop, while probably more enjoyable, is not likely to be as fruitful as studying in a quiet room. It's important to keep distractions to a minimum. You're only planning to study for a short block of time, so make the most of it. Don't pause to check your phone or get up to find a snack. It's also important to **avoid multitasking**. Research has consistently shown that multitasking will make your studying dramatically less effective. Your study area should also be comfortable and well-lit so you don't have the distraction of straining your eyes or sitting on an uncomfortable chair.

The time of day you study is also important. You want to be rested and alert. Don't wait until just before bedtime. Study when you'll be most likely to comprehend and remember. Even better, if you know what time of day your test will be, set that time aside for study. That way your brain will be used to working on that subject at that specific time and you'll have a better chance of recalling information.

Finally, it can be helpful to team up with others who are studying for the same test. Your actual studying should be done in as isolated an environment as possible, but the work of organizing the information and setting up the study plan can be divided up. In between study sessions, you can discuss with your teammates the concepts that you're all studying and quiz each other on the details. Just be sure that your teammates are as serious about the test as you are. If you find that your study time is being replaced with social time, you might need to find a new team.

## Secret Key #2 – Make Your Studying Count

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You're devoting a lot of time and effort to preparing for this test, so you want to be absolutely certain it will pay off. This means doing more than just reading the content and hoping you can remember it on test day. It's important to make every minute of study count. There are two main areas you can focus on to make your studying count:

### Retention

It doesn't matter how much time you study if you can't remember the material. You need to make sure you are retaining the concepts. To check your retention of the information you're learning, try recalling it at later times with minimal prompting. Try carrying around flashcards and glance at one or two from time to time or ask a friend who's also studying for the test to quiz you.

To enhance your retention, look for ways to put the information into practice so that you can apply it rather than simply recalling it. If you're using the information in practical ways, it will be much easier to remember. Similarly, it helps to solidify a concept in your mind if you're not only reading it to yourself but also explaining it to someone else. Ask a friend to let you teach them about a concept you're a little shaky on (or speak aloud to an imaginary audience if necessary). As you try to summarize, define, give examples, and answer your friend's questions, you'll understand the concepts better and they will stay with you longer. Finally, step back for a big picture view and ask yourself how each piece of information fits with the whole subject. When you link the different concepts together and see them working together as a whole, it's easier to remember the individual components.

Finally, practice showing your work on any multi-step problems, even if you're just studying. Writing out each step you take to solve a problem will help solidify the process in your mind, and you'll be more likely to remember it during the test.

### Modality

*Modality* simply refers to the means or method by which you study. Choosing a study modality that fits your own individual learning style is crucial. No two people learn best in exactly the same way, so it's important to know your strengths and use them to your advantage.

For example, if you learn best by visualization, focus on visualizing a concept in your mind and draw an image or a diagram. Try color-coding your notes, illustrating them, or creating symbols that will trigger your mind to recall a learned concept. If you learn best by hearing or discussing information, find a study partner who learns the same way or read aloud to yourself. Think about how to put the information in your own words. Imagine that you are giving a lecture on the topic and record yourself so you can listen to it later.

For any learning style, flashcards can be helpful. Organize the information so you can take advantage of spare moments to review. Underline key words or phrases. Use different colors for different categories. Mnemonic devices (such as creating a short list in which every item starts with the same letter) can also help with retention. Find what works best for you and use it to store the information in your mind most effectively and easily.

## Secret Key #3 – Practice the Right Way

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Your success on test day depends not only on how many hours you put into preparing, but also on whether you prepared the right way. It's good to check along the way to see if your studying is paying off. One of the most effective ways to do this is by taking practice tests to evaluate your progress. Practice tests are useful because they show exactly where you need to improve. Every time you take a practice test, pay special attention to these three groups of questions:

- The questions you got wrong
- The questions you had to guess on, even if you guessed right
- The questions you found difficult or slow to work through

This will show you exactly what your weak areas are, and where you need to devote more study time. Ask yourself why each of these questions gave you trouble. Was it because you didn't understand the material? Was it because you didn't remember the vocabulary? Do you need more repetitions on this type of question to build speed and confidence? Dig into those questions and figure out how you can strengthen your weak areas as you go back to review the material.

Additionally, many practice tests have a section explaining the answer choices. It can be tempting to read the explanation and think that you now have a good understanding of the concept. However, an explanation likely only covers part of the question's broader context. Even if the explanation makes sense, **go back and investigate** every concept related to the question until you're positive you have a thorough understanding.

As you go along, keep in mind that the practice test is just that: practice. Memorizing these questions and answers will not be very helpful on the actual test because it is unlikely to have any of the same exact questions. If you only know the right answers to the sample questions, you won't be prepared for the real thing. **Study the concepts** until you understand them fully, and then you'll be able to answer any question that shows up on the test.

It's important to wait on the practice tests until you're ready. If you take a test on your first day of study, you may be overwhelmed by the amount of material covered and how much you need to learn. Work up to it gradually.

On test day, you'll need to be prepared for answering questions, managing your time, and using the test-taking strategies you've learned. It's a lot to balance, like a mental marathon that will have a big impact on your future. Like training for a marathon, you'll need to start slowly and work your way up. When test day arrives, you'll be ready.

Start with the strategies you've read in the first two Secret Keys—plan your course and study in the way that works best for you. If you have time, consider using multiple study resources to get different approaches to the same concepts. It can be helpful to see difficult concepts from more than one angle. Then find a good source for practice tests. Many times, the test website will suggest potential study resources or provide sample tests.

## Practice Test Strategy

When you're ready to start taking practice tests, follow this strategy:

### **Untimed and Open-Book Practice**

Take the first test with no time constraints and with your notes and study guide handy. Take your time and focus on applying the strategies you've learned.

### **Timed and Open-Book Practice**

Take the second practice test open-book as well, but set a timer and practice pacing yourself to finish in time.

### **Timed and Closed-Book Practice**

Take any other practice tests as if it were test day. Set a timer and put away your study materials. Sit at a table or desk in a quiet room, imagine yourself at the testing center, and answer questions as quickly and accurately as possible.

Keep repeating timed and closed-book tests on a regular basis until you run out of practice tests or it's time for the actual test. Your mind will be ready for the schedule and stress of test day, and you'll be able to focus on recalling the material you've learned.

## Secret Key #4 – Pace Yourself

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Once you're fully prepared for the material on the test, your biggest challenge on test day will be managing your time. Just knowing that the clock is ticking can make you panic even if you have plenty of time left. Work on pacing yourself so you can build confidence against the time constraints of the exam. Pacing is a difficult skill to master, especially in a high-pressure environment, so **practice is vital**.

Set time expectations for your pace based on how much time is available. For example, if a section has 60 questions and the time limit is 30 minutes, you know you have to average 30 seconds or less per question in order to answer them all. Although 30 seconds is the hard limit, set 25 seconds per question as your goal, so you reserve extra time to spend on harder questions. When you budget extra time for the harder questions, you no longer have any reason to stress when those questions take longer to answer.

Don't let this time expectation distract you from working through the test at a calm, steady pace, but keep it in mind so you don't spend too much time on any one question. Recognize that taking extra time on one question you don't understand may keep you from answering two that you do understand later in the test. If your time limit for a question is up and you're still not sure of the answer, mark it and move on, and come back to it later if the time and the test format allow. If the testing format doesn't allow you to return to earlier questions, just make an educated guess; then put it out of your mind and move on.

On the easier questions, be careful not to rush. It may seem wise to hurry through them so you have more time for the challenging ones, but it's not worth missing one if you know the concept and just didn't take the time to read the question fully. Work efficiently but make sure you understand the question and have looked at all of the answer choices, since more than one may seem right at first.

Even if you're paying attention to the time, you may find yourself a little behind at some point. You should speed up to get back on track, but do so wisely. Don't panic; just take a few seconds less on each question until you're caught up. Don't guess without thinking, but do look through the answer choices and eliminate any you know are wrong. If you can get down to two choices, it is often worthwhile to guess from those. Once you've chosen an answer, move on and don't dwell on any that you skipped or had to hurry through. If a question was taking too long, chances are it was one of the harder ones, so you weren't as likely to get it right anyway.

On the other hand, if you find yourself getting ahead of schedule, it may be beneficial to slow down a little. The more quickly you work, the more likely you are to make a careless mistake that will affect your score. You've budgeted time for each question, so don't be afraid to spend that time. Practice an efficient but careful pace to get the most out of the time you have.

## Secret Key #5 – Have a Plan for Guessing

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When you're taking the test, you may find yourself stuck on a question. Some of the answer choices seem better than others, but you don't see the one answer choice that is obviously correct. What do you do?

The scenario described above is very common, yet most test takers have not effectively prepared for it. Developing and practicing a plan for guessing may be one of the single most effective uses of your time as you get ready for the exam.

In developing your plan for guessing, there are three questions to address:

- When should you start the guessing process?
- How should you narrow down the choices?
- Which answer should you choose?

### When to Start the Guessing Process

Unless your plan for guessing is to select C every time (which, despite its merits, is not what we recommend), you need to leave yourself enough time to apply your answer elimination strategies. Since you have a limited amount of time for each question, that means that if you're going to give yourself the best shot at guessing correctly, you have to decide quickly whether or not you will guess.

Of course, the best-case scenario is that you don't have to guess at all, so first, see if you can answer the question based on your knowledge of the subject and basic reasoning skills. Focus on the key words in the question and try to jog your memory of related topics. Give yourself a chance to bring the knowledge to mind, but once you realize that you don't have (or you can't access) the knowledge you need to answer the question, it's time to start the guessing process.

It's almost always better to start the guessing process too early than too late. It only takes a few seconds to remember something and answer the question from knowledge. Carefully eliminating wrong answer choices takes longer. Plus, going through the process of eliminating answer choices can actually help jog your memory.

**Summary: Start the guessing process as soon as you decide that you can't answer the question based on your knowledge.**

## How to Narrow Down the Choices

The next chapter in this book (**Test-Taking Strategies**) includes a wide range of strategies for how to approach questions and how to look for answer choices to eliminate. You will definitely want to read those carefully, practice them, and figure out which ones work best for you. Here though, we're going to address a mindset rather than a particular strategy.

Your chances of guessing an answer correctly depend on how many options you are choosing from.

How many choices you have	How likely you are to guess correctly
5	20%
4	25%
3	33%
2	50%
1	100%

You can see from this chart just how valuable it is to be able to eliminate incorrect answers and make an educated guess, but there are two things that many test takers do that cause them to miss out on the benefits of guessing:

- Accidentally eliminating the correct answer
- Selecting an answer based on an impression

We'll look at the first one here, and the second one in the next section.

To avoid accidentally eliminating the correct answer, we recommend a thought exercise called **the \$5 challenge**. In this challenge, you only eliminate an answer choice from contention if you are willing to bet \$5 on it being wrong. Why \$5? Five dollars is a small but not insignificant amount of money. It's an amount you could afford to lose but wouldn't want to throw away. And while losing \$5 once might not hurt too much, doing it twenty times will set you back \$100. In the same way, each small decision you make—eliminating a choice here, guessing on a question there—won't by itself impact your score very much, but when you put them all together, they can make a big difference. By holding each answer choice elimination decision to a higher standard, you can reduce the risk of accidentally eliminating the correct answer.

The \$5 challenge can also be applied in a positive sense: If you are willing to bet \$5 that an answer choice *is* correct, go ahead and mark it as correct.

**Summary: Only eliminate an answer choice if you are willing to bet \$5 that it is wrong.**

## Which Answer to Choose

You're taking the test. You've run into a hard question and decided you'll have to guess. You've eliminated all the answer choices you're willing to bet \$5 on. Now you have to pick an answer. Why do we even need to talk about this? Why can't you just pick whichever one you feel like when the time comes?

The answer to these questions is that if you don't come into the test with a plan, you'll rely on your impression to select an answer choice, and if you do that, you risk falling into a trap. The test writers know that everyone who takes their test will be guessing on some of the questions, so they intentionally write wrong answer choices to seem plausible. You still have to pick an answer though, and if the wrong answer choices are designed to look right, how can you ever be sure that you're not falling for their trap? The best solution we've found to this dilemma is to take the decision out of your hands entirely. Here is the process we recommend:

**Once you've eliminated any choices that you are confident (willing to bet \$5) are wrong, select the first remaining choice as your answer.**

Whether you choose to select the first remaining choice, the second, or the last, the important thing is that you use some preselected standard. Using this approach guarantees that you will not be enticed into selecting an answer choice that looks right, because you are not basing your decision on how the answer choices look.

This is not meant to make you question your knowledge. Instead, it is to help you recognize the difference between your knowledge and your impressions. There's a huge difference between thinking an answer is right because of what you know, and thinking an answer is right because it looks or sounds like it should be right.

**Summary: To ensure that your selection is appropriately random, make a predetermined selection from among all answer choices you have not eliminated.**



# Test-Taking Strategies

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This section contains a list of test-taking strategies that you may find helpful as you work through the test. By taking what you know and applying logical thought, you can maximize your chances of answering any question correctly!

It is very important to realize that every question is different and every person is different: no single strategy will work on every question, and no single strategy will work for every person. That's why we've included all of them here, so you can try them out and determine which ones work best for different types of questions and which ones work best for you.

## Question Strategies

### Read Carefully

Read the question and answer choices carefully. Don't miss the question because you misread the terms. You have plenty of time to read each question thoroughly and make sure you understand what is being asked. Yet a happy medium must be attained, so don't waste too much time. You must read carefully, but efficiently.

### Contextual Clues

Look for contextual clues. If the question includes a word you are not familiar with, look at the immediate context for some indication of what the word might mean. Contextual clues can often give you all the information you need to decipher the meaning of an unfamiliar word. Even if you can't determine the meaning, you may be able to narrow down the possibilities enough to make a solid guess at the answer to the question.

### Prefixes

If you're having trouble with a word in the question or answer choices, try dissecting it. Take advantage of every clue that the word might include. Prefixes and suffixes can be a huge help. Usually they allow you to determine a basic meaning. Pre- means before, post- means after, pro - is positive, de- is negative. From prefixes and suffixes, you can get an idea of the general meaning of the word and try to put it into context.

### Hedge Words

Watch out for critical hedge words, such as *likely, may, can, sometimes, often, almost, mostly, usually, generally, rarely, and sometimes*. Question writers insert these hedge phrases to cover every possibility. Often an answer choice will be wrong simply because it leaves no room for exception. Be on guard for answer choices that have definitive words such as *exactly* and *always*.

### Switchback Words

Stay alert for *switchbacks*. These are the words and phrases frequently used to alert you to shifts in thought. The most common switchback words are *but, although, and however*. Others include *nevertheless, on the other hand, even though, while, in spite of, despite, regardless of*. Switchback words are important to catch because they can change the direction of the question or an answer choice.

## **Face Value**

When in doubt, use common sense. Accept the situation in the problem at face value. Don't read too much into it. These problems will not require you to make wild assumptions. If you have to go beyond creativity and warp time or space in order to have an answer choice fit the question, then you should move on and consider the other answer choices. These are normal problems rooted in reality. The applicable relationship or explanation may not be readily apparent, but it is there for you to figure out. Use your common sense to interpret anything that isn't clear.

## **Answer Choice Strategies**

### **Answer Selection**

The most thorough way to pick an answer choice is to identify and eliminate wrong answers until only one is left, then confirm it is the correct answer. Sometimes an answer choice may immediately seem right, but be careful. The test writers will usually put more than one reasonable answer choice on each question, so take a second to read all of them and make sure that the other choices are not equally obvious. As long as you have time left, it is better to read every answer choice than to pick the first one that looks right without checking the others.

### **Answer Choice Families**

An answer choice family consists of two (in rare cases, three) answer choices that are very similar in construction and cannot all be true at the same time. If you see two answer choices that are direct opposites or parallels, one of them is usually the correct answer. For instance, if one answer choice says that quantity  $x$  increases and another either says that quantity  $x$  decreases (opposite) or says that quantity  $y$  increases (parallel), then those answer choices would fall into the same family. An answer choice that doesn't match the construction of the answer choice family is more likely to be incorrect. Most questions will not have answer choice families, but when they do appear, you should be prepared to recognize them.

### **Eliminate Answers**

Eliminate answer choices as soon as you realize they are wrong, but make sure you consider all possibilities. If you are eliminating answer choices and realize that the last one you are left with is also wrong, don't panic. Start over and consider each choice again. There may be something you missed the first time that you will realize on the second pass.

### **Avoid Fact Traps**

Don't be distracted by an answer choice that is factually true but doesn't answer the question. You are looking for the choice that answers the question. Stay focused on what the question is asking for so you don't accidentally pick an answer that is true but incorrect. Always go back to the question and make sure the answer choice you've selected actually answers the question and is not merely a true statement.

### **Extreme Statements**

In general, you should avoid answers that put forth extreme actions as standard practice or proclaim controversial ideas as established fact. An answer choice that states the "process should be used in certain situations, if..." is much more likely to be correct than one that states the "process should be discontinued completely." The first is a calm rational statement and doesn't even make a

definitive, uncompromising stance, using a hedge word *if* to provide wiggle room, whereas the second choice is a radical idea and far more extreme.

### **Benchmark**

As you read through the answer choices and you come across one that seems to answer the question well, mentally select that answer choice. This is not your final answer, but it's the one that will help you evaluate the other answer choices. The one that you selected is your benchmark or standard for judging each of the other answer choices. Every other answer choice must be compared to your benchmark. That choice is correct until proven otherwise by another answer choice beating it. If you find a better answer, then that one becomes your new benchmark. Once you've decided that no other choice answers the question as well as your benchmark, you have your final answer.

### **Predict the Answer**

Before you even start looking at the answer choices, it is often best to try to predict the answer. When you come up with the answer on your own, it is easier to avoid distractions and traps because you will know exactly what to look for. The right answer choice is unlikely to be word-for-word what you came up with, but it should be a close match. Even if you are confident that you have the right answer, you should still take the time to read each option before moving on.

## **General Strategies**

### **Tough Questions**

If you are stumped on a problem or it appears too hard or too difficult, don't waste time. Move on! Remember though, if you can quickly check for obviously incorrect answer choices, your chances of guessing correctly are greatly improved. Before you completely give up, at least try to knock out a couple of possible answers. Eliminate what you can and then guess at the remaining answer choices before moving on.

### **Check Your Work**

Since you will probably not know every term listed and the answer to every question, it is important that you get credit for the ones that you do know. Don't miss any questions through careless mistakes. If at all possible, try to take a second to look back over your answer selection and make sure you've selected the correct answer choice and haven't made a costly careless mistake (such as marking an answer choice that you didn't mean to mark). This quick double check should more than pay for itself in caught mistakes for the time it costs.

### **Pace Yourself**

It's easy to be overwhelmed when you're looking at a page full of questions; your mind is confused and full of random thoughts, and the clock is ticking down faster than you would like. Calm down and maintain the pace that you have set for yourself. Especially as you get down to the last few minutes of the test, don't let the small numbers on the clock make you panic. As long as you are on track by monitoring your pace, you are guaranteed to have time for each question.

### **Don't Rush**

It is very easy to make errors when you are in a hurry. Maintaining a fast pace in answering questions is pointless if it makes you miss questions that you would have gotten right otherwise. Test writers like to include distracting information and wrong answers that seem right. Taking a little extra time to avoid careless mistakes can make all the difference in your test score. Find a pace that allows you to be confident in the answers that you select.

### **Keep Moving**

Panicking will not help you pass the test, so do your best to stay calm and keep moving. Taking deep breaths and going through the answer elimination steps you practiced can help to break through a stress barrier and keep your pace.

## **Final Notes**

The combination of a solid foundation of content knowledge and the confidence that comes from practicing your plan for applying that knowledge is the key to maximizing your performance on test day. As your foundation of content knowledge is built up and strengthened, you'll find that the strategies included in this chapter become more and more effective in helping you quickly sift through the distractions and traps of the test to isolate the correct answer.

Now it's time to move on to the test content chapters of this book, but be sure to keep your goal in mind. As you read, think about how you will be able to apply this information on the test. If you've already seen sample questions for the test and you have an idea of the question format and style, try to come up with questions of your own that you can answer based on what you're reading. This will give you valuable practice applying your knowledge in the same ways you can expect to on test day.

**Good luck and good studying!**



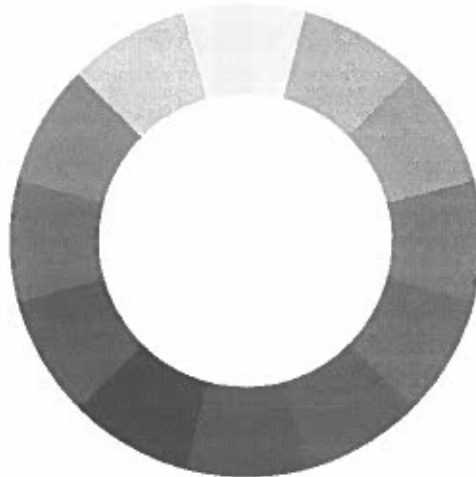
# Creating Works of Art

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## The Elements of Art

The seven elements of art are **color, texture, shape, form, line, space, and value**. **Color** has three characteristics: hue (such as red, yellow, or green), intensity (how bright or dull the color is), and value (how light or dark the color is). Colors can be divided into primary, secondary, and tertiary on a color wheel, where the primary colors are red, yellow, and blue, and the secondary colors are the result of two primary colors mixed together (red and yellow make orange, red and blue make violet, and yellow and blue make green). The tertiary colors are those in between the primary and secondary colors, such as blue-green or red-orange.

- **Colors** opposite each other on the color wheel are considered complementary. Examples include red and green or blue and orange.
- **Texture** is how something feels, or appears to feel, and it can be real or implied. Examples of textures include smooth, rough, or bumpy. A real texture is one you can actually feel, whereas an implied texture is two-dimensional yet appears to have texture.
- **Shapes** are categorized as geometric or organic. Geometric shapes include named mathematical shapes such as circles, ovals, squares, and triangles. Organic shapes are asymmetrical and are often found in nature.
- **Form** is used in three-dimensional art such as sculpture, and it describes the shape of the artwork.
- A **line** is used to define a shape, and it is the path between two points. A line can be straight, curved, broken, implied, or free-form. Lines can be used to create movement or to lead the viewer's eye around the artwork.
- **Space** can refer to the foreground, middle ground, and background of an artwork. It can also refer to the positive and negative space created by the artist. Positive space is the subject of the artwork, and negative space is the area that surrounds it. An artist can create the illusion of three-dimensional space within an artwork.
- **Value** is the lightness or darkness of a color. An artist can use value to provide visual interest in an artwork, to create a mood, or to draw the viewer's eye to a certain focal point. Contrast is the difference in value or the difference in the lightness and darkness.



## Principles of Design

The principles of design include balance, contrast, movement, emphasis, pattern, rhythm, and unity. An artist can use multiple principles of design in their artwork, or they can focus primarily on one principle.

- **Balance** is how an artwork's visual weight is organized, and it can be symmetrical or asymmetrical. Symmetrical balance has the same weight on both sides, whereas asymmetrical balance is visually weighted more on one side. Asymmetrical balance gives the artwork more visual interest and leads the viewer's eye around the artwork.
- **Contrast** is when an artwork's elements are juxtaposed against each other to create interesting differences. This could include a difference in warm and cool colors or a difference between organic and geometric shapes.
- **Movement** is using the elements to lead the viewer throughout the piece. One example is a repetition of shapes that moves the viewer's eye through the artwork.
- **Emphasis** creates a focal point in the artwork by using a bold color, asymmetrical balance, or a strong contrast. Pattern and rhythm consist of a repetition of elements.
- **Pattern** is repeating elements in the same order, whereas **rhythm** is repeating elements without a specific order.
- **Unity** is harmony throughout the artwork created by elements working together. This can be achieved by a repetition of an element, similarity of elements, or even a rhythm of elements.

## The Relationship Between Elements and Principles of Design

The elements of art are the building blocks of visual art, and the principles of design are ways to organize these elements of art. An artist can use multiple elements and principles in their artwork, or they can focus primarily on certain elements and principles. By using the principles of design to organize the elements of art, the artist can decide what the focal point of the artwork is and where they want to lead viewers' eyes. An artist can use the principles of design to arrange the elements of art in their artwork, and they can use the terminology of these elements and principles to explain their artistic decisions. They can also use them to analyze another artists' artwork. The elements of art and principles of design are both sets of established criteria that are used to objectively judge artwork rather than using personal preferences.

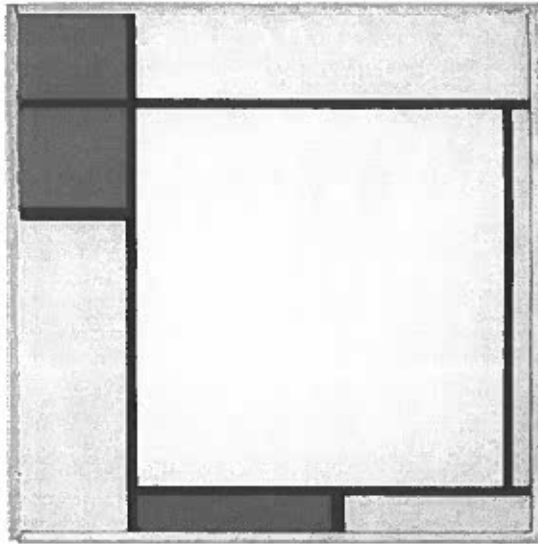
Many of the elements of art and principles of design can be found in two- and three-dimensional artwork. **Texture** can be real on a three-dimensional work, whereas it will be implied on a two-dimensional work. A marble statue might be smooth, whereas a steel sculpture could have a rough texture. **Space** in a two-dimensional work will be created by how the artist uses the elements and principles to arrange the artwork and even to create a foreground, middle ground, and background. **Space** in a sculpture or three-dimensional work is how the artist uses the space in three dimensions. In three-dimensional artwork, **form** has width, depth, and height. The form can be viewed either from all sides, which would make the sculpture in-the-round, or it can be viewed from one side, which is a relief work (built from a solid background). Form describes the shape of the artwork.

## Applications of Principles of Design

### Two-Dimensional Artwork

This painting, *Composition with Red, Yellow, and Blue* (1927), is by Dutch artist Piet Mondrian. It is a product of the de Stijl art movement, which began in Holland. He eliminated any representational

forms in his artwork and pared it down to a few elements. The main elements of art used in this painting are color, line, and shape. Mondrian used planes of pure color in this painting, separated by thick black lines. Here you see the primary colors — red, yellow, and blue — along with black and white. He used black lines to create geometric shapes throughout the canvas. The geometric shapes and the parallel and perpendicular lines give the work a solid and stable feel. Mondrian placed the planes of color in an asymmetrical way and balanced them with panes of white.



### Three-Dimensional Artwork

This sculpture is titled *Embrace IV*, by Emilia Glaser. The main elements evident in this sculpture are color, value, shape, line, and texture. The sculpture is mainly one color of red-orange, with a darker value of the color on part of the sculpture and a different color and value for the base. This use of warm color can invoke a feeling of happiness or excitement, and it can draw the viewer closer to the sculpture. The sculpture appears to be a combination of different shapes, and strong lines visually separate the borders of these shapes. The lines have mostly upward movement, giving



the sculpture a strong, uplifting feel. The sculpture appears to have a rough and bumpy texture, which in this case would be real texture because it is a texture that could actually be felt.



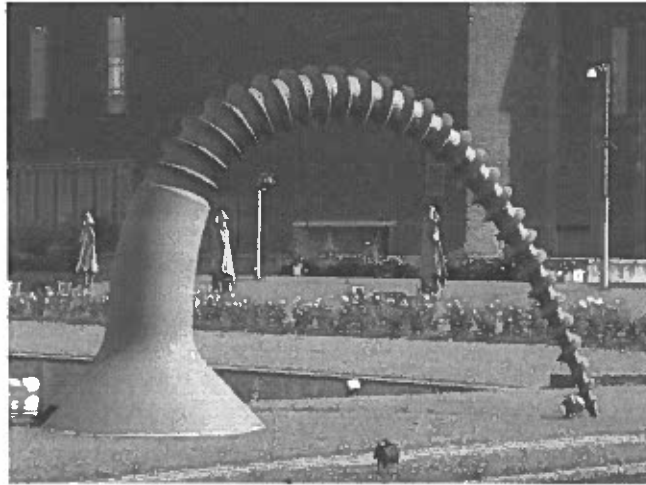
### The Starry Night

This painting is called *The Starry Night* (1889) by Vincent van Gogh. The artist used several principles of design, including contrast, emphasis, balance, and movement. There is contrast in the values used throughout the painting — the darker blues and grays and the lighter whites and yellows. There is also a contrast of warm (yellow) and cool (blue) colors, in which the warm colors advance and the cool colors recede in the artwork. The bright yellow moon in the top right shows emphasis, being the largest portion of this light value and the brightest color in the painting. The large dark shape on the left of the painting is visually balanced by the smaller, bright moon and glow on the right. Van Gogh's brushstrokes look like wind blowing through the sky, and they provide movement in the painting, which leads the viewer's eye around the artwork.



## Screwarch

This sculpture by Claes Oldenburg and Coosje van Bruggen is called *Screwarch* (1978–1984). It appears to be an oversized screw, bending to create an arch. The main principles of design evident in this sculpture are balance, pattern, contrast, and movement. The sculpture is asymmetrically balanced, being much visually heavier at the thicker end on the left. The threads of the screw show a repeating spiraling pattern, which follows the arch to the pointed end on the right. The larger, bulkier end of the screw is smooth and sharply contrasts with the rest of the screw, which tapers slowly to a point and has a spiraling pattern and texture. The sculpture shows movement with its arched form, leading the viewer's eye from the heavier end of the screw to the tapered point on the other end.



## **Organic Shapes**

The elements of art and principles of design can all be found in nature, but it is likely that you will find more organic shapes than geometric. The natural environment contains many textures, such as rough bark, smooth petals, or gritty sand. Many colors and values can be found throughout landscapes, as well as a depth of space and varied forms of plants, trees, and rocks. Bright flowers contrast against dark leaves, providing a focal point or emphasis against the green. Wind creates movement in the natural world, and the repetition of plants or trees creates rhythm. The edges of objects in nature can create implied lines between each other, and lines can be found in the veins of a leaf. The repetition of greens throughout a spring scene or reds and oranges in a fall scene can create unity throughout the landscape.

## **Composition**

Composition is how an artwork is organized, and the principles of design help an artist decide how to arrange the elements of art in their artwork. An artist can use the principles of design to decide what will stand out in their artwork and where they will lead the viewer's eyes. An artist could focus on the use of color as an element in their artwork but then use a pattern to repeat the colors in a certain order or use emphasis to draw attention to a certain color in a certain part of the artwork. They could create unity in the work by repeating a certain color throughout. An artist could focus on certain shapes in their artwork, but then they could use contrast by putting different shapes next to each other. They could use the shapes to create a rhythm by repeating them without a specific order. The artist could even focus on using lines in the artwork, but then they could use movement to guide the viewer's eyes around the artwork with the lines.

## Origins of Drawing

Drawing is a medium that was first used on cave walls as early as 10,000 B.C., and then by the Egyptians starting in 3,000 B.C. In the Middle Ages, drawings were mostly used to prepare for paintings. In the Renaissance era, drawing became a more widely used art form. This is partly due to the availability of paper and the fact that drawing became the foundation for other art forms. Art students during the Renaissance were first taught to draw before painting and sculpting. Drawing was used to study and record nature and anatomy. The artists used pen and ink, as well as black and red charcoal. In the baroque period, drawings were more free-flowing and less exact than those in the Renaissance era. In the 1600s, Rembrandt used pen lines to create expressive drawings. In the 1800s, pencils were first manufactured, and they became a widely used drawing tool.

## History and Use of Drawing

Drawing was originally used to express ideas and scenes in cave paintings. As artists and materials became more refined, drawing was primarily used as a preliminary step before starting a painting. In the Middle Ages, drawings were mainly completed on animal skins, wood, wax, or slate. Artists would keep records of their sketches to use for artwork instead of working from live models. Some artists in the Middle Ages would complete finished drawings as illuminations for manuscripts.

During the Renaissance, when paper became more readily available, artists would learn to draw before painting or sculpting. Drawing was still considered more of a preliminary step before using other media. When large-scale paintings were created, such as in the Sistine Chapel, many preparatory drawings were created to use for the final paintings. In the 1500s in northern Europe, artists began creating drawings as finished works rather than as preparatory materials. Albrecht Dürer and Hans Holbein the Younger created detailed drawings that could stand alone as artworks. In the 1600s, Rembrandt created expressive drawings and Dutch artists took their sketchbooks into the fields to capture scenes to paint from later. Artists continued to create sketches prior to finished artworks, but drawing became an accepted medium for a final artwork.

## Historic Drawing Media

- **Charcoal** is an early drawing material made from slowly burned wood. Charcoal was used for cave drawings, when burnt sticks were rubbed on cave walls.
- **Red chalk** is made from iron oxide pigment and refined clay. It was popular in the 16th and 17th centuries, and Leonardo da Vinci used it for many sketches. **Black chalk** is carbonaceous shale, and it is softer than red chalk. It was used in 15th-century Italy for underdrawings for ink or metalpoint artwork. Albrecht Dürer and Anthony van Dyck used black chalk for portraits. **White chalk** is calcium carbonate or soapstone, and it is used for highlights on drawings.
- **Conté crayons** were developed in the early 1800s. They are made in red, black, and white. They are harder than chalk and produce smoother lines.
- **Graphite** is a form of carbon, and it was first discovered in the 1500s. It was later cut into strips and encased in wood for pencils.
- **Ink** is a liquid pigment that can be used with a pen or a brush. It was also commonly used for writing. **Pens** were first made with bird feathers (quills) and reeds, and later they were created with metal tips.

## Pencils and Charcoal

**Pencils** are made from graphite encased in wood. They are available in a range of hardnesses, from 10H to 10B. A 10H pencil has the hardest lead, and it will stay the sharpest and leave the lightest mark on the paper. A 10B pencil has the softest lead, and it will wear down quickly, leaving the darkest mark on the paper. In the middle are F and HB, which are a medium hardness and darkness.

**Charcoal** is a lightweight carbon that can be found in stick form or pencil form. Compressed charcoal is a hard charcoal stick, whereas vine charcoal is a thin, delicate stick. Charcoal also comes in different hardnesses, although it is usually just in the B (soft) range. A higher number before the B indicates a softer charcoal.

Charcoal and pencil can be used for sketching and drawing, but pencil will generally give the opportunity for greater detail, since there are harder graphites available. Charcoal is often used for large-gesture drawings and putting ideas onto a canvas prior to painting.

## Other Tools for Drawing

In addition to materials used to draw with, there are several tools used along with drawing media. A **tortillon** is a piece of paper wrapped up tightly, ending in a point, that can be used to blend pencil and charcoal drawings. A maulstick, or mahlstick, is a stick with a padded head used to rest and support your hand to keep it steady while drawing or painting. Various **erasers** are used for drawing: A kneaded rubber eraser is one that can be manipulated and rolled into smaller sizes to erase small areas, and it will not leave eraser crumbs behind. A gum eraser is yellowish and will crumble quickly. It is best for larger areas. A pink eraser is firmer and more precise, but it will still leave crumbs on the paper. A large brush can be used to gently brush the eraser bits off of the paper. A dry cleaning pad is a fabric bag filled with pieces of eraser that can be used to clean up fingerprints, smudges, and dust from larger areas of paper.

## Drawing Surfaces

A commonly used drawing surface used in the Middle Ages was **parchment**, which was created from animal skin. Paper was first created in A.D. 105 in China, but it wasn't widely used as a drawing material until it was produced more quickly and more inexpensively in the 1800s.

**Paper** comes in hot-pressed and cold-pressed surfaces. Hot-pressed paper will be smooth, whereas cold-pressed paper will have a texture. Sketch paper is thinner than drawing paper, which is made to be more permanent. Newsprint is the kind of thin paper that newspaper is printed on, and it is used for sketching. Illustration board is a thicker cardboard with a hot-pressed or cold-pressed white surface. Bristol board is thicker than drawing paper, and it also comes in hot- or cold-pressed. A smooth surface will allow for greater detail and better control of pencil marks, whereas a rough surface is better suited for looser drawing and sketching or for a drawing with a rough texture.

Paper considered archival will be labeled as acid-free, and it should not yellow and deteriorate over time. Acid-free paper should be used for finished drawings, whereas any paper, including sketch paper and newsprint, can be used for preliminary sketches.

## Contour and Blind Contour

A **contour drawing** seeks to define the outline of an object, and it can contain as much or as little detail as the artist desires. This technique uses only lines to delineate the outer edges of the subject; it does not include any shading or other values in the drawing. For a contour drawing, the artist will

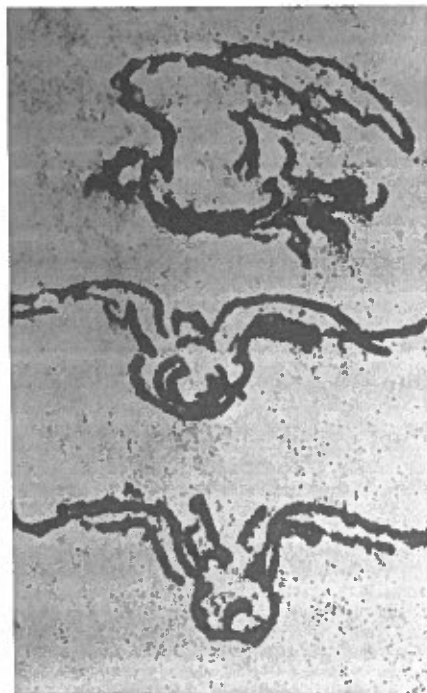
study the subject and show the proportions and volume, rather than focusing on values or fine details. This type of drawing can be used to quickly capture a subject or scene.

A **blind contour** drawing is used by an artist to practice sketching and perception. To create a blind contour drawing, the artist will look directly at the subject and draw a contour without looking back at their paper. They may occasionally glance at the paper to reorient their drawing tool, but generally will keep their focus on the subject. Rather than being used to capture a subject or scene, this is typically reserved as a drawing exercise to help strengthen the artist's hand-eye coordination.

### **Gesture and Perspective Drawing**

**Gesture drawing** is a technique used to quickly capture the action and form of a model or subject. A gesture drawing can be completed in as little as 30 to 60 seconds. The artist uses loose lines to simplify and capture the essence of the subject. These drawings are generally done to study and capture different poses of the human figure. Gesture drawings can help an artist choose a pose to use for a more detailed study of the figure.

Perspective drawing is a drawing technique that shows spatial relationships and the illusion of space on a flat surface. An artist can portray a three-dimensional scene on a two-dimensional drawing. One-point perspective shows the objects in the scene receding to one point in the horizon, as shown in the image. Two-point perspective has the scene receding into two points on the horizon. These points along the horizon where the objects disappear to in the distance are called vanishing points.



### **Hatching and Crosshatching**

**Hatching** is a technique that uses closely placed parallel lines to create shading and tones. Crosshatching is when hatching is used perpendicular to itself, creating heavier shades and tones. In this example from Albrecht Dürer, *The Penitent* (1510), he uses hatching heavily throughout the

drawing. Notice how the lines are closer together to make darker values and how the lines follow the contours of the objects. On flat walls they are straight, and on the curtains, they follow the curves. Using the lines to emphasize the forms in the artwork helps to create a sense of volume for the viewer.

Dürer uses crosshatching in the heavier shaded areas of the drawing. In the darkest areas, the hatched patterns cross each other to create crosshatching. Again, the lines are closer together where the values are the darkest. Although this example is a woodcut, these techniques are also used in the printmaking techniques of engraving and etching, as well as drawing.



## Shading

**Shading** adds depth and form to an artwork. An object with accurate shading can appear three-dimensional. To create this illusion with pencils, the artist needs to vary pressure, use pencils of appropriate hardnesses, and understand where the shadows and highlights should be placed. When light hits the object, it creates many different values. The area closest to the light source will have a highlight, which is the whitest part of the drawing. This can be created by leaving that part white or by erasing afterward. As the object gets farther from the light source, it will be gradually shaded darker. A smooth gradation can be accomplished with careful control of the pencil or by using a blending tool, or tortillon, to blend the graphite. If the object is on a light surface, that surface can create a reflection toward the bottom of the object. The object will also cast a shadow on the surface opposite the light source. Careful observation of the object, as well as the values and shadows, will help the artist create a realistic rendering.

## Critiquing Drawings

When critiquing a drawing as a finished artwork, you can describe, analyze, interpret, and judge it. Begin by describing the visual facts — what you see in the drawing. Is it representational? What

kinds of shapes, lines, or textures do you see? Next, begin analyzing the artwork. Recognize the elements of art and how they are arranged (the principles of design). Do you see shapes arranged in a pattern? Where is the emphasis in the drawing? How are the lines used, and where do they lead your eye? Next, interpret the artwork, or use what you have learned so far to decide what the artist is trying to say. What is the mood of the artwork? What does the subject matter tell you? Why do you think the artist decided to portray it in this way? After completing these steps, you can begin to make your own judgement of the artwork. Did the artist successfully use the principles of design to organize the elements of art? Does the artist successfully convey the feelings, mood, and ideas they were aiming for? Do you see ways that the artwork can be improved?

Following these steps will give you a way to thoroughly and objectively critique a drawing and recognize the successes and failures within it.

### **Creativity in Drawing and Sketching**

Drawing and sketching are commonly used to elicit creativity and **refine ideas**. A sketch pad and pencil or pen are easily portable and can be used to quickly jot down ideas or capture a form or scene to be added to a later artwork. Drawings can be completed quickly and started and stopped easily, unlike paintings, which require preparation, more materials, and drying time.

An artist can gather ideas in a sketch book and then look back at them later to think further and get more ideas from them. An artist can also combine their ideas and sketches into a bigger artwork. They can experiment with different pencils, line widths, and techniques to find the ones that work best for them or what will work best for a particular artwork. An artist can observe the world around them and draw what they see and then add those common items into imaginary scenes or draw from the imagination altogether to create new, inventive scenes. Through sketching and experimentation, an artist can prepare their ideas and techniques for a well-planned final artwork that will showcase their creativity.

### **Oil Painting**

**Oil painting** was developed as a fine art painting medium in the 15th century in northern Europe, and Jan van Eyck is credited with being the first to use oil paint on wood panels. Toward the end of the 15th century, artists began painting on canvas instead of wood panels. The popularity of painting on canvas grew because it was cheaper, easier to transport, and easier to create larger artworks. The canvas was coated with a layer of animal glue and then a layer of lead white paint prior to painting.

Oil paint is made from a pigment suspended in a drying oil. The master painters' apprentices were in charge of mixing and preparing the oil paints. In the late 18th century, oil paints started to be manufactured so they could be purchased.

The pigments and paints used today are more lightfast and durable than the oil paints used in the past. Many times, colors have faded or oxidized due to exposure to light and air, and older paintings

do not look as they were intended. One example is Van Gogh's *Sunflowers* (1880s), in which he used a chrome yellow pigment that has turned brown over time.



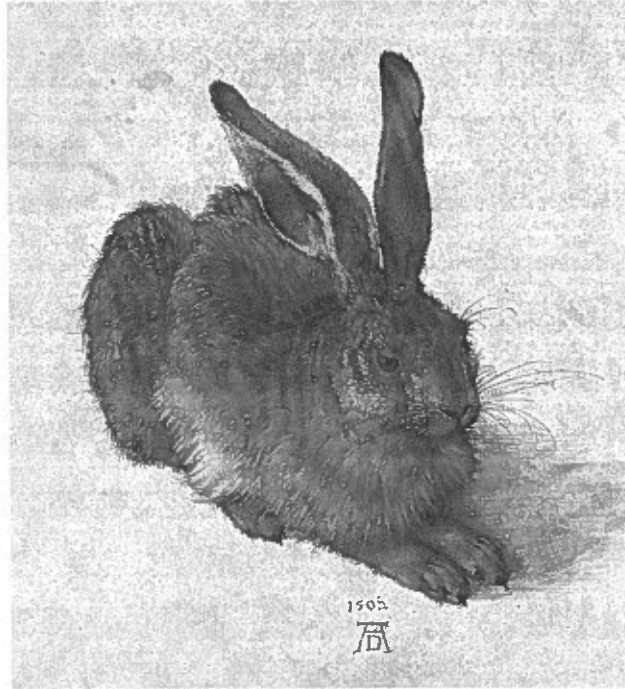
## **Watercolor**

**Watercolor** has been used for cave paintings and manuscript illustrations, but it was first widely used as a fine art medium during the Renaissance. Albrecht Dürer was one of the earliest watercolor painters, as seen in *The Hare* (1502). During the baroque period, watercolors were used for sketching and cartoons. In addition to fine art, Renaissance artists used watercolors for botanical illustrations. In the 19th century, John Audubon used watercolors for his well-known bird illustrations.

Watercolor is created by adding pigment to a gum arabic binder. It can be found in a dry cake form, which needs to be wet with water, or in a tube. Watercolor brushes are generally soft and made with natural (sable, squirrel) or synthetic hairs, and they have a shorter handle than oil and acrylic brushes. Watercolors are transparent, meaning they can be layered upon each other and the color



underneath and white paper will show through. The most common surface for watercolor painting is paper, which comes in hot-press (smooth) and cold-press (rough) finishes.



### **Egg Tempera**

**Egg tempera** was a popular painting medium until after 1500, when oil painting became widely used instead. Traditional egg tempera paint is created by adding pigment to egg yolk, which is used as a water-soluble binder. White wine, vinegar, or water can be added in various proportions to keep the dried paint from cracking. When the yolk is exposed to air, it begins to dry, so the artist continually adds water to keep the consistency correct for painting.

Egg tempera paint dries very quickly, so it is applied in thin, transparent layers and usually with short brushstrokes. The technique of crosshatching can be used to layer the colors. Unlike oil paintings, tempera paints have survived over history in much the same condition as they were intended. In the 20th century, some artists began using tempera again, such as Andrew Wyeth, Thomas Hart Benton, and Jacob Lawrence.

Egg tempera is painted onto stiff surfaces such as wood panels or Masonite because a flexible surface will allow it to crack and flake off the support.

### **Gouache**

**Gouache** is an opaque medium with characteristics similar to watercolor. It is traditionally created with gum arabic as the binder, but it also has a filler added to make the paint opaque. Like watercolor, dried gouache can be rewet and reworked. It dries to a matte finish, and it is usually used on watercolor paper or illustration board. With a smooth hot-press surface, an artist can create great detail with gouache. Gouache is commonly used for graphic arts including illustrations, comics, and posters. It has also been used in animation.

The term gouache was first used in France in the 18th century to refer to opaque watercolor, but the medium and techniques were used prior to this — as early as the 9th century in Persia.

Gouache is now manufactured as watercolor type and a newer acrylic type. The acrylic gouache is water resistant once it's dry, and it cannot be rewet. It differs from acrylic paint in that it dries to a matte finish and can be worked with for slightly longer.

### **Common Painting Tools**

**Paintbrushes** used for oils and acrylics generally have a longer handle than do watercolor brushes. Watercolor brushes have soft natural or synthetic hairs, whereas acrylic and oil brushes have stiffer natural or synthetic hairs, including hog bristles. Whereas watercolors and acrylics are water soluble and the brushes can be cleaned with soap and water, oil brushes will need to be cleaned with a paint thinner solvent.

**Drying oils**, such as linseed and poppy oil, can be added to oil paints to decrease drying times and thin the consistency. There are many types of media for acrylic paints that will decrease the drying time or change the texture to thicker or thinner.

**Primer** is a base for painting, and it is commonly used with oil and acrylic painting. A commonly used primer is called gesso, which is essentially a water-based white paint mixture used to prepare the support.

For watercolors, a **masking fluid** will cover areas of the paper that are needed to stay white for highlights. After the watercolor painting is finished, the masking fluid can be removed, revealing the white paper.

All paints will benefit from the use of a **palette**. A palette can be a basic piece of wood or Masonite, or it can be a more involved structure with divots for each color. A palette is used to organize and mix colors for a painting. The selection of colors and organization is up to the individual artist.

### **Oil and Water-Based Paints**

With advances in **acrylic paints**, an artist can now get similar finished products to that of oil paints, but there are still differences in the media and processes. Oil paint allows for a much longer working time than acrylic. Oil paint will stay workable on the palette for four to eight hours, whereas acrylic paint can dry in less than an hour. A finished oil painting can take six months or more before it is considered dry. The oil paint on the canvas will stay workable to allow for more blending, whereas acrylic dries more quickly and does not lend itself to as much blending. Acrylics turn into a kind of plastic when they dry, so if they dry in the paintbrush, it can be difficult to impossible to clean the brush. Watercolors can be rewet and washed out of the brush at any time, and oil paints can be soaked and removed with paint thinners.

Acrylic can be used as a base for oil paintings, but it cannot be painted on top of oils. When painting with oils, it is important to remember the rule "fat over lean." this means the artist should build increasingly flexible layers on top of each other. The increased flexibility is accomplished by adding an oil medium to the paint and using less solvent.

### **Painting Surfaces**

**Wood** has been used as a support for oil and acrylic painting for centuries. It is rigid and minimizes any flexing or cracking of the paint. Wood should be primed before painting on it to seal the surface and also to make it smoother. For the smoothest surface, layers of gesso can be applied, let dry, and sanded between applications.

**Paper** is used for watercolor or acrylic, but the oil from oil paints will break paper down, so it is not well suited for oil painting. Canvas has been the most popular surface for oil paints since the 17th century, and it is often used for acrylics, too. **Canvas boards** are now used, which are made from canvas stretched over rigid cardboard and preprimed.

Paper for watercolors, acrylics, and gouache is usually thick to accommodate the amount of paint and water used. Watercolor paper needs to be stretched so that it does not warp after use. Some watercolor pads come with glue around the edges to prevent this warping; otherwise, it will need to be taped to a surface on four sides, then wet and let dry to prepare the paper.

## **Underpainting and Glazing**

**Underpainting** is a technique used for oil and acrylic painting to create a base for a finished painting. An artist can use the underpainting to lay out the highlights and shadows for their artwork. Underpainting can be used to layer and build up rich color, and it serves as a foundation to establish the tones throughout the artwork. An underpainting for oil can be done in acrylic so it will dry quickly or with thinned oil paint. A tonal underpainting is done with one color of paint, just to establish the layout and tones before beginning the painting.

**Glazing** is a technique used with oil paints to layer transparent colors over a dried opaque color. Each layer is allowed to dry before another transparent layer is painted on top. The colors interact and visually blend without being physically blended on the palette. Glazing can be used to create skin tones and other complex colors that would be difficult to create otherwise. Some colors are naturally more transparent than others, so the artist needs to know the qualities of the paint and whether to add a medium to increase the transparency.

## **Dry Brush and Sgraffito**

**Dry brush** is a technique used with water-based and oil-based paints. For acrylic and watercolor painting, the brush is loaded with paint after the water is squeezed or blotted out of it. With oil painting, the brush is loaded with paint after the oil or medium is squeezed or blotted from the brush. Dry brushing creates a scratchy-looking texture on the surface, and the brushstrokes will be evident. This can be used to add texture to a painting, including fur or grass, or it can be used for emphasis and contrast to a smoother area.

**Sgraffito** is a technique of scratching through a layer of paint to reveal the layer or surface underneath. Sgraffito can be accomplished with a palette knife, the handle end of a paintbrush, or even a stick. This can also be done with only one layer of paint, with the artist scratching through the wet paint and revealing the canvas underneath.

## **Wet-On-Wet and Wash**

**Wet-on-wet** is a watercolor technique in which the artist paints onto already-wet paper. This will cause the colors to blend and bleed into each other. This technique takes practice because the wetness of the paper, the color already on the paper, the amount of water on the brush, and the color on the brush will all affect the final product. Experience will help the artist know what will happen when they add wet watercolor onto already-wet paper and how the colors will react with each other.

A wash is a technique of adding a large area of color to a watercolor painting. A flat wash is a large area of one color, and a graded wash goes from one color gradually to white or another color. It is easiest to control the wash on dry paper instead of already-wet paper. A large, flat watercolor brush

is used to apply the mixture of paint and water. As paint is applied to the paper, it will begin drying; therefore, time is a critical factor to consider in order to achieve an even application of color.

### **Plein Air and Alla Prima**

**Plein air** is a painting technique that entails painting outdoors. This technique increased in popularity in the 1840s when paint became available in tubes, which is more convenient for travel. The box easel, or field easel, was developed around this time; it is a box that the artist can use to carry their painting materials, and it opens up into an easel. Claude Monet often painted en plein air (French for “outdoors”), using the natural light to capture scenes at specific times of the day. This can be done with any painting medium, including watercolors that can be found in small, portable boxes for this purpose.

**Alla prima** is a painting technique that entails painting wet oil paint onto wet oil layers that have not been allowed to dry. This can also be called direct painting or wet-on-wet. An alla prima painting can be completed in one sitting, unlike an oil painting with multiple layers of glazing, which requires time to dry between layers. Alla prima can create a spontaneous and fresh look in the artwork.

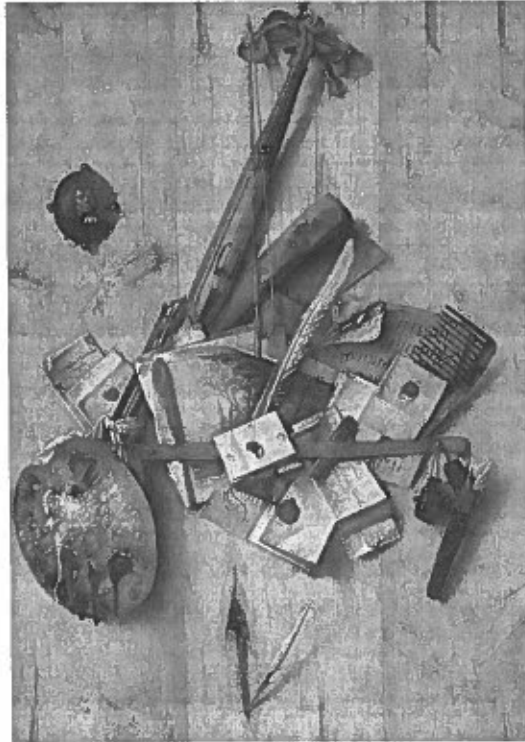
### **Trompe-l'oeil**

**Trompe l'oeil** is a painting technique that means “to deceive the eye” in French. A trompe l'oeil painting is meant to depict objects in a realistic way to produce the optical illusion that the objects exist in three dimensions. This phrase was first used in the baroque period, but the actual technique was used earlier in Greek and Roman murals.

During the Renaissance, frescoed ceiling paintings were created that used foreshortening and realistic depictions to create the illusion of more space above the viewer. This was called di sotto in sù, which means “from below, upward” in Italian.

This painting from 1675 by Gysbrechts is an example of trompe l'oeil. The artist depicted objects piled and scattered on a wood surface, and he used realistic colors, proportions, and shadows to achieve a three-dimensional effect. Even the wood surface is carefully and realistically portrayed.

This technique requires a great deal of attention to detail as well as a deep understanding of color mixing and oil media by the artist.



### Acrylic Paint

**Acrylic paint** has only been in use since the 1940s, and it has provided an alternative to using oil paints. Acrylic paint has a much quicker drying time than oils, and the finished surface has a greater degree of flexibility, allowing it to be painted on more surfaces with fewer considerations than oils.

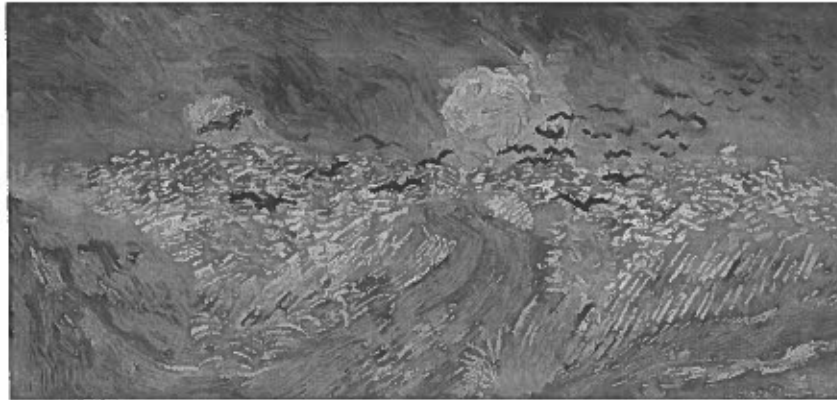
Acrylics do not require the use of solvents for thinning or cleaning up the paint. They are water soluble and clean up with water. As a water-based media, more media can be layered on top of acrylics than on oils, making it more versatile for collage art. Acrylics can be used on more surfaces and supports, including cardboard and paper, that are not suitable for oil paints because oil paints will break certain supports down. With a 15- to 20-minute drying time for each layer, acrylic layers can be completed more quickly than can those in an oil painting.

Acrylic paints were first developed for practical applications such as house painting, but when Andy Warhol began using acrylics in his paintings, including *Campbell's Soup Cans*, they gained more recognition as an artistic medium. Other notable artists who used acrylics are Robert Motherwell, Mark Rothko, and Roy Lichtenstein.

### Impasto Technique

**Impasto** is a painting technique in which the paint is laid onto the surface very thickly with a brush or palette knife. With this technique, the brushstrokes are usually very visible, and they can even become purposeful lines that lead the viewer's eye throughout the artwork. When using this technique, the artist can control how light hits and reflects off of the paint surface. It can make the painting appear three-dimensional, and it can also give the painting texture.

In Vincent van Gogh's painting *Wheatfield with Crows* (1890), he uses this technique, laying the paint on thickly with visible brushstrokes. The brushstrokes create lines throughout the painting, and the lines of the brown path lead the viewer's eye to the middle of the artwork. His use of brushstrokes also creates a sense of movement in his works. The dark blues and bold strokes in the sky suggest stormy and turbulent weather. The brushstrokes throughout the wheat field lean to the side and also suggest wind and storms.



### **Perspective in Paint**

Prior to the Renaissance, artists were aware of the varying sizes of elements related to being close or far away, but Renaissance artist Filippo Brunelleschi is credited with discovering geometric perspective in 1413. After this discovery, artists began to use vanishing points and horizon lines to compose their artwork. Decades after Brunelleschi's discovery, Leon Battista Alberti wrote a description of how to properly use perspective.

This image, *The Last Supper* by Leonardo da Vinci, shows the use of one-point perspective. This work was completed in 1495–1498. The lines in this painting converge to one vanishing point in the center of the painting. This serves to draw the focus to the central figure in the painting. Da Vinci's use of perspective masterfully showcases the relatively new technique, gives an architecturally correct feel to the room, and serves as a method of compositional emphasis in the artwork. Due to the discovery of perspective, artists were subsequently able to portray architecture and other scenes with greater accuracy.



## Historical Use of Apprenticeship

An **apprentice** was someone who learned to be an artist by working under a master artist. In the medieval era, a painter was thought of as a **tradesman**, and their client would dictate what they would create. The master painter would use helpers, or apprentices, to complete the work. The apprenticeship system began in the medieval era, and it continued through the Renaissance, when a painter was considered an artist.

An apprentice would begin with menial tasks such as cleaning paintbrushes and grinding pigments for the master artist. A student would practice drawing by copying works, and then he or she could move on to painting. The apprentices would paint backgrounds and were trained to work in the style of the master artist. The master artist might only paint the figures or faces in an artwork, or the apprentices could complete the entire work in the master's style. The master's signature on a work did not indicate that they completed a certain amount of the work, but rather that it was up to their standards. After a certain amount of years as an apprentice, an apprentice could reach journeyman status and open their own shop.

## Tools for Printmaking

- A **brayer** is a hand tool used for printmaking to smooth out the ink and then roll it onto the printmaking surface for a relief print. It has a handle and a smooth rubber roller.
- A **burnisher** is a smooth metal tool that is used to smooth the surface of a metal intaglio printing plate. Lines are etched into the plate to hold ink, and the burnisher can polish the metal surface to reduce its ability to hold ink. The term burnisher could also refer to a flat disk used to press paper onto a surface to create a print.
- A **plate** is a copper or zinc sheet of metal used for intaglio printmaking. When using a plate, the lines are cut or etched into the surface, and these lines hold the ink, which is the opposite of a relief print in which the raised parts hold the ink.
- A **gouge** is used in relief printmaking to cut away the parts that will not hold ink. Gouges come in different sizes and shapes, including U-shaped and V-shaped, and they are used on surfaces such as linoleum or wood.

## Intaglio and Lithography

**Intaglio** is a printmaking technique in which the image is carved into a surface and the ink is held in those lines for printing. Lines are cut into a metal plate by a burin, which is a handheld metal tool, or by etching, which is a chemical process. For etching, the plate is first covered with an acid-resistant material and then the image is carved into that material to reveal the plate under it. The plate is dipped in acid, which bites only into the lines where the plate is exposed. The acid-resistant material is then removed, and ink is rubbed into the etched or carved lines and wiped off of the rest of the plate. The high pressure of a printing press pushes the paper into the inked grooves to produce the print. The image shown is an example of an etching.

For **lithography**, the artist uses a greasy medium such as a crayon or ink to produce an image on limestone or aluminum. The artist then puts a solution of nitric acid and gum arabic on the surface,

and when a roller with oil-based ink is rolled over this, the ink will only stick to the greasy area. This is then run through a press with paper to produce the image.



### Relief Printing and Screen Printing

**Relief printing** is any method in which a raised surface is used to produce the image. Relief printing is commonly done with linoleum and wood, in which the parts that is not wanted to be printed are cut away by the artist with gouges. Letterpress is also an example of relief printing, in which the raised letters are printed onto paper. Ink is applied to the raised surface with a roller, and then paper is pressed onto the surface by hand or with a printing press, to transfer the image onto paper.

For **screen printing**, also called silk screening (as shown in the image), ink is pressed through a fine screen to produce the print. An image is created onto the screen through many different methods, including stencils or photo emulsion, and the parts of the screen that are left open are where the ink will go through to the surface. Ink is pushed through the screen evenly by a squeegee onto paper, cardboard, fabric, or any number of materials. Andy Warhol is famous for using the screen printing technique to produce multiple prints of the same image.





## Collography and Frottage

**Collography** is a printmaking technique in which materials of various textures are attached to a surface. The materials should all be of roughly the same height. Ink is then rolled onto the textured surfaces, and a print is produced on paper by pressing the paper by hand or with a printing press. Different textures and inking methods can produce different results for this technique.

**Frottage** is a printmaking technique in which the artist gets an impression of the surface of a material. For example, you could place various leaves on a surface, lay paper on top of them, and then carefully rub the side of a crayon onto the paper. The resulting image will show the textures and shapes of the leaves underneath. During the surrealist movement, Max Ernst would take rubbings from various surfaces and use these as a basis for his artworks.

## Monotype and Stamping

Whereas most printmaking techniques can produce multiple identical or similar prints, a **monotype** will only produce one print. The artwork is created on a nonabsorbent surface with oil- or water-based ink, and then it is transferred to paper with a printing press. In the process, most of the ink is transferred to the paper, so there is not enough left on the surface to produce another print. The print can then be embellished with ink, by drawing, or by other painting methods.

**Stamping** is another type of relief printmaking. A stamp can be made from rubber, wax, or other materials, including cardboard or even potatoes. The shape that will produce the image is cut into the material, with the negative space cut away. The shape is pressed into the ink and then pressed onto paper to create the image. A stamped image can be reproduced over and over.

## Linocuts and Woodcuts

The process of creating a **linocut**, or linoleum cut, and a **woodcut** are similar. Both of these are relief printing methods, which involve cutting away pieces of the material to produce the image to be printed. For linocut and woodcut, gouges of various shapes and sizes are used to cut away the material. The cut-away areas will not carry ink, whereas the areas left behind will be inked. When the artist is finished cutting away the material, the surface is inked with a roller, and then it is run through a printing press to print the image onto paper. The image can be reproduced repeatedly.

Instead of using the printing press, an artist could use a burnisher to transfer the image to paper. A **burnisher**, or baren, is a disklike hand tool that is flat on the bottom and has a handle. The artist would put the paper on top of the inked surface and then rub the paper evenly with the burnisher to transfer the ink to the paper.

## Mezzotint and Aquatint

**Mezzotint** is a printmaking technique in which the artist works from dark to light. The artist would work on a copper or steel plate and roughen parts of the plate for shading, while smoothing out other parts for the lighter areas. This would increase and reduce the areas' ability to hold ink. The technique was developed in the 17th century, and it could be used to create gradations in the printed work, rather than everything being black and white.

**Aquatint** is another way to create tonal effects in a print. Fine particles of acid-resistant powdered rosin are melted onto a metal plate, which is then dipped in acid. The acid eats away at the metal around the particles, creating an even, granular pattern that when inked and printed will give an

effect similar to a watercolor wash. The darkness of these tones can be controlled by lengthening or shortening the time that the plate is exposed to the acid.

### **Ceramics as a Medium**

Throughout history, ceramics have been used for fine arts and for functional pieces. Around 24,000 B.C., humans began making small figures out of clay. In 9,000 or 10,000 B.C., the first functional pottery and bricks were made. Glazes were discovered in Egypt around 8,000 B.C. A potter's wheel was used in Central America around 3,000 B.C. In ancient Greece, decorative vases depicted daily life and religion and were later decorated with black figures and red figures. Porcelain was developed in China during the Han dynasty (206 B.C.–A.D. 220). Pottery now can be mass-manufactured, but many fine artworks and functional pieces are still created by hand.

Ceramics are items produced from clay, including fine artwork, sculptures, figurines, and functional items such as tiles, dishes, urns, and vases. The item is formed, and then it is heated to harden it. A glaze can be applied, and then the item is reheated to harden the glaze. An underglaze can be applied first as a painted decoration. They can be hand built, pressed into molds, or created using a wheel.

### **Sculpture as a Medium**

Sculptures have been created throughout history from many media, and only the most durable have survived. They can be small figures, larger freestanding works, or reliefs attached to walls. The first known prehistoric sculptures are from the Stone Age, approximately 230,000 B.C., and they were made from basalt and quartz. Figures called Venuses (shaped as obese women, possibly related to fertility) have been found from the Stone Age and were made from materials such as bone and various stones. Mesolithic sculpture, from 10,000–4,000 B.C., included freestanding sculptures and bas-relief works. In the Neolithic period (4,000–2,000 B.C.), bronze statuettes were created. Classical Greek sculpture is some of the most well known, dating from 500–323 B.C., and these superbly crafted figures would only be surpassed by later Renaissance artists. The Renaissance (A.D. 1,400–1,600) was a “rebirth” of classical ideals, and the sculptors created figures with great realism. Michelangelo (Michelangelo di Lodovico Buonarroti Simoni) is considered as the greatest Renaissance sculptor. Traditional materials were used throughout history, including stone, wood, bone, and metal.

### **Bas-Relief vs Haut-Relief**

In terms of sculpture, a relief is a sculpture in which the sculptural elements are attached to a solid background. For the sculpture to appear raised from the background, the background elements are cut away, leaving the subject raised.

A bas relief is also called a low relief. The final sculpture has a shallow depth and is not raised far from the background. Coins are a good example of this. In this type of relief sculpture, elements are often distorted by being flattened.

A haut-relief is also called a high relief; this is when more than half of the sculptural form is projecting from the background. Heads and limbs might be completely detached from the background in this form of relief. Many ancient Greek relief sculptures used this technique. This

image is an example of a high, or haut-relief sculpture. Although the figures are still attached to the background, they are mostly projecting from it, only being attached at their backs.



## Clays

Clays can be classified as high fire and low fire. The three most commonly used types of clay are earthenware, stoneware, and porcelain. Earthenware was the earliest clay used, and it is fired to a temperature of less than 1,200°C. Terra cotta is a type of earthenware that is reddish brown in color. Earthenware is brown, orange, or red in its raw and fired state. Earthenware is more porous than stoneware or porcelain, and it is less durable.

Stoneware is a mid- to high-fire clay that ranges from light gray to brown when fired. Stoneware is nonporous, and it differs from porcelain in that it is more opaque.

Porcelain has a rich history in China, and items made with porcelain are often called china or fine china in some English-speaking countries. Porcelain is a high-fire clay that is made with kaolin, which makes the finished product pure white. Porcelain is fired to 1,800°C, and when it is fired, it is hard, nonporous, and translucent.

## Materials Used for Sculpture

Stone has been used for sculptures for centuries, and the artist must use the subtractive method — removing pieces of the stone to shape the sculpture. Marble has been a preferred material for traditional sculptors since ancient Greece, but artists also use granite, limestone, sandstone, and alabaster.

Wood has been used historically for carving, and many important sculptures in Africa, China, and Japan were carved from wood. It is lighter and much easier to carve than stone.

Glass can be cast in molds or heated in kilns and then blown or sculpted with hand tools. Larger scale glass sculptures are a modern development. Glass was believed to be discovered in Egypt around 8,000 B.C.

Clay has been used for thousands of years to form pottery. The first functional pottery vessels were created in 10,000 B.C. People were crafting human and animal figures from clay as early as 24,000 B.C. Many cultures have used pottery for fine arts and functional vessels. Clay is a natural material found in the earth, but artists prefer different types. Clay can now be bought commercially, or it can be mixed by the artist.

## **Tools Used for Sculpture**

Tools such as chisels, pitching tools, rasps, mallets, and rifflers are used to sculpt stone. A chisel is a piece of steel that is pointed at one end and flat on the other end. A pitching tool is a wedge-shaped chisel. The chisel or pitching tool can be positioned on the stone and hit on the flat end with a mallet to break away unwanted stone. Rasps are flat steel tools with a rough surface, which can be used to wear away excess stone. A riffler is a smaller rasp used for details. Sandpaper or emery (a type of stone) can be used to polish a stone sculpture.

For pottery, an artist uses tools such as cutters and rolling pins for hand building. Ribbon or loop tools are made from a flattened metal ribbon and are attached to a wooden handle. These are used to trim, carve, and hollow out shapes. A wire cutter is used to remove a pot from a potter's wheel. A caliper is an adjustable tool used to measure openings for making lids.

For wood sculpture, similar tools are used as those for stone sculptures: chisels, rasps, mallets, and sandpaper. Gouges are useful for digging into the wood, and knives are also used for carving.

## **Additive vs Subtractive Sculpture Techniques**

Subtractive sculpture is the oldest form of sculpture. This consists of removing material from a larger piece, such as marble, wood, or another material. Michelangelo was a master of this subtractive technique, also known as carving. Michelangelo would begin with a large block of marble, and then he would carve and chip away until he was satisfied with his sculpture. The original piece of material has to be big enough to accommodate the size and shape of the finished work of art.

The additive technique consists of adding material to create an artwork. A soft material, such as clay or plaster strips, is built up over an armature until the final form is achieved. This is also called modeling. With the additive technique, the sculpture can start small and be built larger.

Another additive sculpture technique is assembling. This technique became popular in the 1950s and 1960s. The artist creates a three-dimensional collage by gluing, welding, nailing, and otherwise joining objects — usually found objects. The final product is called an assemblage.

## **Hand Building and Wheel Throwing**

Hand building is working with clay without a pottery wheel. Three methods are slab building, pinch pot, and the coil method. For slab building, clay is rolled into sheets and cut into shapes. The shapes are cut out and then joined together. The artist would score the edges with a sharp clay tool and then add some slip (liquid clay) to join the edges securely.

A pinch pot is created by rolling a ball of clay and then inserting a thumb into the ball. The artist presses the sides out evenly with the thumb on the inside of the pot and the fingers on the outside, until the sides and bottom are of consistent width and are smooth.

For the coil method, the artist first makes a shallow pinch pot as the base. He or she then rolls long coils of clay and builds up the body of the bowl or pot in a spiral, scoring and adding slip as the object is built.

Wheel throwing consists of using a potter's wheel to throw clay objects. The artist will first get any air bubbles out of the clay by wedging (kneading) the item on a surface, and then he or she uses slip to create the object as the clay spins on the wheel.

## Modern vs Traditional Sculpture Materials

Traditional sculpture materials include stone, wood, clay, and metal. Stone (including marble) sculptures have survived through the years better than other materials due to their durability. Most works created with wood have been lost to decay, insect damage, and fire. Sculptors in ancient Greece and during the Renaissance focused on depicting the human body, and many ancient sculptures depicted religious or political subjects.

Modern sculptors have moved away from traditional materials and subjects and focus more on assembling and found objects. Picasso changed the direction of sculpture when he began constructing sculptures from different objects, much like a sculptural collage, in the early 20th century. In the 1940s and 1950s, artists began creating abstract and surreal sculptures and experimenting with new materials. This includes Alexander Calder's mobiles and David Smith's stainless steel sculptures. By the 1960s, some artists began creating minimalist works and experimenting with steel and environmental installations. Modern artists have also created sound sculptures, light sculptures, street art sculptures, and kinetic sculptures.

## The Stages of Clay

The stages of clay determine how fragile or workable it is and what can or should be done to it next. Clay that has partially dried but is not completely dry is **leather hard**. When a piece is leather hard, the artist can carve the piece or add decorative slip. Handles can be added, and the foot of a pot can be trimmed.

**Bone dry** refers to when the clay is completely dry. The clay will be a lighter color. The piece will be fragile; attaching and carving cannot be done at this stage.

**Bisque** is when the piece has been fired once in a kiln. Bisqueware can be glazed and fired again. At this stage, prior to being glazed, the clay is still porous. Prior to being fired, all unfired clay pieces are referred to as **greenware**.

**Slip** is a liquid clay mixture that can be used to join clay pieces together. Slip is a mix of clay and water, and it has a runny consistency.

## Summarize the use and significance of ceramics in China.

Pottery was first made in China during the Paleolithic era, and it became the most well-known form of art in China. Porcelain, a type of ceramic, is so associated with China that porcelain wares are dubbed "china" or "fine china" in other countries.

Porcelain originated in China, and although proto-porcelain was made as early as 1,600 B.C., it developed into high-fire porcelain in the Han dynasty (206 B.C.–A.D. 220). Later during the Ming dynasty, they began exporting porcelain wares to Europe. During the Ming dynasty (A.D. 1368–1644), cobalt underglazing was perfected, leading to the production of the iconic blue and white vases from that period. The blue underglaze is painted onto the porcelain, and then a clear glaze is applied, and the piece is fired.

Contemporary artist Ai Weiwei blends modern ideas with historical Chinese materials. One of his performance art pieces involved dropping a Han dynasty urn. Another work involved creating 100 million porcelain sunflower seeds.



### **Sculptures from Ancient Greece vs Rome**

Sculpture in ancient Greece often depicted battles, mythology, and their rulers. Whereas earlier sculptures were made from limestone or bronze, the later larger sculptural works were made from marble or bronze. The classical period of Greek sculpture showed great skill in depicting human anatomy and natural poses. Sculptures were life-sized and realistic. Most bronze Greek sculptures have only survived as Roman copies. The Greeks used the lost-wax technique to create their metal sculptures.

Sculptures in ancient Rome focused more on portrait and less on the idealized human body. The sculptured figures were more rigid and less natural than the Greek sculptures. Their sculptures reflected the current styles and hairdos, and they could even be dated by historians based on these fashions. Romans sought to immortalize and capture a likeness of a person, whereas Greeks sought to idealize them. There are many original Roman sculptures, but there are also many Roman copies of Greek sculptures.

### **Renaissance Sculpture Subjects and Techniques**

The hallmarks of the early Renaissance were classical composition and realism. Artists portrayed their subjects with a naturalism of their clothing, proportions, and perspective. These Italian artists recalled the classical sculptures of ancient Greece, and their subjects and forms. Throughout the Renaissance, sculptors created religious and secular sculptures. Church interiors, palaces, and private homes were elaborately decorated. The Madonna and Child were a popular subject, as well as scenes from the life of Christ. During the High Renaissance, subjects broadened and diverged more away from religious themes to include mythology and other topics.

Lorenzo Ghiberti won a contest to create large bronze doors at the Florence Baptistery, and this is thought of as the beginning of Renaissance sculpture. Donato di Niccolò di Betto Bardi, better known as Donatello, is another well-known sculptor of the 15th century, second only to Michelangelo. Both created many large marble and bronze sculptures. Donatello's most well known work is his *David*, cast in bronze. Michelangelo is known for many sculptures including the *Pieta* and *David*, both marble. This image is of Michelangelo's *David*.



### **Lost-Wax Casting Technique**

Lost-wax casting is a technique in which a metal copy of a sculpture is produced from an original sculpture. This technique was used as early as 3,700 B.C. To produce a sculpture with this method, a mold is first made of a clay sculpture. The inside of this mold is brushed with wax until the wax is the thickness of the intended metal sculpture. The mold is removed, and the shell of wax is filled with a heat-resistant material. Then a heat-resistant plaster covers the wax, and the assemblage is turned over and placed in an oven. The wax drains away through vents placed in the shell; after the plaster mold has been filled with sand, bronze is poured into the void left by the wax. After the whole assemblage has cooled off, the plaster and center are both removed, and the artist can apply any finishing touches to the bronze sculpture.

### **Fiber Art as a Medium**

The term fiber art was first used by curators after World War II. It described works relating to fabrics, and it includes embroidery, weaving, knitting, crocheting, and sewing. Fiber arts take into consideration the artist's skill and labor to create the work, as well as the materials used, and it focuses more on the aesthetics than on the usefulness of the item.

In the 1950s, fiber artists began weaving more nonfunctional artworks. Then in the 1960s and 1970s, artists began exploring different techniques including knotting, coiling, and pleating fibers. The feminist movement began using fibers as "high art" and celebrating needlework in the 1970s. From the 1980s to the present, fiber artists have created more conceptual work, influenced by postmodernism. They have focused on cultural issues including feminism, gender, politics, and social sciences. Judy Chicago first used the term feminist art and founded the first feminist art program in the United States. Her work *The Dinner Party* incorporated fiber arts and celebrated the position that needlework and fabric has had in the history of women.

## **Fibers and Materials**

A fiber is a threadlike piece or material created from threadlike pieces. This includes materials such as fabric, yarn, and embroidery thread. Fibers can be made of natural materials, such as cotton, wool from sheep, or silk from a silkworm, but they can also be made from synthetic materials such as acrylic used to make yarn.

Yarn can be bought premade, or it can be spun by the artist. To spin yarn, the artist starts with roving, which is wool that has been run through a mill to brush the fibers in the same direction but hasn't been spun into yarn yet. Yarn can be made with many materials, in many thicknesses and colors. Roving can also be used for felting, which is a process involving hot water and shrinking a wool piece down into a smaller, denser piece.

When using fabrics, the artist can use a sewing machine or sew by hand, but the artist needs to understand the properties of each material and how best to join them.

## **Jewelry as a Medium**

Prior to the discovery of precious metals, in prehistoric times humans used bone, shells, antlers, feathers, and pebbles to decorate their bodies. One of the oldest examples of traditional jewelry was discovered in a tomb in Sumer from 2,600 B.C. The findings included gold pins, amulets, earrings, and a headdress. Evidence was found of Sumerians using techniques such as welding, enameling, stonecutting, and filigree. The tomb of Tutankhamun in Egypt showed mastery of gold and jewelry techniques by the ancient Egyptians. Bracelets, amulets, pendants, earrings, and a large quantity of jewels were found in the tomb, showing a high degree of craftsmanship. Motifs used include the scarab, lotus flower, Horus, eye, serpent, and sphinx, among others. During the Bronze Age, the Minoans in Greece were stamping and cutting gold sheets into beads to form necklaces and decorate clothing. Jewelry making flourished during the Hellenistic period in Greece, and it was used to an even greater extent in ancient Rome. The gold ring became common in ancient Rome, and not just for noblemen. Rings and brooches became widely used in medieval Europe. With a rebirth of classicism, jewelry making reached new heights in the Renaissance era.

## **Tools and Supplies**

Precious metals used for creating jewelry include gold and silver. They are both available in varying purities. 24 karat gold is 24 out of 24 parts gold, and it is also known as pure gold. Fine silver is 99.9% pure silver, whereas sterling silver is at least 92.5% pure silver. Other metals used include brass, which is an alloy of 70% copper and 30% zinc; copper, a bright reddish-orange element; and pewter, a silver-gray alloy of tin, antimony, and copper.

A soldering iron can be used for joining metal parts together. A jewelry artist will use a variety of pliers, saws, and cutters for working with metal, as well as a polisher to finish the piece. A mandrel is used to size and shape a ring; it is a tapered piece of metal that the ring fits onto. Clamps hold the piece steady for the artist to work on it. A loupe is a magnifier used to see the piece in detail. Calipers are used to measure the gauge (thickness) of materials.

## **Knitting, Weaving, and Crocheting**

Knitting consists of creating a series of interlocking loops using straight knitting needles that are pointed at one end. The knitter begins by casting on, or creating the first stitches on the needle. A variety of stitches are used; the main stitches are called knit and purl. The basic knitted pattern is called a stocking or stockinette pattern, and the right side looks like a pattern of V shapes.



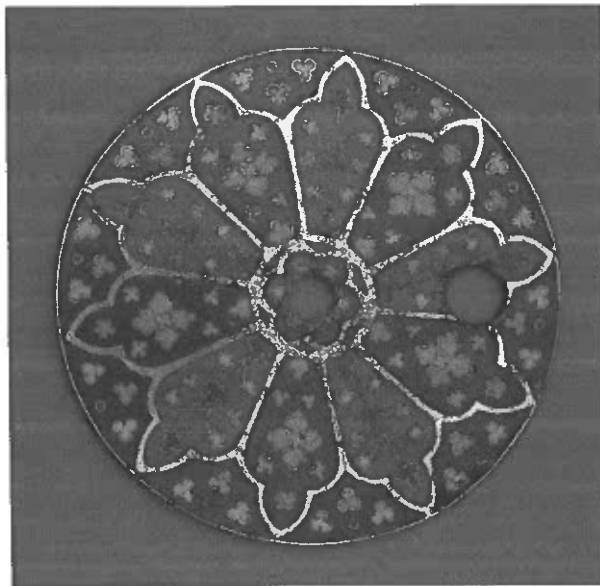
For weaving, two sets of threads are interlocked in a perpendicular pattern. This can be done by hand or by machine. The lengthwise threads are called the warp and are held stationary on a loom while the other thread (weft) is passed back and forth between them.

Crocheting involves using a stick with a hook at the end, called a crochet hook, and creating stitches to interlock the yarn into a fabric or pattern. With crochet, each stitch is finished before starting the next, whereas in knitting, many stitches are kept open at the same time.

### **Enameling**

Enameling involves fusing powdered glass to a surface by heating it to between 750°C and 850°C. When fired, the glass powder melts and turns into a smooth, shiny coating. Enameling is often seen on metal jewelry, but it can also be used on glass and ceramics. It can be applied to gold, copper, silver, and aluminum. Commercially, it is often applied to stainless steel. After it is fired, it is durable and resistant to scratching. The finely ground glass used for enameling is called frit, and various minerals are added for coloring. Different colors of enamels can be mixed to create new colors, and enamel can be transparent, translucent, or opaque. Enameling was used in ancient Egypt for the creation of jewelry, as well as in ancient Greece, ancient Rome, and China. In ancient Rome, enamel was also used on glass.

This image is an example of enamel applied to a copper alloy disk, from between 1290 and 1310. It is a radial pattern with a rose window design.



### **Soldering and Filigree**

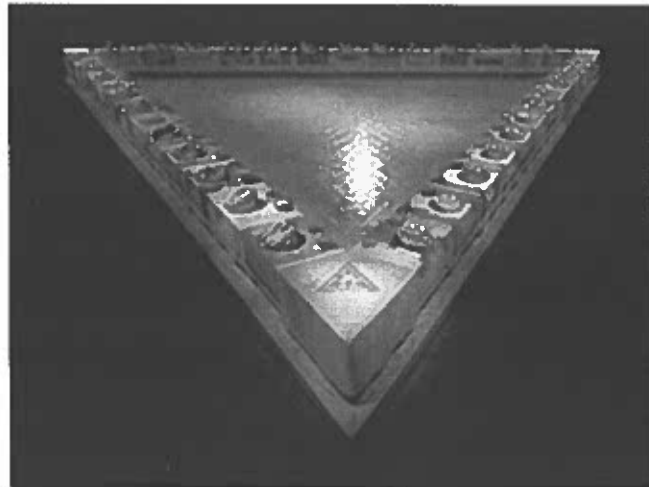
Soldering can be done on a clean ceramic tile or fire brick. The metal to be soldered should be clean and free of oil or grease. Flux is mixed with water and dabbed on the parts where the metal will be joined. The flux is a chemical used to promote soldering. Tiny pieces of solder are placed onto the fluxed seams of the metal with tweezers. A flame is applied, and the piece is heated evenly until the solder melts and the pieces join.

Filigree is a technique of forming metal threads to resemble a lace pattern. Making a filigree piece involves careful and skillful bending of wire. A filigreed metal piece can be simple or complex, consisting of many pieces carefully formed and combined. Before working with the wire and

wrapping it, it should first be annealed. Annealing is a process of heating the metal, then cooling it slowly, so it is easier to work with for a specific technique. This silver ring contains a filigree pattern.

### **The Acceptance of Fiber Art**

Textile and fiber work, including sewing, embroidery, knitting, and crocheting, have always been considered women's work and have been devalued for a long time. During the suffrage movement of the early 1900s, embroidery was highlighted as a fiber art medium for feminist protests. During the 1950s, artists began creating hanging and freestanding fiber works, but it wasn't until Judy Chicago's work that fiber arts really began to be accepted as an artistic medium. Artists took the perception of fiber as women's work and turned their works into fun and liberating works of art. Her most famous work, *The Dinner Party*, celebrates the accomplishments of 39 important women from history, setting a place at a table for each woman. The work, constructed as a long triangle, incorporates traditional needlepoint and embroidery among other materials. More than 400 people, mostly women, volunteered to assist with aspects of this artwork, and it is still known as the first major feminist artwork.



### **Jewelry Making: Art and Craft**

Although art and craft are both thought of as ways to express creativity, the distinction lies in the purpose of the work produced. Crafts are created with an aesthetic and a functional purpose, whereas art is generally decorative but not functional. Based on this, jewelry's functional and decorative nature can be seen as both an art and a craft. Jewelry makers throughout time have used various techniques to create intricate and beautiful works that show superb craftsmanship as well as artistic inspiration. Jewelry making has followed artistic trends throughout major art eras, and the pieces have been used to adorn important leaders, politicians, and the common citizen. Jewelry making requires skill and understanding of the materials, but so does working with oil paints or sculpture materials. The line between art and craft has often been blurred, with artists creating decorative pieces with materials usually used for functional crafts.

### **The Early Camera**

The first **photograph** was taken by French inventor Nicéphore Niépce in 1827. In 1837, Louis Daguerre developed the first practical process to create photographs, which was called the daguerreotype. Daguerreotypes create an image on a silvered copper plate, and they require the

subject to stay still from 15 to 30 minutes. Henry Fox Talbot next developed the calotype, or talbotype, process. The daguerreotype and the calotype both use two nested boxes as the body of the camera. The calotype used paper coated in silver iodide for the print.

**Emulsion plates**, or wet plates, using the collodion process followed. They needed much less exposure time than previous methods. Bellows were added to cameras at this time to aid in focusing the image. Ambrotype and tintype were two common emulsion plates. Ambrotype used a glass plate, whereas tintype used tin.

In 1888, George Eastman developed a film camera, and the first one was called the "Kodak." This camera did not require solid plates, and the cost was low enough for the average consumer. The first 35 mm camera was available in 1913, but the film was not affordable to average consumers until the 1940s.

### **Digital Photography**

Prior to the introduction of digital photography, the photographic process was slower and much more expensive. The number of shots was limited to the number available on each roll of film. Film had to be handled carefully and correctly, and then it was taken to a photo developing center, or it could be developed at home in a darkroom using special equipment. Until the pictures were developed, the photographer did not know how their pictures turned out. If the original prints and film are lost, the images can be lost forever.

With digital photography, the number of images is only limited by the storage space on the camera and the size of the digital image. Photographers can immediately review the images, delete unwanted images, and take more photographs until they are satisfied that they have a good shot. Digital photographs can be more easily edited and manipulated on a computer than photos developed in a darkroom. Digital photographs can be stored indefinitely on a digital device and printed inexpensively with online services or on a home printer.

### **Photography Supplies**

Although film cameras are still in limited use, **digital photography** has surpassed them as the medium of choice. Digital cameras range greatly from inexpensive cameras for casual use to high-priced cameras for professionals. Fewer dedicated low-end digital cameras are used now because the ability to take photographs is included in most smartphones.

The **resolution** of a digital camera is determined by its image sensor. A camera with a 1,000 × 1,000 pixel image sensor will take up to 1 megapixel photos. A digital camera can shoot up to 120 megapixels, whereas a smartphone will now shoot up to 12 megapixels. A digital camera can be compact and portable, or it can be larger with removable lenses. A digital single-lens reflex (DSLR) camera contains a mirror at a 45-degree angle to convey the image to the sensor. The DSLR camera

will have a higher possible resolution than a compact camera, and it will usually have the option of multiple lenses for different purposes. This image is of a DSLR camera.

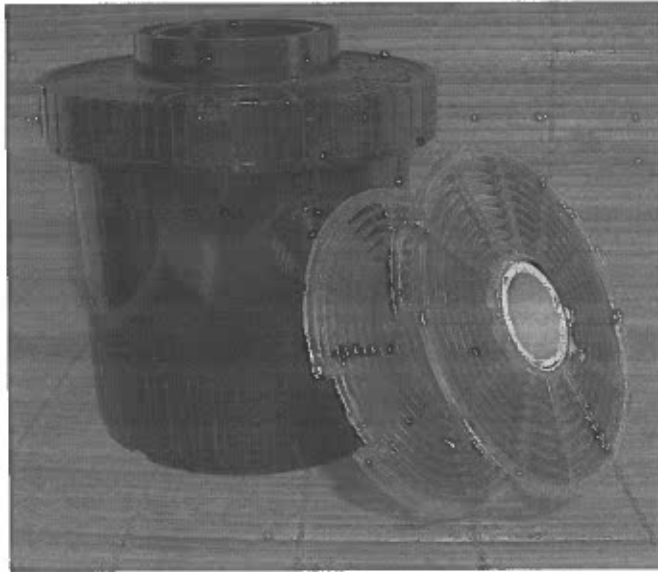


### **Film Photography Supplies**

To shoot photographs with a film camera, the correct type of **film** is needed for the photographer's purposes. The most common size is 35 mm and speeds range from 100 to 3,200, with consumer film ranging up to 800. The speed of the film is determined by the International Standards Organization (ISO) scale, which dictates how much exposure the film needs to produce an image. Slower film will give better detail and color, but faster film can capture a subject in motion.

To develop the film, the camera back is opened, the film is removed in a completely dark room, and it is coiled into a reel as shown in the image. The reel is placed into the container, and a chemical process consisting of developer bath, stop bath, and fixer bath are introduced into the container. The film can then be exposed to light to be washed and dried.

After the film is developed, the images are printed onto photo paper in a darkroom lit with only a safelight, which will illuminate the room in a red or amber color. An enlarger is used to expose the film to the photo paper.



### Parts of a Camera

The main part of a camera is called the **body**. The **viewfinder** is where the photographer looks through the back of the camera to compose the shot. Some digital cameras will have a liquid-crystal display (LCD) screen instead of a viewfinder. The shutter release button activates the shutter, and the amount of time that the shutter is left open is determined by the shutter speed. The lens is on the front of the camera, and it focuses and directs light into the camera. Lenses can either be fixed to the body, or they can be removable. The aperture of the camera controls the amount of light reaching the image sensor. It also determines how much of the image is in focus (depth of field). The aperture is expressed in f-stops. A film advance lever is found on a film camera, and it moves the film to the next frame. A flash can be built in or added to the camera; it adds light to the subject. A flash can be connected to the top of the camera on a socket called a hot shoe.

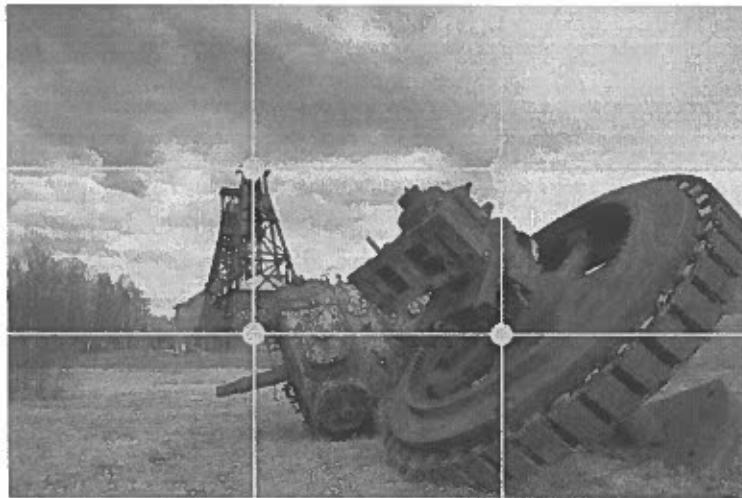
### Video Art

**Video art** began in the 1960s, and artists used mainly analog videotape as their medium into the 1990s. Nam June Paik is known as the pioneer of video art. The first instance of video art is when Paik used a Sony Portapak video recorder in 1965 to tape Pope Paul VI's procession in New York City, and then he played the tapes in another location. The availability of consumer video equipment such as the Portapak allowed artists to begin experimenting with this new medium. Artists experimented with the capabilities and limitations of the equipment by combining, layering, and distorting the signals. In the 1980s and 1990s, video editing software became more readily available and allowed video artists much greater flexibility and control over their work. With the advent of digital video technology, equipment has become increasingly compact and portable, as well as more easily available.

One of Paik's most famous works is *Electronic Superhighway* (1995), which includes a 51-channel video installation, along with neon lights. The scale and images represent the enormity of the United States as seen by this artist who came from Korea at only nine years old.

## The Rule of Thirds

The **rule of thirds** is a compositional technique used for not only photography, but also for other two-dimensional art forms. The rule of thirds involves dividing an image vertically and horizontally into three equal parts. This divides the image into nine equal parts. The subject or focal point of the image should then be placed at one of the intersections of these lines. Doing this creates tension and imbalance in the image, and it creates a more interesting composition than placing the subject or focal point squarely in the center of the photograph. This image illustrates the rule of thirds and the lines associated with it. In this image, the center of the nearest object is placed on the lower right intersection of lines and the tower in the background is aligned along the left vertical line. The horizon also falls along the lower horizontal line, rather than being placed in the center of the image.



## Aperture and Focal Length

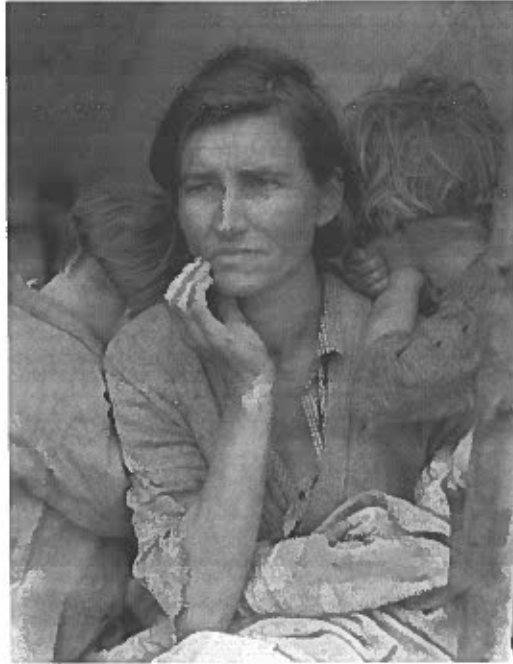
A camera's **aperture** is the opening in the lens, and it is measured in *f*-stops. Moving from one *f*-stop to the next doubles or halves the size of the opening. A larger *f*-stop number means a smaller aperture. Adjusting the aperture will change the depth of field of your photograph, which is how much of the image is in focus. A shallow depth of field is a result of letting more light in or a larger aperture (a smaller *f*-stop). A shallow depth of field means that only a part of the image is in focus and the rest is blurry. A large depth of field results in most of the image being in focus, and this is done with a smaller aperture (larger *f*-stop).

The focal length of a camera lens determines the magnification of the image, and it is usually expressed in millimeters. The field of view and focal length are inversely proportional. A 24–35 mm lens will give a wider angle and capture more of a scene from the same distance as a 50 mm lens.

## Photography Used to Document Events

Early photographers attempted to record the events of war, but limitations of the process prevented them from recording movement and action. Instead, they photographed the still aspects, and they even recreated scenes to attempt to convey their impressions of the battles. During the Civil War, photographers staged scenes of battles to heighten the emotional effects of their images. They would even move and rearrange dead bodies. These images were used to convey the atrocities of war to the public.

During the Great Depression, the Farm Service Agency sent photographers out to document American life, especially rural America. These photographers, including Dorothea Lange, captured images of life during this difficult time. These images serve as a reminder of this era, as well as documentation of how Americans persisted through their difficulties. One of the best-known images from this time is *Migrant Mother*, by Dorothea Lange. She skillfully captured the worry and fear on the face of a mother dealing with raising children during a time of extreme poverty.

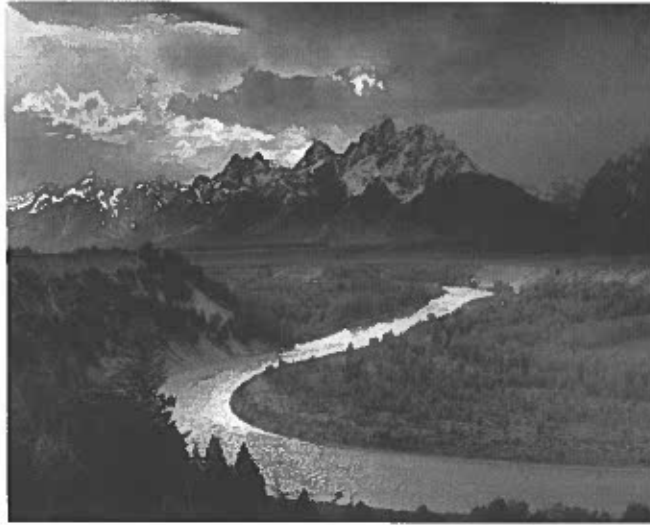


### **Acceptance of Photography as an Art Form**

Since the invention of the camera, photographers have struggled with acceptance in the art world. They questioned the role that photography would play in art and whether they should be confined to the aesthetics of other art forms or explore ideas and characteristics of the new medium. Photography has taken many forms, including photojournalism, but it has historically mostly been accepted as a craft.

In the early and mid-1900s, Alfred Stieglitz, Edward Steichen, and Ansel Adams were critical to advancing photography from a craft to the acceptance as a fine art. In Adams' case, his beautiful photographs of nature scenes were used not only as artistic expression, but also to promote the conservation of nature. His work *The Tetons and Snake River* is an example of this. It wasn't until after the 1950s that it was thought acceptable and unpretentious to frame a photograph for a show

or exhibition. Until the 1970s, the main genres of fine arts photography were portraits, landscapes, and nudes.



### **The Impact of the Camera**

After the invention of the camera in the early 1800s, people began using photographic techniques to attempt to capture reality in a more reliable way than they could by hand. People created millions of daguerreotypes to record images of their families, aware of their own mortality. Photographs were used to capture the atrocities of war, mundane life, and each other. Images of average people could be created as easily as images of important politicians. Action photos as well as posed scenes were created. Images captured in a photograph were more objective than those created by artists, taking out much of the imagination and artistic license, and giving a more reliable representation of the subject. By the mid-19th century, photography was becoming accepted as a powerful tool for communication. When the first mass-produced camera was created in 1901, photography became accessible to more people. With advances in equipment, photographers no longer needed to carry plates and chemicals to process their images.

### **Cindy Sherman**

Cindy Sherman is a photographer whose work has been an inspiration for contemporary portrait photographers. She began her photography work in the 1970s. In her first self-portrait series, *Untitled Film Stills*, she plays the role of "everywoman," dressing up and characterizing herself in many different clichéd feminine roles including housewife and pinup girl. Sherman changed the perception of portrait photography to a depersonalized method of critiquing social issues. She used an antinarrative approach to photography, discarding notions of documentary realism and creating works that left unresolved ideas and emotions.

Sherman used her photography to examine assumptions and stereotypes, and her work is often associated with feminism. Her work has highlighted the objectification of women, as well as obsessions with youth and beauty. She explored identity and representation in new ways and opened the door for creative and conceptual photographic portraiture. In the 1980s, her work helped to drive photography into acceptance as high art.



## **Electronic Art as a Medium**

**Electronic art** is an art form that uses electronic media, including digital art, video art, and interactive art. Digital art is created using a computer, and it started when artists began to experiment with computers in the 1960s. As computers have become more affordable, digital art has grown as a medium.

**Photoshop** was first developed in 1987 at Industrial Light and Magic, a visual effects company, and it was later sold to Adobe. Many versions and related programs have followed, including a touchscreen version for tablets.

Nam June Paik is regarded as a pioneer in video art, which emerged as a medium in the late 1960s as video cameras became available to consumers. As time has passed, prices have dropped, and video cameras have become increasingly portable and more versatile.

**Interactive art** involves the viewer participating with the artwork. This could include the viewer walking into or onto the artwork, or even becoming part of the artwork. These works generally include some computer or motion sensor components. The earliest examples of interactive art date back to the 1920s.

## **Digital Art: Supplies**

Supplies used for digital art include computers, tablets, video cameras, scanners, and digital cameras. The computer can be used to generate art, for example, with fractals or algorithms, in which data are put into the computer and the computer uses the data to create an image. The computer can also be the tool that the artist uses to create their artwork. The artist can use a mouse or a stylus to draw and edit images on the screen. This can also be done on the touchscreen of a tablet. The final product can be printed on papers of various thicknesses, colors, and surfaces. An inkjet printer blends colors smoothly and is cost effective. Laser and LED printers are more expensive and faster but are best with solid colors and black text.

Video cameras can be used to capture video, which can be edited on a computer to produce the final product. Another part of digital art includes using an electronic display in an art installation. The artist can include TV screens or projector screens to display their videos.

## **Techniques Used in Digital Art**

To create digital art, the artist can use the computer to manipulate found images, images taken with a digital camera, or images scanned with a scanner. The computer can also be used to automatically generate images such as fractal or algorithm art. Once the artist has images in the computer, they can use editing software such as Photoshop to alter those images. Illustrator is another popular software used to create images, but it is used to create vector-based illustrations and text that can be enlarged or shrunk without losing quality. Photoshop is used to edit photographs and raster (pixel)-based artwork. If a raster-based artwork is enlarged too much, it loses quality and becomes pixelated.

To create artwork that includes an electronic display, the artist can use a projector and a screen to project a large video or can include TV or computer screens within their work to show their video art.

## **File Formats for Digital Art**

Common image file formats include JPG, GIF, TIFF, and PNG. JPG is the most commonly used image format, and it stands for Joint Photographic Experts Group. JPG images are highly compressed; this has the benefit of a small file, but the compression is lossy, meaning it sacrifices quality for a smaller size. A GIF file uses lossless compression, but it is limited in its display of colors. It is better for graphics than photographs. A TIFF file is lossless and is considered the best quality format for graphics work. It can be saved in red, green, blue (RGB) or cyan, magenta, yellow, and black (CMYK). A PNG file will be smaller than a TIFF but larger than a JPG, and it is also lossless. It is the newest of these formats. A GIF or PNG file will support transparency or animation.

Videos are saved as Audio Video Interleave (AVI), Flash Video Format (FLV), Windows Media Video (WMV), Apple QuickTime Movie (MOV), or Moving Pictures Expert Group 4 (MP4) formats. AVI is one of the oldest video formats. FLV files are created with Adobe Flash. WMV was originally intended for streaming content online. MP4 is a newer format becoming popular for sharing videos online.

## **Advantages and Disadvantages of Digital Art**

Digital art can be saved in an image or video format, and it can be shared and reproduced multiple times. A digital image can be printed, and this artwork can be shared with multiple people or shown in multiple locations. Many traditional art methods produce only one artwork, and if this artwork is damaged, there is not another copy saved elsewhere. Digital art can be created quickly, and it can be edited, erased, and changed until the artist is satisfied. As technology evolves, new techniques and possibilities emerge.

Because digital art can be reproduced and shared endlessly, it is not held in as high regard as other art forms. Digital art is thought to require less skill than other art forms, and because anyone can create digital art, it is thought of as a lesser art form. It does not require the knowledge of traditional art media or practice involved with drawing, painting, sculpture, and other media.

## **Performance Art as a Medium**

**Performance art** began in the early 20th century with the futurist, Russian constructivist, and Dada art movements. Performance art is a scripted or unscripted performance that is presented live in the context of fine arts. The performance is usually conceptual and not just for entertainment. The artist seeks to break away from the traditions of art and can even include audience participation if desired.

Performance art involves four components: the performer, time, space, and a relationship with the audience. It can be experienced live or through media, with no specific venue or length of time required. The artist might stick to a script or improvise as the performance goes on. Unlike the performing arts, performance art does not create a fictitious drama with a linear script. Performance art is often satirical or will make the viewer think about art in unconventional ways.

## **Site-Specific Art and Installation Art**

**Site-specific art** is created to be displayed or erected in a certain location, and it loses meaning if it is removed from that location. The term was first used in the mid-1970s. Site-specific art includes sculptures, land art, or even a dance or performance created for and performed in a specific location. Christo and Jeanne-Claude are known for their large-scale, site-specific artworks including wrapped bridges and surrounded islands.

**Installation art** is a large-scale construction created with mixed media, for a specific location and length of time. An installation can take up an entire room and is sometimes referred to as an environment. The viewer can walk through the room to experience the art. An installation can also be smaller and be intended for the viewer to walk around. Installation art has been a major art form since the 1960s.

### **Environmental Art**

The **environmental art movement** began in the 1960s and consisted of site-specific sculptures. Environmental art can use part of the environment to create aesthetic artwork, or it can create a statement on environmental, social, or political issues relating to the natural world. It can highlight and celebrate the artist's connection with the natural world, and it can use natural materials within the environment. The movement began in rural areas, but in the 1970s and 1980s, environmental art was also created in public and urban areas. It can be created to blend in with nature or highlight environmental issues, but sometimes environmental art actually damages the environment, like Robert Smithson's *Spiral Jetty*, shown here. The creation of this work permanently damaged the land it was created on, and it has been criticized for such. Another criticism of environmental art is the fact that it either has to be experienced on site or displayed as a photograph of the art, posing a challenge to gallery exhibitions.



### **A Happening**

A **happening** is a performance or event created in the context of fine art. Happenings include audience participation as a main component, and although some parts are planned by the artist, there is often also room for improvisation as well. Every time a happening was performed, it would be different due to the unplanned and improvised parts. This is in stark contrast to static, unchanging works of art, which provide the same experience to each viewer. Happenings exist as a fleeting moment, something that cannot be preserved and shown in a museum. A major difference between happenings and other types of art is that each happening is unique. They could be elaborate and large or intimate and small depending on the artist's intentions.

Allan Kaprow first used the term "happening" in 1957 to describe art events that he experienced at a picnic on George Segal's farm. Kaprow's 1959 work was titled *18 Happenings in 6 Parts*. A happening could include any combination of elements of dance, music, performance, poetry, and theater, as well as art creation.

### **Environmental Art: Materials.**

**Environmental art** can incorporate materials from the natural environment, or it can introduce new and surprising materials into the natural environment. Some environmental art will include leaves, branches, rocks, moss, logs, vines, and other materials found in the local environment,

changing the environment and emphasizing the local materials. Other environmental art will include nonnatural materials such as nylon fabric, spray paint, or metal.

This example by Robert Smithson, *Broken Circle and Spiral Hill*, was created in 1971 in the Netherlands. Smithson listed his materials as green water and white and yellow sand flats. Smithson used the local materials to create something different and recognizable as something not created by nature, but rather created with nature. Smithson had begun the “land art” movement, desiring to create art out in the open and not inside a studio. The life span of this type of artwork is finite, meant to be eventually reclaimed by nature.



### **Performance Art: Materials**

**Performance art** involves the presence of the artist as the performer, the involvement of the audience, time, and a space for the performance. It includes the actions of the performer or performers as the artwork. The actual work requires live performance, but the artwork can reach a wider audience afterward by documentation through photography and videotaping. The documentation can affect how the viewer understands the work, and it can be different than experiencing the work firsthand.

In Marina Abramović's work *The Artist Is Present* (2010), she sat silently at a wooden table, and people took turns sitting across from her, silently engaging her gaze. Abramović was experimenting with people's perception of expected time of a performance, stretching it out to eight hours a day for three months. She sought to push limits of the time of a performance piece, while engaging thousands of participants.

### **Performance Art: Techniques**

Performance art involves many techniques and materials, all depending on the artist and the messages that they are trying to convey. One example is Yoko Ono's *Cut Piece* (1964), in which she sat on a stage while viewers took turns cutting her clothing off of her with scissors. This was a commentary on voyeurism and a voyeur's participation and responsibility in objectifying women.

Another example is Chris Burden's *Shoot* (1971), which involved a friend shooting him in the arm while another friend documented the performance with a camera. This work touched on the second friend's desire to intervene, ideas of gun control, and even the Vietnam War.

For *Art/Life: One Year Performance (Rope Piece)*, begun in 1983, Linda Montano and Tehching Hsieh were tied to each other by an eight-foot piece of rope for an entire year but did not touch each other. For this work, the rope represented people's struggle to connect to each other socially and physically.

### **Environmental Art: Techniques**

Environmental art seeks to challenge traditional notions of sculpture and bring sculptural elements to the natural environment. Some environmental art uses elements of the natural landscape to create the artwork, including sticks, sand, rocks, stones, and moss. The artwork is intended to disappear back into the landscape as time and weather affect the sculpture.

In the 1980s, artists began creating environmental art in public spaces, including vacant lots and other urban locations. Artists sought to bring their artwork closer to people, to engage them in the dialogue about art, the environment, and conservation. One artist planted cabbages in a pattern in an empty lot. Another made the particulates in the air visible for viewers. Yet another artist marked possible flood lines in at-risk cities that could result from climate change.

For environmental art to be shown in a gallery or museum, the artist must provide photographs, which do not give the full experience of the art.

### **The Evolution of Performance Art**

Performance art has become accepted as an art medium in the past 30 years.

It differs from theater and performing art by its lack of a clear narrative. Inspired by the abstract expressionism movement, artists wanted to include the body's role in artmaking into the actual artwork. The act of creation, not just the final product, was seen as important, like Jackson Pollock's action paintings. His movements and process played a big role in the creation of his paintings. Performance art emphasizes the time and space in which art exists, as well as the actions of the artist. Artists sought new ways to express themselves, and museums have sought ways to display these works. In a way, this is opposite to the idea of performance art existing in a finite time and interacting with the viewers. New strategies of performance art have sought to create interactions between people who would not have interacted otherwise. Artists have even begun to reenact performance pieces from the past, attempting to recapture those experiences.

### **Environmental Art: Motivation**

Environmental art, or land art, sprung partly from artists' desire to work outside of the studio and create artworks that could not be contained in a gallery or exhibit. Depending on the artist, it can be created to raise awareness of environmental issues such as erosion or conservation. It can explore humans' relationship with nature or the human-built world with the natural environment. It can capture how we are polluting the environment or how man is affecting the natural world. It can even highlight the artist's love of nature and the beauty of our world. Environmental art is created as site-specific artwork that will eventually be reclaimed by its surrounding environment, so its existence is usually short-lived. Photography is an important component of these works, capturing the scene for those who cannot view it in person before it is gone.

### **Christo and Jeanne-Claude**

Christo and Jeanne-Claude are artists known for some of the largest and most ambitious site-specific artwork created. Whereas landscape art uses natural materials to create artwork, Christo

and Jeanne-Claude used manufactured materials to contrast with the environment in which they created the artwork. Part of their process included negotiating with and gaining permits from the owners of the land or structure they wished to use. Each artwork created was large scale and required a lot of time and work to construct. They have insisted that the artwork was created for aesthetic value alone, and not for any deeper meanings. Some well-known artworks include wrapping the Pont-Neuf, the oldest bridge in France, in a sand-colored fabric, and surrounding several Miami islands in a bright pink fabric. *The Umbrellas* involved placing more than 1,000 umbrellas in Japan and the United States at the same time. In their project *The Gates*, installed in Central Park in New York City in 2005, visitors could walk through and around these 7,503 fabric gates throughout the park, which changed the look of the familiar landscape.

### **Earth Art**

Earth art, or Earthworks, is a genre of art that seeks to use materials taken directly from nature. This is a subgenre of environmental art, but it focuses on the use of local and natural materials to create sculptural forms. Artists would use water, stones, gravel, soil, and sticks, paying homage to the specific site by using local materials. Earth art shares some characteristics with minimalism, using a simplicity of form to express ideas. Earth art highlights the beauty and aesthetics of the natural world while rejecting the traditions of art creation and exhibition. Earth art can be categorized as invasive or noninvasive, with invasive Earth art making significant alterations to the environment. Noninvasive Earth art is thought of as being more respectful to the environment, preserving the integrity of the landscape. Because Earth art is site-specific, it is not accessible to the average viewer, cannot be displayed as is in a museum, and cannot be bought and sold.

# Art, Culture, and History

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## Themes

**Themes** are universal ideas explored and represented in artwork. One popular recurring example is identity. Identity includes the characteristics and behaviors that put an individual in a certain group. Some of the factors for identity include race, religion, culture, and language.

Photographer Cindy Sherman explored identity by photographing herself in different roles and costumes, essentially erasing her own identity and taking on the identity of other people. In doing this, she focused on the stereotypes of these female roles, addressing feminism, youth, aging, and obsession with status, ultimately questioning identity.

Kara Walker, an artist working with silhouettes, explores ideas of identity through race and gender. She portrays racism and historic scenes of slavery, getting past the romanticized notions of the past and exploring its reality. Her silhouettes simplify forms and focus on the topic at hand. She seeks to get past misconceptions and portray the true nature and identities behind tough subjects.

## Fine Art vs Applied Art

**Fine art** is art with no purpose other than being aesthetically pleasing. This includes drawing, painting, sculpture, and other media. **Applied art** is art that serves a purpose. Applied arts are useful objects with artistic design applied to their creation. This includes graphic design, interior design, fashion design, decorative arts, and architecture. Graphic design and illustration are also categorized as commercial arts, which fall under applied art. Decorative arts is the creation of jewelry, metalwork, ceramics, embroidery, carpets, furniture, and more. Sometimes applied arts are used in fine art works, so the line between fine arts and applied arts can be blurred, depending on the creator and their intent. In the 1960s, artists such as Andy Warhol began to blur the division between the two, which had been clear in previous years. Warhol used commercial art techniques to mass-produce works that were considered fine art.

## Realism

The **realism movement** began in France in the 1850s, and it attempted to document people and ordinary life faithfully, rather than avoiding unpleasant subjects or romanticizing them. Realist artists depicted laborers and ordinary people engaged in everyday life activities, realistically documenting and preserving life and culture at that time.

This example by Gustave Courbet is called *The Grain Sifters* (1855). It shows a mundane scene of workers sifting grain, using dark and natural colors to portray the scene realistically. Courbet led the realism movement in France. The realism movement challenged the narratives and depictions of history paintings, which was an academic style with posed action scenes. Realism artists documented manual labor and the plight of everyday people, using dark, serious tones to show serious-looking people. Realism artists were not interested in depicting history or anything that they did not personally see or experience; they were only documenting the present-day struggles of the common man.



## Emotions and Ideas

Emotions and ideas can be expressed through artwork in many ways, including the imagery, subject matter, or colors used. Frida Kahlo is a Mexican artist who used the subject matter and imagery in her artwork to express her physical and emotional pain and frustration. Throughout her life, Kahlo experienced abuse as well as a near-fatal bus accident that caused many physical problems. She began to paint self-portraits and explore ideas related to her pain and injuries, including emotional pain from her divorce from artist Diego Rivera. In her paintings, she often depicted her physical problems as well as open wounds to portray her pain. She sometimes included imagery of roots, to symbolize growth and a feeling of being trapped. Kahlo would also depict issues of childbirth and miscarriage, to communicate her frustration over her own failed pregnancies. She would often mix reality with elements of fantasy and paint scenes relating to pain and death. She used self-portraits to communicate her emotions and ideas relating to her pain as well as to explore her identity.



## Political Ideas

Artists can use their artwork to support or criticize **political ideas**. Political protest is an often-used theme in artwork. The imagery in artwork can show the devastation caused by political decisions and the harm they can cause to innocent people. Pablo Picasso's *Guernica* (1937) is one of the best-known antiwar paintings in history. Picasso created this to depict the violence, chaos, and suffering of war. Picasso focused on how war affected innocent civilians, and he depicted this in his work, showing the pain and suffering inflicted by the Spanish Civil War. The imagery and title reflect the bombing of the town Guernica by German and Italian war planes. *Guernica* was painted in black, white, and gray, and it depicts a woman holding a dead child, a wounded horse, and a woman with her arms raised in horror, among other imagery. The woman's hand suggests the shape of an airplane. The color scheme allows the viewer to concentrate on the imagery without being distracted by other colors. To many, this painting has become a symbol of the devastation and horrors of war.



## Social Ideas

Artists will often reflect the social climate surrounding them through the subjects that they portray in their artwork. They can choose to portray marginalized populations, bringing social issues to the attention of a larger population. Romare Bearden is an African-American artist known for capturing the social and cultural climate of African-American neighborhoods in his collages. During the civil rights movement in the 1960s, he began to use cut paper and magazine clippings to portray the culture and community in African-American neighborhoods and to celebrate themes such as jazz

music, the rural South, blues musicians, religion, and spirituality. He focused on unity and cooperation within the African-American community.

Another example of art reflecting society and culture is the social realism movement. Social realism artists sought to highlight the “forgotten” members of society, such as the poor, immigrants, and racial minorities. During the 1920s and 1930s, these artists portrayed the common worker as the backbone of society, and their artwork showed political corruption, materialism, joblessness, and poverty, among other social and political issues at the time. This example by Ben Shahn is a mural called *The Meaning of Social Security*, and it is an attempt to depict Franklin D. Roosevelt’s speech on the upcoming social security legislation and the ambitions of the New Deal programs.



### **Women’s Emerging Role**

During the medieval era, women would work with men to create manuscript illuminations and embroideries. During the Renaissance, though, some women artists gained international reputations, thanks to shifts in culture such as humanism. Humanism emphasized the value of all people. During the baroque period, women began depicting women as strong figures, and they also began painting still-life artworks. In the 18th century, women began to be accepted as students by famous artists and two women founded the Royal Academy of Arts in London. In the 19th century, women began to gain access to formal art education and more women began to exhibit their artwork. Photography was an accessible medium for women, with no formal training or traditions to constrict their creativity. In the 20th century, particularly the 1960s onward, feminism played a role in increasing the focus on women artists as well as their presence in formal training and prominent exhibitions. In 1985, the anonymous female artist group the Guerrilla Girls spoke out about gender inequalities, especially in the art world.

### **Reflecting the Current Economy**

Artists can use their artwork to show how the economy is affecting certain populations and bring this awareness to a wider audience. One example of this is the visual depiction of the economic ruin caused by the Dust Bowl. In the 1930s, dust storms swept through the American West and wiped out many farms and ranches. The land was ravaged by drought and rolling clouds of dust. Farmers lost everything and had no way to make a living. The Dust Bowl, as it was called, was reflected in the artwork of the time. The artists who depicted this event attempted to show how it affected farmers and the economy. Thomas Hart Benton’s lithograph *Prodigal Son* from 1939 shows the desolate and wasted land as well as the farmer mourning it. The farmer is meant not to represent one single man, but all farmers who were affected by this tragic event. Benton approached the topic symbolically, showing the ruined land and home, animal carcass, and the man who will have to move on from his land.

Another artist who depicted the Dust Bowl was Alexandre Hogue. Whereas Benton saw this event as something happening to passive victims, Hogue saw it as something created by man's effect on nature. Hogue showed the slashes and furrows made in the land and the ruined green plains.



### **Influence on Popular Culture**

**Pop art** served as both an art movement and a cultural movement. Pop art used images and objects from popular culture and blurred the line between “high art” and mass-produced cultural objects. This movement elevated common items to fine art, rather than sticking to traditional art themes. Andy Warhol took mundane Campbell’s soup cans and Brillo boxes, creating repeated images and objects based on them, and showing them as artwork. Many pop artists, including Andy Warhol and James Rosenquist, began as commercial artists.

Warhol began to mass-produce his artwork, much like the products he was depicting were also mass-produced. In doing this, he equated artwork to a commodity that can be bought and sold, just like these products. Warhol would use bright colors, high contrast, and multiple prints of the same image, as if you were seeing the product repeated on a store shelf. The repetition, bright colors, and contrast of pop art are still used today in advertisements, perpetuating the link between art and culture.

### **Technology and Art**

**Technology** is used in conjunction with art in many different ways. Some artists use technology within their art, such as video artists. Others use computers, digital cameras, and scanners to create art, such as electronic artists or graphic designers. This art can be printed repeatedly, and multiple copies can be shown or sold. For those who do not use a form of technology to create their art, they might use it to compose a scene. An artist can use digital photography to capture images to work on, or he or she could use computer software to compose the artwork before drawing or painting it. An artist might draw or paint from life with no assistance from technology, but then he or she may use technology to document the work and put it online on a website for others to view. Technology can also be used to keep records of work or to submit artwork to art competitions across the world.

## African Art

**African art** includes painting, sculpture, pottery, masks, textiles, body decoration, jewelry, and rock art. Some African art is aesthetic, some is political or ideological, and some is used for rituals. Characteristics of African art include stylized realism, emphasis on sculpture, geometric forms, and an emphasis on the human figure. African artists will tend to visually abstract, or stylize, figures rather than represent them in a naturalistic way. Sculpture is a preferred art form rather than working in two dimensions. African artists use geometric forms and symmetry, with repeated geometric shapes throughout an artwork. This example of a mask is symmetrical and includes geometric shapes. The human figure has often been a main subject for African art, depicted in masks, paintings, and sculptures. Human figures tend to show youthful characteristics because of an emphasis on health and physical strength as well as youth.



### Context and Purpose

Some African art was created for religious purposes. In addition to regional religions, Christianity and other religions have been practiced there. Some art objects were created for display on an altar or shrine. Other artworks could be used to present sacrificial offerings, to commemorate leaders, or to contact spiritual ancestors. African art objects could also be used to connect with spirits through religious rites or by a religious specialist. These spirits could be summoned for healing or for communicating with ancestors.

Masks were used in performances and rituals with the participation of musicians, dancers, and the audience. When the masked dancer put on the mask, they took on the role of a powerful spiritual being. Many African societies have names for their masks, and these names include the dance, the meaning of the mask, and the spirits associated with the mask.

## Asian Art

**Eastern art** does not follow the same aesthetics of the elements and principles as Western art. Asian art does not have a hierarchy of fine arts versus crafts; rather, the skill of craftsmanship is

valued, and all types of arts and crafts will be exhibited simultaneously. The crafts of creating porcelain or textiles, for example, have a long and respected history in Asia. Calligraphy, or the art of writing, is also a valued art form, and it has included many different scripts from different times and cultures.

Eastern art focuses more on landscapes and spiritual ideas, rather than representational subjects or realism. It will often be shown on more of a flat plane, instead of showing traditional perspective that is used in Western art. Some common forms of traditional Asian art include silk painting, woodblock printing, and batik, as well as painting with ink on rice paper.

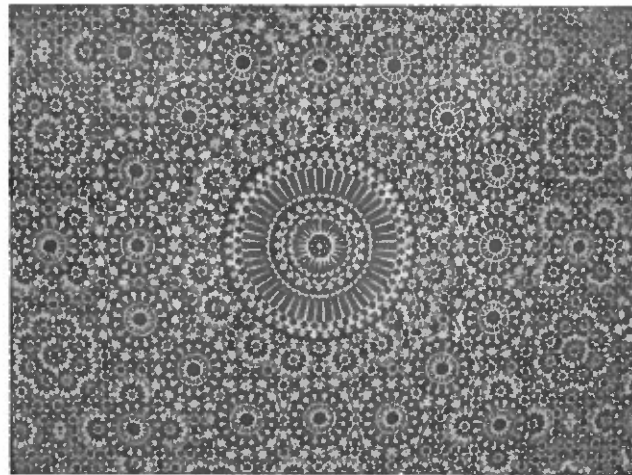
### Context and Purpose

**Buddhism** has had a great influence on Asian art. Mandalas, which are geometric artworks representing the universe, and Buddha statues are examples of this influence. Asian art has sought to depict man's understanding of natural forces and to understand the pattern of nature. The creation of artwork, including calligraphy, could refresh the spirit of the artist. Portraits would attempt to highlight the subject's moral character rather than just faithfully depict the subject. Art showed inspirational themes, and it often stayed away from subjects such as war, violence, death, and nudes. All objects in nature were seen as "alive," and rather than depicting nature realistically, Asian artists would try to capture the inner essence of these things. The artwork is full of symbolism, such as a dragon representing an emperor, or a pine tree symbolizing endurance. In the 1800s, Asian artists began to experiment with Western artistic traditions but turned back to Eastern traditions and began combining Eastern and Western ideas.

## Middle Eastern Art

**Middle Eastern or Islamic art** includes artwork created by countries in the Middle Eastern region by Muslim and non-Muslim artists. This includes architecture, mosaics, calligraphy, manuscript illumination, metalworking, textiles, and more. Religion is the most important aspect of Islamic art, and the artwork will often include patterns that could be repeated into infinity. This concept is important to Muslims, contrasting the experience of infinity with man's finite existence on earth and disregarding this temporary presence. Another important concept is the dissolution of matter, which can be achieved by applying patterns and decoration to surfaces. Floral patterns were often used for patterns and decorations, and they could be highly intricate and ornate. Calligraphy was integrated into artwork and decorations as an important element, and the inscription is often a quote from the Qur'an.

This image is an example of a repeated infinite pattern as well as dissolution of matter by covering it with a pattern.



## Aboriginal Art

**Early Aboriginal art** from Australia included rock paintings (shown) and carvings now found throughout the country, and many are protected in national parks. The rock art is thought to be for decoration or ceremonial purposes. Indigenous art is still created today in Australia and has become popular again since the 1970s.

The European colonization of Australia had a large impact on its artwork. Since the 1700s, Europeans began depicting Australian scenes, landscapes, and natural history illustrations. They attempted to capture the difference in lighting and scenery from the European landscape to the Australian landscape. The Victorian gold rush of the 1850s prompted wealthy landowners and merchants to commission landscape paintings. A distinctly Australian style of painting arose in in

the late 1800s, focusing on idealized landscapes and plein air painting. The main themes included working and conquering the land, the Australian outback, and the rural pioneer.



### Latin American Art

**Latin American** art, from Central and South America, begins with the indigenous people. The first art objects were utilitarian, but eventually they began to produce artwork that represented the values and religions of the different regions. When South America was colonized by Europe, the art forms began to merge and blend. Latin American art is a blend of three cultures: Indian, African, and European. Prior to colonization, many Indian natives lived in Latin America, but then European settlers arrived and brought African slaves. During colonial times, art was usually religious, and it resembled traditional European artwork.

In the 1800s, artists began to develop their own regional styles that departed from European styles and traditions. One important artistic movement is muralism, which began in the 1920s. Hundreds of murals were painted in public places, with social and political messages, ideas of identity, and a unifying theme.

### European Art

**European** artwork began with prehistoric rock painting and carving, and it has developed over the centuries through many different artistic movements. Beginning in the middle ages, art would be commissioned by a patron, usually by the church or state. This artwork mainly showed historic, biblical, and religious scenes and religious and political leaders. Secular artwork included landscapes and still lifes. Academies trained artists in methods, materials, and anatomy; attempted to elevate art from a craft to fine art; and began to exhibit artwork. Art was created in workshops by master artists and their apprentices. As the importance of the church and royalty declined, the subject matter changed. The industrial revolution brought changes in technology that included premade, portable paints. Artists became independent and could use their own creativity. Because the academies resisted these changes, innovative artists became avant-garde while academic art stuck to traditions.

### North American Art

Prior to colonization, traditional Native American art dominated North America. **Early colonial** art was based on European traditions, and artists mainly painted portraits and landscapes. In the 18th century, artists such as Benjamin West, John Singleton Copley, and Gilbert Stuart became some of

the first significant American painters. Starting in 1820, the Hudson River School produced romantic landscape painting artists. The American Revolution brought a demand for patriotic artwork, and artists began to document rural America. Prominent 19th-century painters created portraits and painted a wide range of subjects including pioneers, soldiers, and sailors. American impressionism flourished in the 19th century, and in the 20th century, European art continued to impact America. This influence gave rise to the abstract art scene. Many art genres have risen in North America since the beginning of the 20th century, including pop art, minimalism, and photorealism.

### **Prehistoric Art**

**Prehistoric** art is art that was produced in preliterate times, prior to writing or recordkeeping. The first known art is from the Paleolithic era, and it consisted of petroglyphs, cave paintings, and sculptures and carvings in bone. Humans were making art to express ideas and to represent their beliefs and surroundings visually. One of the earliest representational artworks from prehistory is the *Venus of Willendorf* (shown), from roughly 28,000 B.C.E.

In China and Japan, prehistoric pottery has been found, as well as bronze figures. In Europe, cave paintings were found in Lascaux and Chauvet, France, and in parts of Spain. Aboriginal painted rock art has been found in Australia, and engravings and paintings on stone and walls have been found in African caves. A large percentage of known prehistoric art is attributed to hunters and foragers. Repeated motifs include animals, humans, tools, maps, and symbols. Portable objects, such as rocks and bones, and stationary surfaces such as cave walls, were used for art creation.



### Characteristics and Purpose

Whereas some think that cave art was purely decorative, others think it was created for other reasons. Some of the cave walls used were remote and inaccessible, so it is thought that they were used for religious ceremonies or to summon better hunting conditions. Animals and other figures were generally depicted from a simplified side view. Artists painted and drew animals, hunting scenes, landscapes, maps, and many different symbols.

Petroglyphs have also been found, which are prehistoric rock carvings created by removing parts of the rock. Some show real subjects, whereas others are abstract. They might have been used to



convey information or for religious purposes. Some might even be a form of prewriting, or a way to map the stars.

The Venus figurines from prehistory are women with exaggerated features, and they are thought to be fertility idols, good luck statues, or a symbol of a mother goddess. The *Venus of Willendorf* is one of the earliest examples of a female nude.

### Materials

**Paleolithic artists** used five main colors: black, white, yellow, red, and brown, as shown in this example from the Lascaux cave art in France. Color pigments were used for body and face decoration long before creating artwork. Some would mix earth or charcoal with animal fat for blacks and browns, and many paintings like this most likely vanished over time. Later rock art that has been discovered used materials such as iron oxide, kaolin, hematite, and manganese. Crayons were developed from solid pieces of pigment, and brushes were formed from animal hairs. Artists would also apply paint with their fingers or a pad made from lichen or moss.

Later in the Stone Age, artists used ochre for yellows, browns, and reds and used manganese or charcoal for black. White was ground calcite or kaolin. The artist would grind the pigment into a powder and mix it with water, blood, animal fat, juice, or other materials to help the pigment stick to cave walls or other surfaces.



### **Egyptian Art**

Painting, sculpture, and jewelry were created in ancient Egypt from 3,000 B.C. to 30 A.D.. Most of the art from this time was found in monuments and tombs. The artwork is mostly formal, and it follows their own guidelines for depicting figures. The stone statues are rigid and formal, whereas wood figures are more expressive. Ancient Egyptians' two-dimensional art is a combination of people, animals, and symbols. The organization of this artwork depends on the context: For more formal, organized scenes, they are sorted with the more important figures at the top. For a chaotic scene, such as a battle, this organization is not used.

The art we are most familiar with was found in the tombs of wealthy leaders; however, items of lesser quality are found in the burial sites of people of lower status. Statues were used as a conduit for people to interact with their gods. A ka statue is a statue intended as the resting place for a person's life force. Certain conventions were used for the creation of these, such as the sky god Horus always being represented with a falcon head. This consistency gave the figures a timeless quality.



### Characteristics and Purpose

Much of the artwork created in ancient Egypt was not meant to be seen; rather, it was mostly created for tombs, and it emphasized life after death. Tombs in ancient Egypt were packed with furniture and food, as well as art and jewelry. The more important and wealthy the person, the more precious artifacts were found in their tomb. These items were meant for the person in their afterlife.

Egyptians used a hierarchy of scale to depict people, leaders, and gods: The larger the figure, the more important they were. Kings and deities might be shown on the same scale. Another common element of Egyptian artwork was hieroglyphs, or images that were symbols for sounds and words. These were the writing system of ancient Egypt, and they often accompanied the artwork.

Two-dimensional scenes were organized in registers, or parallel lines that separated scenes and served as ground lines. People were depicted with a simultaneous profile view and front view.

### Materials

**Ancient Egyptians** used soft stones such as limestone, sandstone, and calcite for sculpture. Copper chisels and stone tools could be used on these softer stones, and ancient Egyptians used copper alloys on harder stones such as quartzite, basalt and granite. Most statues were painted, as evidenced by traces of paint left on them. For wood carving and sculpting, a variety of native woods was used, including acacia, fig, fir, and cedar.

For metalwork, Egyptians used copper, bronze, gold, and silver. Many metal statues were melted down, and the materials were reused. They were able to cut stones for jewelry with precision. They used many stones in jewelry including lapis lazuli, feldspar, jasper, amethyst, and quartz.

The pigments used for painting came from local minerals. They used carbon for black, gypsum for white, iron oxide for reds and yellows, azurite and malachite for blues and greens, and orpiment for bright yellow. Paints were applied directly, or they were layered to create other effects.

## Renaissance Art

The **Renaissance** was a revival of classical learning during the 14th, 15th, and 16th centuries in Europe. Renaissance artists sought to capture the value of the individual and the beauty of the natural world. This revival of drawing, painting, sculpture, and architecture was partly driven by humanism, which is a philosophy that attached importance and worth to the individual.

Increased prosperity led to an increase in commissioned artwork from wealthy patrons (especially the Medici family). At the same time, the church was conflicted on spiritual and secular issues, which helped the spread of humanism. The church was also a big patron of the arts, and it spent a great deal on art and architecture at the time. In addition to the wealth of Italy, Italy also contained a lot of Roman architecture and artifacts, which contributed to the beginning of the Renaissance in this area.

### Characteristics and Purpose

The ideas of humanism brought greater attention to detail and greater realism, as well as a focus on virtue. Artists began to use linear perspective foreshortening, bringing a natural realism to faces and figures. Sculptures, drawings, and paintings showed increased knowledge of anatomy. Most painters began to use oil paint rather than tempera at this time, which contributed to this realism.

Christianity was still the main subject of artwork at this time, reflected in the paintings and sculptures of many prominent artists including Michelangelo, Leonardo da Vinci, and Raphael. Stories from mythology were depicted, too, to promote the idea of humanism. During the Renaissance, artists were creating artwork for patrons and their status was raised to a level above craftsman. Because of the Renaissance movement, Western art developed from the ideals of classical artwork.



Altarpieces were commissioned often, and these would be the focal point of the space they occupied. Frescoes were often created in churches and in private buildings. This painting method was time consuming, with a prominent example being Michelangelo's Sistine Chapel ceiling (shown). Patrons also commissioned portraits of themselves and artworks for their homes.

### Materials

Frescoes, that is, murals painted onto plaster walls, were painted during the Renaissance period. The pigments were mixed with water and applied to wet plaster, and once the plaster dried, the pigments were visible on the wall. This was a time-consuming process, but it was used for large works of art including the Sistine Chapel ceiling.

Artists also painted with oil paints, which became available in the 15th century. The slow drying time allowed artists to blend and paint with greater realism and detail than before. More colors were available, and the transparency allowed artists to use glazing techniques, layering transparent colors for greater depth and richness. Artists during this time also still painted on wood panels or rigid supports with tempera.

For sculpting, the most common material was marble. Michelangelo's famous sculptures, including *David*, *Moses*, and other notable works, were carved from marble.

## **Baroque Art**

Baroque art dominated Europe in the 17th and 18th centuries. The style was propagated by the Catholic Church, often in the form of monumental works of public art. This style was meant to counter the rationality and simplicity of the Renaissance style and inspire a sense of awe. Many baroque artworks illustrated Catholic ideas, within biblical or mythological depictions. Architecture, painting, and sculpture all reflected these ideals successfully. Baroque sculpture also used a dramatic sense of movement, contrasting with the comparatively still and calm Renaissance sculptures.

Baroque paintings would often include allegories, which are stories with hidden meaning and messages. The educated viewer was expected to recognize and understand symbols and hidden meanings in the artwork.

The *Trevi Fountain in Rome* (1732, shown) is an example of the overly ornate baroque style in sculpture. Some of the major artists of this time include Rembrandt, Caravaggio, and Peter Paul Rubens.



### Characteristics and Purpose

The **baroque** art style is characterized by exaggerated motion and attention to detail. The scenes are created to enhance a sense of drama and grandeur. The chiaroscuro technique is often used in baroque art. This is the use of strongly contrasting tones of light and dark, usually in a dramatic, high-contrast scene. Another technique used is tenebrism, which consists of keeping an area black, while a portion of the subject is brightly illuminated, as shown in this painting from 163

To set their artwork apart from the Renaissance artworks, artists departed from tranquil scenes and expressions of that time and instead showed intense emotion and movement in their work. Instead of the even lighting of Renaissance artwork, they used more dramatic lighting and they

used asymmetry to enhance the sense of instability and movement. Clothing would be moving by wind or the motion of the person instead of draped and resting motionlessly.

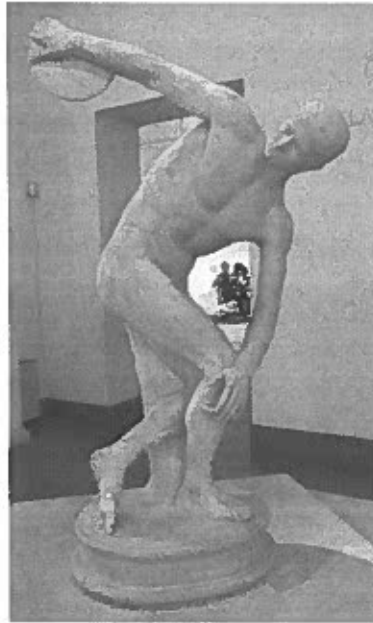


### **Greek and Roman Art**

The great classical art period began in Greece, and this art later greatly influenced Roman artwork. Romans borrowed many elements of their religion from Greece, and they also borrowed art and architectural styles. Ancient Greeks used art to express noble ideas and emotions. They wanted to highlight the great accomplishments of man and honor their gods through their artwork. Sculptures included nude athletes in realistic poses, as shown, as well as gods and goddesses. The artwork was mostly sponsored by the government and made for the public to see, and it was a great source of pride for the people. Art from ancient Greece includes stone and wood statues and pottery in red figure and black figure styles. They also painted on panels and pottery.

Ancient Romans used their artwork more for aesthetics and decoration, rather than for lofty ideals like the Greeks. In Rome, art lost its spiritual quality and was used more to adorn homes. They did copy the Greek statues of gods and goddesses, but they also created skillful and realistic portrait

sculptures. In addition to sculptures, they created paintings and mosaics for homes, showing scenes of daily life.



### Materials

The Greeks and the Romans used marble and bronze for sculptures. Roman artists used encaustic (pigment mixed with hot wax) and tempera for painting scenes on panels, and they created fresco paintings on architectural surfaces. For mosaics, Romans used small cut pieces of glass, tile, pottery stone, and shells. The pieces were called tesserae, and they were stuck to the surface with mortar.

The ancient Greeks also created wood sculptures in their early period, although few of these have survived. The preferred sculpture materials were marble and limestone, as well as cast bronze. They created figurines from terra cotta and bronze. The Greeks also painted on panels with encaustic and wax, and they painted their sculptures as well as parts of their temples. Most of the paintings that have survived are on pottery. Their pottery had a high iron oxide content, giving it a red color. This example is of the Greek red figure pottery.



## Medieval Art

The period of medieval art spans more than 1,000 years, from the fall of the Roman empire to the Renaissance period. Subjects explored during this time include mythology, Christian themes, and biblical stories. The medieval period can be separated into Byzantine, Romanesque, and Gothic. Byzantine art was from the Eastern Empire called Byzantium, and it was highly stylized. Byzantine art favored symbolism over realism, and the subject matter included imperial and religious subjects. This example of Byzantine painting shows religious subject matter.

**Romanesque** art included massive churches built with stone arches, similar to Roman architecture. Romanesque painters created frescoes and used encaustic on panels. Gothic art began in Paris and spread throughout Europe. Its greatest contribution was the cathedral and elaborate architecture with complicated decoration. Painting during the Gothic period included animated figures and expressions, painted small in relation to their backgrounds.



## The Mannerism Style

The **mannerism** style of art and architecture emerged as a reaction to the high Renaissance. From the end of the Renaissance in the 1520s to the beginning of baroque art in 1590, mannerism focused more on style and technique than the meaning of the subject. Mannerism arose partly from new scientific discovery that man was not the center of the universe, but, rather, the earth revolves around the sun. At the same time, the Reformation movement highlighted a need for church reforms, bringing turmoil and religious uncertainty.

Mannerist artists reflected this uncertainty, attempting to solve artistic problems by changing proportions and portraying people in new and strange ways. These included elongated limbs, small heads, and dramatic, unnatural, contrived poses. Departing from the linear perspective and depth used in Renaissance art, mannerists flattened the composition and arranged the figures on a flat plane, as shown. Mannerism artists experimented with form, portraying emotions, and bright and unusual colors.





## El Greco and Tintoretto

El Greco, a nickname meaning “the Greek,” painted in the mannerist style, using elongated and strange proportions and portraying strong, dramatic emotions. The poses are strained and unnatural, heightening the emotion conveyed by the subjects. Rather than using accurate lighting, the lighting in his works seem to come from within the figures or from an unseen source. In his later works, he elongated figures even more, especially on altarpiece works. This work from 1600 shows his odd use of lighting and forced, strained poses that illustrate the mannerist style.

Tintoretto, another mannerist painter, created monumental religious works and emphasized the mystical nature of religion. He also used elongated forms and forced poses, but his works show a mastery of lighting along with a better idea of spatial depth. He sought for viewers to experience the divine through his religious depictions. Through lighting and composition, he created a supernatural atmosphere, portraying scenes not from this world.



## The Renaissance Art Period

The **Renaissance** period of art was a rebirth of interest in classical learning and arts. Artists looked to the past for inspiration, while innovating and producing some of the best-known art in history. Artists used naturalism, attempting to portray figures realistically rather than exaggerating or stylizing them. Renaissance artists studied anatomy and perspective, as well as light and shadow, to use them accurately in their artwork. They took ideas from the mythology of classical civilizations and used them as a starting point to create their own monumental works.

During the Renaissance, the ambition of classical civilizations was rediscovered, boundaries were pushed, and artists innovated to capture the beauty of humanity. The Greek idea of humanism was used to celebrate the accomplishments of man. Renaissance artists saw the classical period as the height of humanity and attempted to recreate and build upon this movement.

## Leonardo da Vinci, Michelangelo, and Raphael

Leonardo da Vinci, Michelangelo, and Raphael are a few of the best-known artists of the Renaissance period. Leonardo was a “Renaissance man,” with knowledge of math, astronomy, architecture, art, inventing, literature, anatomy, and more. His well-known works include the *Mona Lisa* and *The Last Supper*. He pioneered a technique called *sfumato*, which uses subtle gradations to create a smoky look.

Michelangelo showed a mastery of anatomy in his artworks. His best-known works are his *David* statue and his painting of the Sistine Chapel ceiling. Unlike many artists, he achieved fame as an artist during his lifetime. He was accomplished in art, sculpture, and architecture, and he inspired the artist Raphael.

Raphael is known for his skillful composition, as well as his serene depictions of the greatness of human nature. One of his best-known works is the *School of Athens*, a monumental work from 1509–1510 depicting many ancient Greek philosophers (shown). This artwork also shows a mastery of perspective, as well as natural poses and lighting.



## Neoclassicism

**Neoclassicism** occurred during the late 18th and early 19th centuries. This movement in art and architecture was an attempt to revive the classical Greek style and depart from the highly ornate baroque style. It also came about partly from the discovery of Roman ruins at Pompeii and Herculaneum. Neoclassical artwork was serious, stoic, and heroic. Artists portrayed moral narratives of ethical superiority, returning to classical subjects and motifs from Greek and Roman art. This art is characterized by somber colors, shallow space, balance, clarity, and restraint. Artists sought to show smooth paint surfaces with no brushstrokes visible in their artwork.

This movement coincided with the Age of Enlightenment, or Age of Reason, which was an intellectual and philosophical movement focused on reason as the main source of authority. These ideas were also reflected in the art at the time, as artists moved from ornate and frivolous art to

more serious, classical subjects. Neoclassical artists had few surviving Greek paintings to model their work after, but they had many more examples of sculpture to follow for their work.

### **Jacques-Louis David and Jean-Auguste-Dominique Ingres.**

One significant artist of the neoclassical style is Jacques-Louis David. His painting *Oath of the Horatii* is a prime example of the neoclassical movement. This painting (shown) tells a story from classical times, from a Roman legend in which the Horatii brothers take an oath to defend Rome. In this carefully organized composition, three arches with columns span the background, whereas all the figures and action are pushed into the foreground as if creating a sculptural relief.

Jean-Auguste-Dominique Ingres was a student of David, and he also created works in the neoclassical style. Unlike David, he began to favor more sensuous subjects and became known for portraits. His work *Oedipus and the Sphinx* (1808) was completed while Ingres worked in Rome. This scene is from the Greek myth of Oedipus, when Oedipus was guessing the riddle of the Sphinx. Ingres won the prestigious Prix de Rome for this painting. Keeping with classical standards, Oedipus is depicted as a beautiful and ideal young man.



## Romanticism

The **romanticism** movement began in 1770 and encompassed art, literature, music, and culture. The term romantic refers not to love, but to intense emotion. This movement emphasized emotion and individualism, and it was a reaction against the rationalism of neoclassicism. Romantic artists often illustrated literary themes. They emphasized and depicted emotions such as terror, awe, and apprehension, and they attempted to capture the beauty and sublime feel of nature. This painting by Thomas Cole from 1836, *The Course of Empire: Destruction*, embodies the focus on nature and destruction in a romantic artwork.

This style first manifested in landscape painting, and artists challenged the previously low status of landscape art by painting monumental works. History painters also created large works, portraying disaster, divine wrath, and natural catastrophe. Artists portrayed vast spaces with people dwarfed in comparison, mystical landscapes, and nature's triumph over man. No traditional religious art came from this period, but artists continued to portray small villages and the wilderness, despite the increase of urban spaces.



### Eugène Delacroix, Theodore Gericault, Thomas Cole

Several significant artists worked in the romanticist style. Eugène Delacroix was at the forefront of the French school of romantic artwork. In *Liberty Leading the People*, he depicted the female figure of Liberty leading the French Revolution of 1830. It is a history painting, showing a violent, dramatic, catastrophic scene.

Theodore Gericault was another French romantic artist. His work *The Raft of the Medusa* is a significant romantic painting. This work is larger than life size, and it shows the aftermath of the wreck of a French naval frigate, with people escaping on a makeshift raft. It shows men dying and struggling to survive against nature, with strong emotions and an unfolding drama.

Thomas Cole was an American painter who portrayed the American wilderness in the romantic style. One of his well-known works is called *The Oxbow*, which shows a bend in the Connecticut

River, in a valley after a thunderstorm. There is a juxtaposition of broken trees, violent cliffs, and dark rain clouds beside blue skies and a tranquil bend in the river.



## Realism

The **realism** movement began in France in the 1850s, as a rejection of the ideas of romanticism. Rather than exaggerated scenes and heightened emotions, realism sought to portray ordinary scenes with accuracy and truth. The artists attempted to show people from all walks of life and social classes accurately and not smooth over or avoid unpleasant subjects. Realist artists did not portray people heroically or sentimentally; instead, they wanted to treat all subjects with equal seriousness. The advent of the camera helped to increase the desire to show subjects realistically.

The realism movement is thought to be the first modern art movement, because the artists rejected traditions and expanded the definition of what is considered art. They examined the political, cultural, and economic structure of society, and they used earthy tones to show what was happening in all parts of society. Realist artists painted real-life events, workers, street life, cafés, peasants, and nightclubs, rather than grand landscapes or posed scenes with extreme emotions.

### Gustave Courbet, Jean-Francois Millet, and Honoré Daumier

The main realist artists in France were Gustave Courbet, Jean-Francois Millet, and Honoré Daumier. Courbet would paint ordinary scenes on vast canvases that were normally used for history paintings. Two of his well-known works include *The Stonebreakers* (shown) and *A Burial at Ornans*. *The Stonebreakers* was painted in 1849, and it shows ordinary workers in his native region of France. He uses natural color and lighting to portray his subjects.

In the United States, Thomas Eakins and Winslow Homer were significant realism painters. Winslow Homer began as a commercial illustrator, but then he was inspired by Courbet, Millet, and Daumier and began to paint ordinary subjects in America. Eakins painted his friends and local people in outdoor sports, including his work *Max Schmitt in a Single Scull, from 1871*. His most well-

known work is *The Gross Clinic*, which showed a scene from a surgical operation, and this was received unfavorably by critics due to its subject matter.



## Impressionism

The **impressionism** movement began in the late 1800s as artists in Paris began to practice plein air painting together. The artists included Claude Monet and Pierre-Auguste Renoir. Impressionists departed from a faithful depiction of a scene, and instead they attempted to capture their impression of it, or the momentary effect of lighting on the scene. Artists used small brushstrokes and pure color. They tried to capture the optical effects of light, and the differences that weather and sun position create in a scene.

The recent invention and availability of paint in a tube helped spur on this movement. Artists were able to paint outside more easily and capture scenes as they saw them. The emphasis in the painting was as much on the artist's perception of the scene as it was on the scene itself. The painting by Claude Monet, *Haystack. End of Summer. Morning*, from 1891, shows how Monet used color and brushstrokes to capture the lighting of a summer morning on the haystack.

### Claude Monet, Edgar Degas, Mary Cassatt, and Auguste Renoir

Claude Monet is the most well-known impressionist painter, and some of his subjects include cathedrals, haystacks, landscapes, water lilies, and his garden in Giverny, France. The paintings of his garden included a Japanese footbridge that spanned over water lilies. His paintings became increasingly abstract in later years due to his failing eyesight.

Edgar Degas was an impressionist painter best known for his paintings of ballerinas and dancers. He captured his impression of dance lessons and performances, showing the movement of the moment with visible brushstrokes. This example from 1873–1876, *The Dance Class*, shows a dance class being instructed by the man in the center. He did not capture outside light like other impressionists, but he still captured fleeting moments in time.

Mary Cassatt was the best-known female impressionist painter, and she often painted domestic scenes with a child and mother as the subjects. Cassatt was invited to exhibit with the impressionists by Degas, and she began to be influenced by their work.

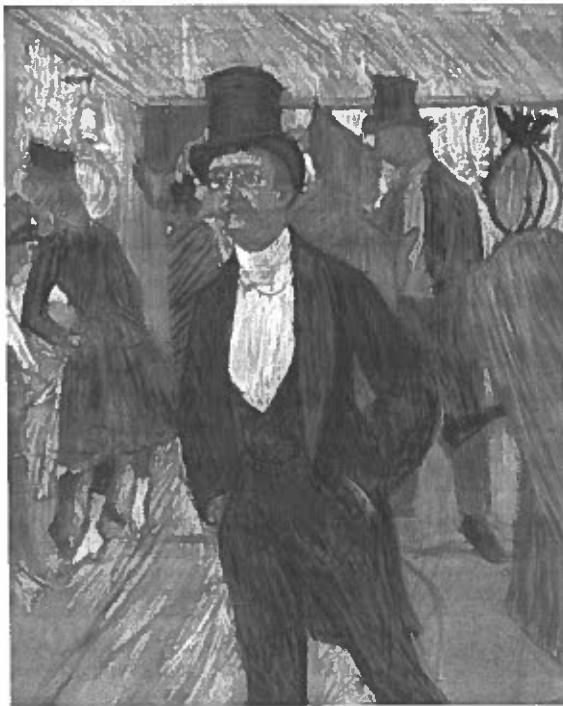
Auguste Renoir captured stunning landscapes and beautiful portraits in the impressionist style. The visible brushstrokes, soft edges, and pure colors follow the patterns of impressionist painters, and he shows a masterful understanding of how light affects his subjects.

## Postimpressionism

**Postimpressionism** was a French art movement from 1886 to 1905 that followed impressionism and preceded fauvism. Postimpressionism sought to explore the emotional response of the artist and depart from the naturalism of impressionism. These artists still used bold and pure colors as well as real-life subject matter, but they also leaned toward more geometric shapes, distorted forms, exaggerated or arbitrary colors, and sometimes heavy outlines.

**Neoimpressionist** Georges Seurat departed from the spontaneous nature of impressionism for a more planned approach that included the optical blending of spots of color. This is now known as pointillism, but it falls under the postimpressionist movement. Paul Signac carried on Seurat's ideas; he helped Seurat develop the pointillism style.

This work by Henri de Toulouse-Lautrec from 1889, titled *Monsieur Fourcade*, shows several major ideas of postimpressionism. Although the artworks and artists of this period are fairly varied, this work does show the bold, arbitrary colors and outlines used in postimpressionist artwork.



## Vincent van Gogh, Paul Gauguin, and Paul Cezanne

Vincent van Gogh, a prominent Dutch postimpressionist artist, exhibited many of the ideas of this movement. He used bold colors, sometimes arbitrarily or in odd ways, as well as bold lines to express his emotion through his paintings. In this 1890 painting, *Portrait of Dr. Gachet*, van Gogh expresses emotion through the pose, facial expression, and colors. Bold colors and brushstrokes, along with heavy outlines, are visible in this artwork.

Paul Gauguin used bold and unusual colors, sometimes in flat planes and flattened spaces. This French artist's work includes many paintings of landscapes and people of French Polynesia, where he lived for 10 years.

Paul Cezanne was another French postimpressionist painter, and he is known as the father of postimpressionism. His exploration of geometric shapes and bold colors prompted Picasso and others to eventually experiment with multiple views of forms. He sought to reduce nature to geometric shapes and find new ways of modeling space and volume.



### **Fauvism and Expressionism**

The **fauvism** movement, from about 1905 to 1908, followed the postimpressionism movement and included some similar ideas. Fauvism emphasized strong and unusual colors, using color to express mood without being representational of actual colors. Fauvism also emphasized the flatness of the canvas, and it valued individual expression over naturalistic representation. The leaders of the fauvism movement were Henri Matisse and André Derain.

**Expressionism** began in Germany at the beginning of the 20th century, and it spanned from roughly 1905 to 1920. Artists of this movement used strong colors and distorted forms to express their feelings in their artwork. Artwork came from within the artist, rather than being copied from what they observed. They used swirling and exaggerated brushstrokes and sought to evoke emotional responses to their works. Edvard Munch's *The Scream* (1893) is an example of the



Expressionist style, with its unusual, nonrepresentational colors, distorted form, and desire to express a strong feeling of despair or agony.



### Fauvist and Expressionist Artists

Henri Matisse was a fauvist artist who pioneered the movement. He applied large, flat areas of color to his paintings and worked with bright colors directly from the tubes to convey emotions. He is also considered a leader in defining the 20th-century modern art movement. One of his best-known works of this period is called *Woman with a Hat* (1905). He used unusual colors, including green on the woman's face.

Expressionism began with works of artists such as Vincent van Gogh and Edvard Munch, and then in 1905, German artists formed a group called Die Brücke that began the main wave of expressionism. This group included artists Erich Heckel, Fritz Bleyl, and Karl Schmidt-Rottluff, and they were later joined by Otto Müller, Emil Nolde, and Max Pechstein. Wassily Kandinsky was a notable Russian expressionist painter, and he went on to work in abstract art.

### Cubism and Futurism

**Cubism** is an early-20th-century art movement in which several viewpoints are shown simultaneously, and simple geometric shapes or interlocking planes are used to construct a scene. Cubism began in 1907 and ended around 1915. Pablo Picasso and Georges Braque pioneered this movement, influenced partly by the three-dimensional representations in works by Paul Cezanne. Cubist artists would analyze a form, break it apart, and reassemble it visually in a more abstracted format.

Futurism, an early-20th-century movement that began in Italy in 1909, emphasized movement, technology, speed, and violence. The artwork included objects such as cars, airplanes, and industrial elements. Like cubists, these artists expressed dynamic elements in artwork. They also praised originality, admired technology over nature, and sought to convey movement through space.

Futurist artists praised war and valued nationalism, and they would depict urban scenes such as riots and construction in the city.

### **Pablo Picasso, Marcel Duchamp, Giacomo Balla**

Pablo Picasso is one of the most recognizable names of cubism. His cubist works include flat planes of color, distorted forms, geometric shapes, and reassembled faces with both eyes on one side of a profile.

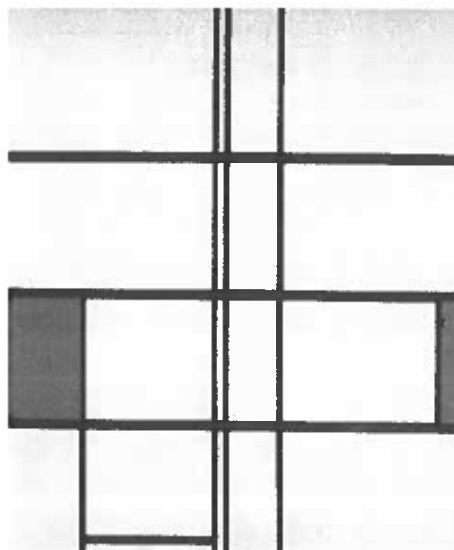
Marcel Duchamp's work spanned both the cubist and futurist movements. His work, *Nude Descending a Staircase, No. 2*, from 1912, shows a dynamic scene of repeated abstracted and geometric forms of a nude descending from left to right in the painting. The repetition and form convey movement and rhythm.

Giacomo Balla's *Dynamism of a Dog on a Leash* from 1912 embodies some of the tenets of the futurist movement. The painting shows the feet of a woman, plus a leash and a walking dog, and through the repetition of the feet, leash, and tail, Balla shows the dynamic movement of the woman and the dog. The dynamic elements show almost a blur of movement, conveying speed and direction.

### **Constructivism and De Stijl**

The constructivism movement began as a Russian abstract style of art and architecture that started in the 1910s. This movement consisted of constructing dynamic three-dimensional forms from objects such as plastic, wood, glass, or iron. This movement began with Vladimir Tatlin, who was influenced by Picasso's cubist constructions and wanted to "construct" art with dynamic components. Tatlin began to make abstracted still lifes out of scrap materials.

De Stijl is Dutch for "the style," and this Dutch art movement that started in 1917 is also known as neoplasticism. This art movement promoted the reduction of artwork into geometric shapes, lines, and primary colors. Artists attempted to turn this style into a universal form of expression, departing from individual expression. Piet Mondrian is the most recognizable de Stijl artist. Neoplasticism refers to the style and ideas developed by this artist, promoting a new, abstract form of artwork for modern times. This is an example of Mondrian's work, showing his use of black lines, geometric shapes, and primary colors.



## **Vladimir Tatlin, Piet Mondrian**

The **constructivism** movement began with artist Vladimir Tatlin in 1913. Tatlin was a Soviet architect and painter, and he constructed three-dimensional “counter-reliefs” of wood and metal. His intention was to question the traditions of art. His main constructivist work was the *Monument to the Third International (Tatlin’s Tower)*, which joined the dynamic components of technology with the aesthetics of machines. This construction included searchlights and projection screens, and it was criticized for being a combination of functional items and art. This tower sparked an exchange of ideas between Russia and Germany on the ideas of revolutionizing art.

The main artist from the de Stijl movement is Dutch painter Piet Mondrian. He sought to create pure abstractions with horizontal and vertical lines, as well as primary colors. He wanted to reduce his artwork to the most basic elements, using them to represent the essence of the energy and forces of nature. The pure abstraction and minimal palette was meant to express an ideal and universal harmony in the art world. His idea of neoplasticism, which guided his work, relied on color, line, and form to express universal ideas.

## **Dada and Surrealism**

The **Dada** art movement began around 1915 in Zurich, New York, Germany, and Paris. The movement came about as a reaction of disgust and revolt to the horrors of World War I, and the movement was also antibourgeois. They sought to depart from traditional values of art and create a new kind of art. It is considered antiart, challenging the definition and conventions of art. Dada techniques include readymades, which involves presenting a premade object as art, and the photomontage, using scissors and glue to assemble images from images printed in the press.

Surrealism began in the 1920s in France, and the movement included paintings of strange, dreamlike, and unnerving scenes with realistic accuracy. Surrealism sought to express unconscious thoughts and resolve contradictions between reality and dreams. This movement eventually affected literature, music, and film in many countries as well. This art movement drew heavily on Freudian theories of sexuality, fantasy, dreams, and irrationality.

## **Marcel Duchamp, Salvador Dali, and René Magritte**

As part of the Dada movement, Marcel Duchamp began creating artwork called “readymades,” made from items that were already created and he just declared them to be art. One well-known example is his 1917 *Fountain*, which is an already-made urinal that he signed as R. Mutt. Another Duchamp artwork from 1919, *L.H.O.O.Q.*, shows the departure from and irreverence toward traditional artwork. He took a postcard depicting the Mona Lisa and drew a moustache and face on the portrait, then labeled it *L.H.O.O.Q.* With this artwork, he challenged artistic conventions of the past, and the value of traditional artwork.

Salvador Dali, a well-known surrealist artist, created his best-known work, *The Persistence of Memory*, in 1931. *The painting depicts melted pocket watches on a dreamlike landscape.*

René Magritte, a Belgian surrealist artist, created thought-provoking artwork by juxtaposing ordinary objects in unusual ways. In *The Treachery of Images* (1928–1929) he depicts a pipe with the words, in French, “This is not a pipe.” The viewer is faced with the challenge of reconciling these words with the fact that this is a representation of a pipe, not an actual pipe.

## **Abstract Expressionism**

**Abstract expressionism** refers to an art style from the 1940s and 1950s. The artists grouped under this style sought total freedom of expression through their artwork. They shared an outlook, rather than a specific style, and this is thought to be the first truly American art movement. Abstract expressionism is also called the New York School, because the movement was centered in New York. Its influence extended into the 1970s. Abstract expressionist artists were influenced by the surrealist idea of expressing the subconsciousness in artwork. Abstract expressionism includes color field painting and action painting, and mixes of these two, among other techniques.

Color field painting uses solid areas, or fields of color, on a large scale that extend to the edges of the canvas. The extension to the edges suggests the colors continuing to infinity, and the large scale helps to envelop the viewer in the colors. Action painting includes dribbling, splashing, and dripping paint onto a canvas using gestures and movements, while emphasizing the unconscious.

### **Artists of Abstract Expressionism**

Jackson Pollock is known for his action paintings, or splatter paintings. The term “action painting” was coined to describe Pollock’s methods of applying paint to a canvas. Pollock considered this technique to be a way to harness the capabilities of his unconscious, which expressed itself onto the canvas. He saw the drips and splatters not as random paint, but as a balance of chaos and control.

Mark Rothko, Barnett Newman, and Clyfford Still were all color field painters of the abstract expressionist movement. They were looking to get away from form and representation in artwork, and they did away with the figure/ground convention by turning the figure and ground into one. The color seemed to extend beyond the edges of the painting and was the focus of the artwork.

Helen Frankenthaler used a mix of techniques and invented the “soak-stain” technique, which involved creating large color washes by pouring thinned paint onto a canvas. She used Pollock’s technique of pouring paint but also used elements of color field painting by incorporating large areas of pure color.

## **Pop Art**

**Pop art** was a British and American movement in the 1960s that used items from popular culture and incorporated them into artwork. This was partly inspired by the readymades of Dadaism. The artists of this movement went against the disengagement of abstract expressionism and celebrated popular culture and consumer items. They used bright, flat colors from advertising and imagery from comic books as well. As a response to and departure from abstract expressionism, pop art used hard edges instead of painterly techniques and impersonal, everyday reality instead of personal symbolism.

Some of the significant artists of the pop art movement used commercial imagery such as Campbell’s Soup cans, imagery directly from comic books, and even a direct representation of the American flag. They were inspired by everyday objects and mass consumerism, and they combined objects, text, and images to create new meaning in their artwork.

### **Andy Warhol, Roy Lichtenstein, and Jasper Johns**

Andy Warhol was a commercial artist who became a significant pop artist. He created video art, installations, performance art, and paintings, and in 1961 he began producing pop art paintings,

including the iconic *Campbell's Soup Cans*. He also painted portraits of many celebrities in bright and vivid colors.

Roy Lichtenstein was a pop artist who is known for his comic book imagery. He altered images from comic books, added different text, and painted them on a large scale. He used Benday dots, the dots produced by mechanical means in printing, to create these images. One of his well-known works is *Drowning Girl* (1963), which depicts a comic image of a drowning girl and her boyfriend in a boat, along with text.

Jasper Johns was a pop artist known for his American imagery, especially the American flag. His *Three Flags* (1958) is a painting of three American flags layered upon each other. *Flag*, from 1954–1955, is a faithful reproduction of an American flag using encaustic.

## Postmodernism

**Postmodernism** is a mid- to late-20th-century art movement that departed from modernism. Since the beginning of the 20th century, modernism had led art practice and theory and had promoted the ideas of progress, reason, and idealism. Postmodern artists would not recognize the authority of previous art movements, and this movement was skeptical and antiauthoritarian. This “anything goes” style cast aside all rules of style and included elements of confrontation, tongue-in-cheek humor, and ludicrousness. Postmodernist artists built on the ideas of previous movements such as pop art and feminist art, but they questioned the ideas and subjectivity, authorship, and originality in previous art movements. This movement also questioned the commodification of art production.

Postmodernism is a cross-disciplinary term with philosophical origins, and it was highly influenced by French philosopher Jacques Lacan. Lacan added a contemporary intellectual significance to the ideas of Freud, and he suggested that the unconscious is just as complex and sophisticated as the conscious mind.

## Sigmar Polke, and Gerhard Richter

Sigmar Polke, a German artist whose artwork pioneered a postmodern approach, departed from coherence in his art as well as the idea that art comes from the artist's personality. In his 12 canvases collectively called *The Fifties* (1963–1969), he portrays a combination of cynicism and nostalgia while commenting on German culture. The grouping of paintings goes against the concept of stylistic coherence because he used different styles throughout the works.

Gerhard Richter's photo paintings of the 1960s combined photography with painting. In doing this, he combined high and low art into one technique. Richter would project a photograph onto a canvas, then paint it in neutral shades of gray, leaving out the black and white tones. He then used a dry brush to soften the edges, degrading the image to give a blurry effect. He assigned neutral titles to his works. This method of mechanical reproduction took any artist style out of the equation, as well as any emotion expressed through the artwork.

## Feminist Art

**Feminist art** began in the late 1960s as female artists sought to revise the history of a male-dominated art world and bring attention to the contributions of female artists. They sought to abolish stereotypes as well as challenge and influence cultural attitudes. Prior to feminism, female artists did not get the same publicity or status that their male counterparts did, and the art world was dominated by male artists. Feminist artists began to embrace and use materials in their works that were tied to their gender, such as textiles and embroidery. They also used newer styles such as

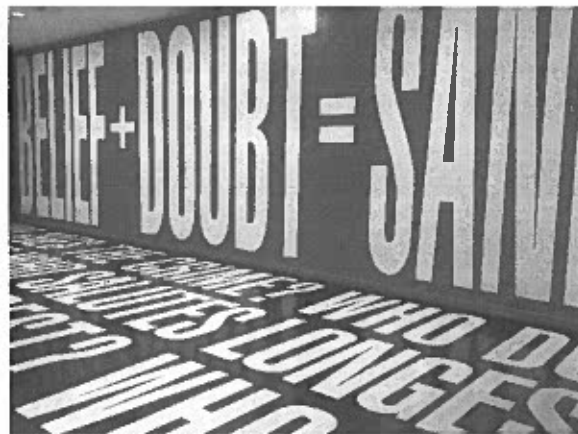
video, body, and performance art that did not have such a long history as a male-dominated style. These newer types of media allowed these artists to deliver more direct and personal messages to their viewers. Whereas some feminist artists explored the objectification of women in media, or ideas of domesticity, others focused on the absence of recognition of female artists throughout history.

### **Barbara Kruger, Cindy Sherman, and Faith Ringgold.**

Barbara Kruger uses mass communication and advertising techniques, pairing black-and-white photos with Helvetica or Futura text, to explore identity and gender issues. The text and slogans she uses challenge the viewer, and her phrases often include pronouns such as I, you, we, or they. She often appropriates images from magazines and adds text to frame the images in a new context to make the viewer think. This image shows her artwork *Belief + Doubt* from 2012 and its iconic and recognizable style of text.

Cindy Sherman is a feminist artist who is known for her self-portraits. She used makeup, wigs, and props to transform herself to represent various female stereotypes in her photographs. Her artworks question ideas of authenticity and identity.

Faith Ringgold is an African-American feminist artist who worked in themes of racial and gender identity and equality. She told stories through quilts, and she recognized a need for equality in the art world. Ringgold would often insist that 50% of the artists included in prominent art shows should be women.



### **Armory Show**

The Armory Show was the first major exhibition of modern art in America. This show is also called the International Exhibition of Modern Art, and it was held in New York City's 69th Regiment Armory building in 1913. The art exhibited here was influential to American art because of the inclusion of modern art by European and American painters and sculptors. Prior to this, Americans were used to seeing realistic art, but this show exposed them to cubist, impressionist, and fauvist artworks. Marcel Duchamp's *Nude Descending a Staircase* was included in this show. This collection of more than 1,300 artworks shocked many, and it was ridiculed and declared insane and immoral by many. The inclusion of these works in this successful art show served as a catalyst for many artists to rethink their styles and experiment with new ways of creating art.

## The Degenerate Art Exhibition

The Degenerate Art Exhibition was held in Munich by Adolf Ziegler and the Nazi party in 1937. The Nazis had removed more than 20,000 artworks from state museums that had been deemed too modern or progressive. Works by foreign artists were also confiscated, including Pablo Picasso, Piet Mondrian, and Wassily Kandinsky, but these works were not exhibited. 740 of these confiscated works were shown in the Degenerate Art Exhibition to defame the artists and show the public the decay of culture. These works were thought to lack artistic skill or insult the German culture. The works were shown in the exhibition without frames and were accompanied by derogatory words or slogans. The art was divided into categories including "An Insult to German Womanhood," and "Nature as Seen by Sick Minds." More than two million visitors attended this show, and some works were destroyed after the show ended. Many other works were sold on the international market and found new homes in museums abroad.

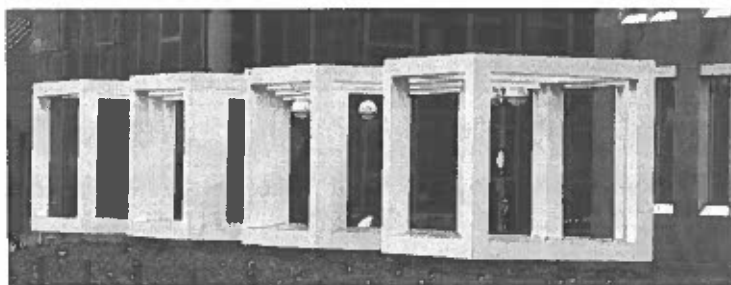
## The Guerrilla Girls

The Guerrilla Girls group formed in 1985 to speak out against sexism and racism in the art world. These women wear gorilla masks to hide their identities while they speak out against powerful institutions. They also hide their identities by using pseudonyms, taking the names of deceased female artists. They have used posters, billboards, and books, as well as public appearances, to disseminate their messages. This group has gained attention for their protest art, and their first well-known poster asked, "Do women have to be naked to get into the Met. Museum?" The image on the poster was a copy of Ingres' *La Grande Odalisque*, with a gorilla head over the woman's face. This poster was in reference to the number of nude women exhibited in the museum and the lack of female artists represented. The Guerrilla Girls have repeatedly brought attention to issues of inequity through their clean designs and jarring images.

## Minimalism Art

The **minimalism movement** is characterized by an extreme form of abstract art. In the 1960s, artists began to reduce artwork to its barest form, not wishing it to represent anything. They used geometric shapes and challenged the previous conventions of creating and viewing artwork. Minimalist artists wanted their artwork to exist simply as its own form and material, not as a representational form. Minimalist artwork shows traits of simplicity, harmony, and purity.

Although minimalist art can be two-dimensional, it is often three-dimensional, using simple, sometimes repeated, geometric shapes. Early abstract ideas, as well as the constructivist ideas of reducing artwork to its simplest and most essential form, inspired minimalist artists. This example from 1991 by Solomon "Sol" LeWitt is called *Open Cubes*, and it shows white repeated geometric forms. These forms exist only as themselves and are not meant to be representational. The viewer should only accept the artwork as its purest form of geometry and simplicity.



## Street Art

**Street art** began with graffiti, but these artists have eventually shown their work in public areas and in galleries and museums in the 1970s and 1980s. Street art initially consisted of politically charged protest slogans and graphics illegally painted in public areas. Graffiti usually refers to vandalism, and street art was initially tied to hip-hop culture and lower income areas. In the 1970s, Jean-Michel Basquiat began spray painting his form of artwork in Manhattan. Later in the 1980s, Keith Haring was creating his distinctive artwork on the subway lines in New York City, and his well-known style of outlines and vivid colors, as shown, has persisted as popular artwork even now.

Banksy is another well-known street artist, although his identity is unknown. Banksy spray paints stencils designs onto walls and buildings throughout major cities, and those works have been turned into prints, t-shirts, and more. Street artist Shepard Fairey created the iconic Andre the Giant stencil which can be seen in many locations, and he went on to make the well-known Barack Obama graphic in red, white, and blue.



## The Harlem Renaissance Art Movement

Between 1920 and 1930, a new wave of artistic creativity poured out from a group of African American artists in Harlem, a neighborhood in the borough of Manhattan in New York City. This movement became known as the Harlem Renaissance, and its influence continued through and past the 1930s. This area of New York became a center of African-American immigrants, and the movement sparked a racial pride that challenged racism and stereotypes. The artwork of this time had aims to uplift African-Americans' spirits and the race as a whole. Some of the common themes represented in the artwork were racism, the effects of slavery, folk traditions, and how to convey the experience of black life or black neighborhoods.

Jacob Lawrence was the first well-known African-American artist, and his *Migration* series showed the migration of blacks from Africa to America. His work focused on the history of the American South.

Aaron Douglas was an artist who painted murals on buildings and created illustrations for the covers of black publications. In this work, *Aspiration* from 1936, Douglas shows the progression from slavery to the freedom of the industrialized North.



## Ashcan School

The Ashcan School describes a group of American realist painters who decided to portray urban life of New York in an unidealized fashion. This was not an organized movement; rather, it was a collective desire to portray modern life in a new way. This group believed that poor and working-class people were a worthy artistic subject matter, and they sought to portray these people in an authentic way. They used a dark palette, a sketchy quality, and visible brushwork to show scenes of everyday modern life in New York City, with subjects including street kids, alcoholics, subways, crowded tenements, and theaters. These artists challenged refined and idealized artwork, moving away from American impressionism and the more polished academic realism. After the Armory Show in 1913, as well as the advent of cubism and fauvism, the work of the Ashcan School no longer seemed as radical as it initially did.



## The Hudson River School

The Hudson River School was an American art movement in the mid-19th century that included landscape painters intent on painting in a romantic style. The paintings of this movement depict the Hudson River Valley and areas surrounding it. The themes reflected in these artworks are exploration, discovery, and settlement. These landscapes are detailed and somewhat idealized, often showing a juxtaposition and harmony of settlers or agriculture with nature. They were also showing their belief in nature as a revelation of God.

This movement was the first native art movement in America. Thomas Cole is credited as the founder, and the movement spanned two generations of painters. The second generation was not as tied to a geographical location as the first, but rather followed the style. Albert Bierstadt was a notable artist of this second generation. This painting by Bierstadt, *A River Landscape, Westphalia* (1855), shows the accord of man with the beauty and grandness of nature.

## Folk Art and Outsider Art

**Folk art** is the art of peasants or a native culture. Folk art is generally characterized by simple or naive subject matter, and it is utilitarian or decorative in purpose. Folk art is not influenced by art movements or styles, and it will not include the work of professional artists. This type of art shares and expresses the values of a community as well as their cultural identity. Pottery, jewelry, paintings, sculpture, needlework, and costumes can all be folk art.

Outsider art is artwork created by untrained artists who learned their craft and methods on their own. These artists are not part of an artistic establishment and can include the mentally ill or even rural artists outside of urban areas. Outsider art is sometimes called "naive art." An increased interest in outsider art is in line with the general rejection of traditional values and methods of art by modernist artists.

### **Warhol's Factory**

The Factory refers to Andy Warhol's studio in New York City. This location became a hangout for artists and celebrities, and it was known for its raucous parties. Warhol decorated this location with aluminum foil, mirrors, and silver paint, and it was also called the Silver Factory. The Factory later occupied two other locations. Warhol's time at this Factory location was referred to as the Silver Era.

In addition to the artistic experimentation and musical performances at The Factory, an assembly-line production of artwork also occurred. Warhol questioned the idea of artist and art production by mass-producing artwork with his silkscreen method and having a group of helpers create his work for him. These helpers became known as "Warhol Superstars," and they included musicians, free thinkers, drag queens, socialites, and celebrities, among others. He paralleled and reflected the concept of mass consumerism and mass-produced commercial objects by creating his own artwork in this way.

### **Op Art**

The **op art movement** of the 1960s used geometric forms to create visual effects and optical illusions. Op art is abstract and nonrepresentational, and many works were created in just black and white. Viewers often were given the feeling of movement, vibration, hidden images, or swelling within the artwork. Op artists consider how our vision works and how the planes of the figure and the ground can work with or against each other. Op artists also work with colors and how they can function together to produce different effects on the viewer's eye. As an early op artist, Bridget Riley worked in black and white and later began working in color op art. Josef Albers is another well-known op artist who worked in color, and he would nest geometric shapes of contrasting colors within each other, making visual effects of the shapes receding and advancing against each other.

## Art Deco Movement

The **art deco movement**, taking its name from the Exposition Internationale des Arts Décoratifs et Industriels Modernes held in Paris in 1925, began in Paris with architecture and decorative arts in the 1920s. It later became a major style in the 1930s throughout America and Western Europe. The art deco style is characterized by streamlined forms, symmetry, geometric shapes, smooth lines, and bright vibrant colors. This movement was influenced by the geometric forms of cubism, the industrial components of futurism and constructivism, and the bright colors of fauvism. The style was used during the roaring twenties as well as the Great Depression of the 1930s. Art deco was used to improve the style of mass-produced objects, and it was also used for posters and some fine arts. This poster from 1925 is an example of the art deco style, with hard lines, streamlined forms, and geometric shapes with vibrant colors. The style was meant to be pleasing to the eye.



## Art Nouveau

**Art nouveau** sought to distance itself from historical styles, as well as challenge the hierarchy of fine arts over decorative arts. Art nouveau was a decorative style that focused on linear contours and outlines, and it used muted, limited colors such as blues, greens, yellows, and browns. Art nouveau artists wanted to revive good craftsmanship, lift the status of crafts, and skillfully create modern designs that did not rely on past design. This international style was popular between 1890 and 1910, and it was applied to art, architecture, as well as everyday objects such as furniture, lamps, and jewelry.

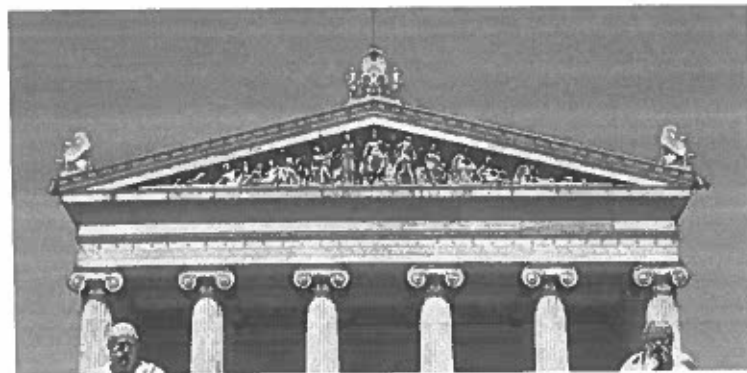
One prominent art nouveau artist was Alphonse Mucha, a Moravian artist who created many illustrations, posters, paintings, and other designs. This example shows his signature style, which was considered outdated by the time of his death. His designs often showed beautiful women surrounded by a symmetrical, flowing, floral and ornate design and muted colors.



### Classical Architecture

**Classical architecture** includes buildings that employ the principles and aesthetics of Greek and Roman architecture. This style includes a post and beam system with columns bearing the load. The pediment (shown) is the triangular part of a building above the columns. It might include elaborate sculptures within. Greek architects used the golden mean, or golden ratio, to create their ideal proportions for some of their buildings.

Columns were units of measurement in human scale, and several styles, orders, were developed over time. Caryatids functioned as columns in Greek architecture, but they were stone carvings of females used as support pillars. Greek architecture often used marble and stone, but the discovery of concrete in Rome enabled the construction of arches, domes, and vaults, as used in the Pantheon. Whereas Greek temples were invariably oriented east to west, Romans would orient their temples in respect to the other surrounding buildings.



## Greek and Roman Column Orders

**Ancient Greek architecture** has three distinct column orders. These styles are distinguished by their proportions and their unique characteristics. The Doric order is the simplest design, with a flat and unadorned design for the top and bottom of the column. This order is four to eight times its diameter. The Ionic order consists of spiral scrolls, or twin volutes, at the tops of the columns. This column's height is nine times its bottom diameter. The Corinthian order is much more ornate, as shown, with floral designs. This column is taller, at 10 times its diameter.

The Romans adopted all of these column styles, and they later added two of their own. Their Tuscan order is very plain, and it is a simplified version of the Doric order. The composite order is a blend of the Ionic and Corinthian orders, using the scrolls of the Ionic order and the floral motifs of the Corinthian order.

## Byzantine Architecture

**Byzantine architecture** is the architecture of the Byzantine, or later Roman Empire. This style was highly influenced by Greek and Roman architecture. Buildings became more complex, geometrically; in addition to stone, bricks and plaster were used in some instances. Mosaics were used in place of carved stone decorations, and many domes were used at this time. The architects used pendentives to support a circular dome over a square space, or they used an elliptical dome over a rectangular space. Prior to this, domes were used over circular spaces. Most of the surviving examples of Byzantine architecture are sacred in nature.

The greatest surviving example of Byzantine architecture is the Hagia Sophia in Constantinople (shown). A huge dome was constructed over a square space. The interior of the church included colored marble and other stones, and the vaults and domes were covered with elaborate mosaics.



## Romanesque Architecture

**Romanesque architecture** is a style of medieval Europe beginning around the 11th century. This style is characterized by semicircular arches for doors and windows, and barrel or groin vaults. Many castles and churches were built in this style. Romanesque churches had large, thick walls and piers with few windows, a large tower where the nave and transept cross, and smaller towers at the western end of the church. An arcade, or row of columns, was constructed in the center of larger churches, separating the nave from the aisles. These buildings, both secular and sacred, give a feeling of solidity and strength by their massive size, thick walls, and masonry construction. Instead of relying on columns for support as in Greek and Roman architecture, this style, like the Byzantine style, relies more on walls. This example shows the few small arched windows that exemplify the Romanesque style.



## Gothic Architecture

The **Gothic architecture** style in Europe spanned from the mid-12th to the 16th century. Architects sought to solve problems created by simple, dark, damp buildings from previous styles and instead create light, airy, beautiful structures. Gothic architecture is characterized by grand tall designs with upward visual movement. New building techniques allowed builders to create taller towers. The flying buttress is a defining element of this style, and it helped to allow these new heights. The pointed arch is another characteristic of medieval architecture, along with the advent of vaulted ceilings and gargoyles. Gargoyles serve a practical purpose as a drainage spout, but they also serve as decorations with evil or menacing features. The medieval style is known for being ornate, as seen in this example of the Amiens Cathedral in France. Beauty and aesthetic considerations are shown in the designs for these highly decorative buildings.



### Balustrade, Pediment, and Flying Buttress

A **balustrade** is a series of pillars, or balusters, that support a rail to form a low wall or barrier. This could also be used for an ornamental parapet or balcony.

A **pediment** is the triangular gable used in classical Greek temples, as well as Renaissance and neoclassical architecture. It is found under the roof of the building and above the entablature. This would usually be on top of a portico or columns. The triangular area within the pediment is called a tympanum, and this was usually decorated with relief sculptures.

A **flying buttress** (shown) is a masonry support that transmits the thrust of a vault or a roof into the outer support. This is usually an inclined bar on a partial arch that extends, or flies out, from the wall and carries the weight of the vault or roof. This architectural element developed in Gothic architecture, from prior hidden supports in previous styles. This helped architects create the high ceilings characteristic of Gothic-style churches.



### **Spire, Facade, Caryatid, and Entablature**

A **spire** is a tapering structure that comes to a point at the top of a building. These are often found on skyscrapers and church towers. A spire can function as a symbol of the power of religion, giving a sense of strength and reaching toward heaven.

The architectural term **facade** comes from a French word meaning "face." The facade of a building is its front or face, and this is often the most important design aspect when planning a building.



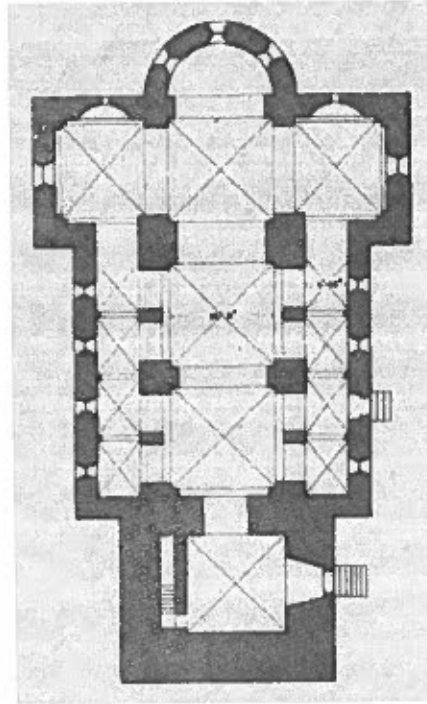
A **caryatid** is a stone carving of a female figure, draped in clothing, used to support an entablature. This caryatid, as shown, was used in place of a column in a Greek building. The entablature is the upper section of a classical order, and this is divided into the architrave, frieze, and cornice. The architrave is the lowest section of the entablature, which rests on the columns. The frieze is the middle section, in which relief sculpture might be found. The cornice is the crowning molding that will be found directly under the pediment.



### **Basilica, Apse, Nave, and Transept**

A **basilica** was originally a type of Roman building, but this later became the basis for the design of the Christian church. In ancient Rome, a basilica was a public building in which courts were held, and other public functions were held there as well. The basilica would be centrally located in town, near the main forum. It is a rectangular building divided by rows of columns, or colonnades, into three aisles. The center aisle is called the nave. The nave runs from the entrance or vestibule of the church to the apse. The apse, or chancel, is the vaulted semicircular structure at the end of the

center aisle. This is where the altar would be located. The transept is part of the church that lies across the main body and forms the cross shape. In this illustration, it is just before the apse.



### **Obelisk, Oculus, Pilaster, and Rotunda**

An **obelisk** is a tall, four-sided structure that is freestanding and tapers to a pyramidal point. These were often found at the entrances to Egyptian temples, and they continue to be used in Western architecture. One well-known example is the Washington Monument in Washington, D.C.

Oculus is the Latin word for "eye." In architecture, it is a circular opening in the center of a dome, and it is a feature in Roman, Byzantine, or neoclassical buildings. An oculus can also be found in a wall. The oculus in the Roman Pantheon is open and allows rain in, which leaves the building through drains in the floor.

A pilaster (shown) is a flat, upright architectural element that projects from a wall, giving the appearance of a column inset in the wall. A pilaster only functions as decoration, not as support.



A rotunda is a building that is round inside and out and is topped with a dome. A rotunda can also be a large interior space topped with a dome.

### **Renaissance Architecture**

**Renaissance** architecture occurred in Europe between the 14th and 17th centuries. This style followed Gothic architecture, and it was followed by the baroque style. The Renaissance style emphasized proportion, geometry, and symmetry, and it included orderly composition of the columns and pilasters they used. These architects used semicircular arches, as well as hemispherical domes. The building plans are square and symmetrical, and facades are symmetrical as well. Church facades would usually be topped by a pediment, as shown in this example of St. Peter's Basilica. Renaissance architecture used the Greek and Roman orders of columns, either as structural objects or as purely decorative pilasters. The dome was used often as a large external feature or as a structural internal dome. Doors would have square lintels, and openings without doors would have arches with a decorative keystone. The keystone is the top center stone in an arch that carries the load of the arch structure. Moldings and decorative details were created with

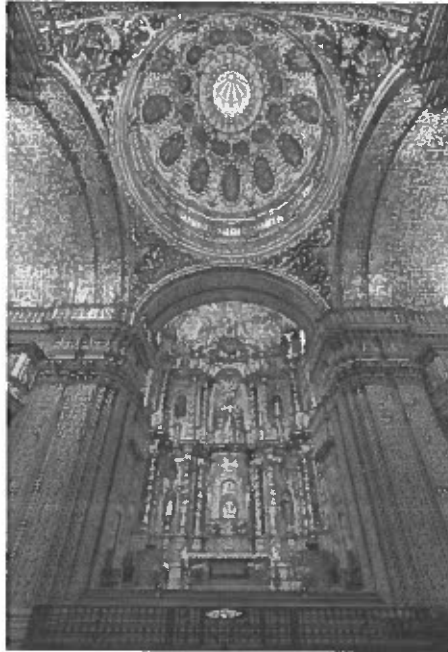
great attention to detail because they found it critical to master the techniques of the ancient Romans.



### **Baroque Architecture**

**Baroque** architecture originated in Italy in the late 16th century, and it was prevalent in areas including Germany and South America until the 18th century. The baroque style is characterized by complex architectural plans often based on an oval design, with broader naves in an oval shape. Other characteristics include purposely fragmented elements, dramatic lighting and contrast, large frescoes on the ceiling, trompe l'oeil paintings, sumptuous colors and decorations, pear-shaped domes, and marble or faux finishing in the interior. The interior might also include bronze gilding, sculpted angels, and twisting columns. Baroque architects sought to explore new forms and styles as well as methods of lighting. They were using this architectural style to express the wealth and

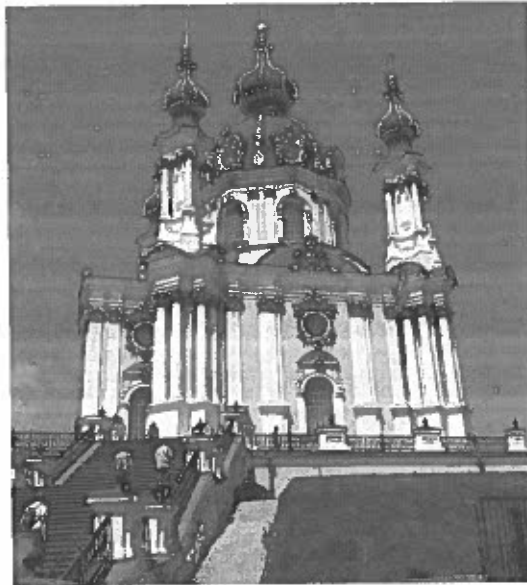
power of the Catholic Church during the time of the Counter-Reformation, a movement in response to the Protestant Reformation.



### **Rococo Architecture**

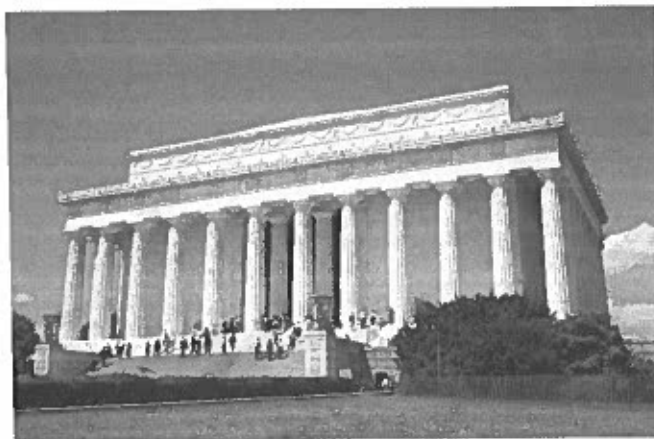
The **rococo** style of architecture began in Paris in the early 18th century. It then spread throughout France and other countries. The rococo style first developed in interior design and decorative arts; then it expanded to architecture and other arts. This architectural style is characterized by pastel colors, serpentine lines, and excessive, elaborate ornamentation. The exterior of a rococo building will be simple, and the interior is filled with ornament and decoration, with the intent to wow the viewer. Floor plans of churches were complex, sometimes with interlocking oval shapes, and the stairways of palaces became ornate, central focuses. This style was meant to be highly theatrical and have something for a visitor to see at every turn. One example of rococo architecture is St. Andrew's Church in Kiev, Ukraine (shown). This facade shows a simplicity with a pastel blue and

some ornamentation, but in keeping with the style, the interior is much grander and more elaborate.



### **Neoclassical Architecture**

Classical architecture of ancient Greece and Rome was revived later with neoclassical architecture in the mid-18th century. This style began as a reaction to the excessive ornamentation of the rococo style. This international movement was characterized by a return to the clarity, restraint, and balance, as well as subjects and motifs, of classical styles. Neoclassical architecture used columns, especially the Doric order, and it showed a desire for blank walls rather than decorations. The roof would be flat, sometimes with a pediment, and the facade would be flat and long, with a wall of columns across. No domes or towers were used in this style. Examples of this style include the National Mall and the Lincoln Memorial (shown) in Washington, D.C. The Lincoln Memorial exemplifies the long, flat facade with a row of columns and the flat roof used in this style of architecture.



### **Art Nouveau Architecture**

The **art nouveau style of architecture** was popular in the United States and Europe beginning in the 1880s, and it declined around 1910. Architects using this style sought to express modern ideas

and use nontraditional forms in their buildings. This is sometimes referred to as the first modern architectural style. It is characterized by curved, graceful lines and decorations influenced by nature including leaves, vines, peacocks, and dragonflies. Ironwork and glass were used as sculptural elements as architects tried to embrace what was then possible because of the industrial revolution. These buildings also might contain mosaics, stained glass, and Japanese motifs. The architectural detail was often colorful and decorative, helping bring in the new, modern era.

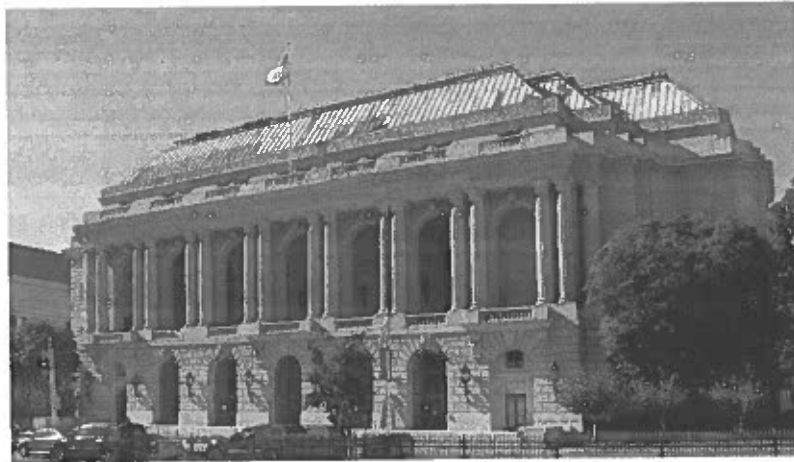
This example, the Casa Batlló in Barcelona Spain, was remodeled and redesigned by Antoni Gaudí in 1904. It has the irregular shapes and flowing stone sculptural work that is characteristic of the art nouveau style. The facade is decorated with a mosaic made from broken tiles, and the roof is arched and rounded.



### **Beaux Arts Architecture**

The **beaux arts architectural style** was taught from the 1830s to the end of the 19th century at the École des Beaux-Arts in Paris. From there, it strongly influenced architecture in the United States. Beaux arts architecture drew from Greek and Roman styling and included arched and pedimented doors, arched windows, flat roofs, columns, and symmetry. Beaux arts may also include sculptural details as well as classical details such pilasters, garlands, and balustrades. Interiors often have grand stairways and marble floors, with arched doorways and large rooms. Government buildings may have domes and high, vaulted ceilings.

The San Francisco Opera House (shown) built in 1932 is an example of the beaux arts style in the United States. The bottom floor is rusticated, with rough-cut stones. The top floor features columns and archways, as well as a low-pitched roof.



### **Neo-Gothic Architecture**

**Neo-Gothic architecture**, also known as Gothic Revival or Victorian Gothic, is a style that occurred in the late 18th century in England. The use of this style increased in the early 19th century as architects sought to revive the Gothic architecture style. This style follows the original Gothic architectural style, with pointed arches for doors and windows; steeply pitched roofs; decorative ornamental patterns; spires; leaded glass, quatrefoil, or clover-shaped windows; pinnacles; grouped chimneys; stone carvings of gargoyles, leaves, and birds; and sometimes patterned brick or multicolored stone. A Gothic Revival building will emphasize vertical elements, leading the eye up to the sky. The style was often used in church architecture and also in the construction of colleges.



This example is the Salt Lake Temple in Utah, and it exhibits many of the Gothic architecture characteristics, including the emphasis on vertical elements. The spires are also reminiscent of the Gothic style.



### **Art Deco Architecture**

The **art deco style of architecture** began in Paris in 1903. This style was applied to apartment buildings and public structures, but rarely to private homes. Art deco architecture used rectangular, block-like forms, arranged geometrically, with these elements broken up by ornamental and curved decorative motifs. This style was sleek and linear, with a modern feel. Buildings were embellished with repetitive designs, such as chevrons or geometric shapes, and these decorations might be machine made rather than hand-crafted. Art deco emphasized the horizontal rather than the vertical, and for practicality, a simple geometric box-shaped building could be embellished in this style to create a modern fashionable design on a budget. Materials used in art deco architecture are smooth stone, terra-cotta, stucco, steel, aluminum, and glass blocks.

The Chrysler Building, built in New York City in 1928, is an example of this architectural style. It includes ornaments protruding from the corners, as well as contrasting brickwork and emphasis on horizontal elements.



### **Bauhaus Architecture**

**Bauhaus architecture** developed from the Bauhaus School of Art and Design in Germany beginning in 1927. The Bauhaus School sought to connect art with design and technology. The director of this school was Walter Gropius, who was a German architect known as a pioneer of modern architecture. The architectural style is simple and straightforward, following the Bauhaus minimalist and industrial aesthetic. Bauhaus architects sought unadorned functionality rather than aesthetics, and they often used a limited palette of neutral colors. This style favored function over form, Gropius designed door handles that became a well-known component of Bauhaus architecture and design.

The Bauhaus Building in Dessau, Germany (shown), built in 1926, is attributed to Gropius and embodies the Bauhaus style. The building is simple, with a clean design, geometric styling, and it

uses a limited palette other than the red doors. This building is an example of Bauhaus architecture valuing function over aesthetics.



### **The Prairie School Movement**

The Prairie School was a style of architecture prevalent in the Midwestern United States in the late 19th and early 20th centuries. Most architects associated with this movement were employed by Frank Lloyd Wright or Louis Sullivan, but Sullivan himself is not considered an architect of this style. The Prairie School style was used on some public buildings, but it is mostly known for home design. Common features include an emphasis on horizontal lines, overhanging eaves, low pitched or flat roofs, an open floor plan, clean lines, strings of windows in a row, built-in cabinetry, and the use of natural materials such as stone and wood. Wright favored geometric shapes as decorative designs in his buildings, whereas some other Prairie School architects used floral and circular geometric decorations. This example, Wright's Frederick C. Robie House in Chicago, Illinois, shows the clean lines, horizontal emphasis, overhanging eaves, and emphasis on geometric shapes prevalent in this style.



## Skyscrapers

Architect Louis Sullivan is known as the “father of skyscrapers” and is considered the originator of the modern skyscraper. The name skyscraper was first used in the 1880s as the first skyscrapers were built in the United States. Originally this referred to buildings containing 10 or 20 stories, but later it came to describe buildings higher than 40 or 50 stories tall. After the first safe passenger elevator was created in 1857 and a need for more business space arose in cities, it became desirable to build buildings more vertically than horizontally. The refinement of the steel process in the 1860s also allowed for taller buildings to be constructed. These buildings had a steel skeleton rather than load-bearing walls, and this steel construction allowed these skyscrapers to rise to greater heights. This load-bearing steel frame was developed by architect William Jenney. Sullivan’s Wainwright Building (shown), built in 1891, was the first building with a steel frame and vertical bands to emphasize its height. It is considered the first skyscraper.



## The International Style of Architecture

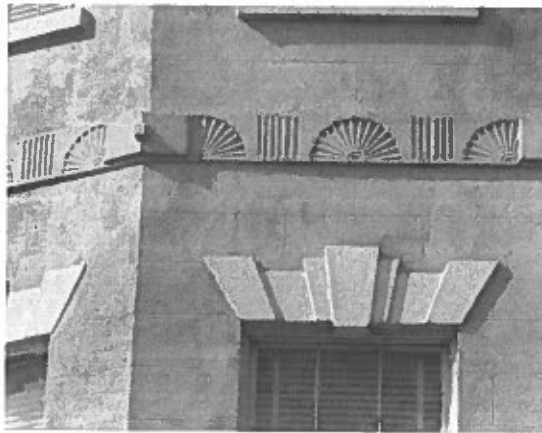
The **international style of architecture** developed after World War I in the 1920s and 1930s, and it emphasized modern design. This was the dominant style of architecture until the 1970s, and it was influenced by the de Stijl and Bauhaus movements. This style is characterized by industrial materials, linear, geometric forms, an absence of ornamentation. Glass, steel, and reinforced concrete were the main building materials. The style grew from a desire to get away from eclectic and mixed architectural styles and decorations, the development of new construction technologies, and a growing need for office buildings and other industrial structures. These architects took advantage of the inexpensive mass-produced iron and steel, and sheathed the buildings in glass, creating a new, modern look for the era. Prominent architects of this style include Walter Gropius,

Ludwig Mies van der Rohe, Le Corbusier, and Philip Johnson. A notable example (shown) is van der Rohe's Seagram Building in New York, built in 1958.



### Grotesque, Plinth, Keystone, and Stringcourse

- A **grotesque** is a carved mythical creature that is used for decoration on a building. Grotesques look similar to gargoyles, but gargoyles have a functional purpose as a water spout that carries water away from the side of a building.
- A **plinth** is the square slab at the bottom of a column. This term can also refer to a flat block at the base of a door, or a projecting course of brick or stone at the base of a wall.
- A **keystone** is the wedge-shaped stone at the top of an arch. This stone locks the arch pieces in place; it is the last piece placed in the arch to give stability to the structure.
- A **stringcourse** is a projecting horizontal course, or band, of bricks or stonework on a building. It can be thin and undecorated or larger and ornate. This stringcourse, above the window, runs along the building horizontally and has a decorative pattern.



## **The Principle of Form**

The principle form follows function is associated with modernist architecture and design. It suggests that the design of a building should be led by its function, or purpose. This quote is attributed to American architect Louis Sullivan, who is known as the “father of skyscrapers,” as well as America’s first modern architect. Sullivan saw the purpose of the building as determining the form, reflecting the activities that will happen inside, instead beginning with a design and fitting the function to it. This became a maxim of modernist architects in the 1930s, who thought that decorative elements were inessential and should not be used in the design of modern buildings. Sullivan, however, continued to use some decorative art nouveau and Celtic elements in his design, including green ironwork that became a recognizable hallmark of his work. Sullivan was a mentor of Frank Lloyd Wright, who later altered the saying to “form and function are one.”

# Aesthetic Knowledge and Analysis of Art

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## Prior Knowledge and Perception

A person's prior knowledge can affect how they perceive things visually. Prior knowledge carries expectations and biases based on what a person knows and has experienced. We combine what we see with what we already know, and we use this information to make assumptions when viewing new stimuli. We use our knowledge and experience to interpret familiar scenes and to provide a basis for unfamiliar scenes. For example, if a person encountered a familiar street sign, but part of the text on the sign was missing or obscured, based on prior knowledge of the color, shape, and visible text, the person would still perceive the sign as meaning what they expected, such as "YIELD" or "STOP." Without this prior knowledge, someone would not know how to interpret the sign with the missing text or might interpret it erroneously. Our prior knowledge is affected by, and subsequently affects, our visual perception.

## Prior Knowledge and Artwork

A person's prior knowledge can give them information to analyze an artwork differently than someone without that knowledge. Prior knowledge about an artist and their process or an art movement can help someone understand and appreciate an artwork more than someone who has no knowledge of these concepts. For example, someone not familiar with the artist Jackson Pollock and his method of action painting might dismiss his artworks as an unskilled mess. With prior knowledge of his intention and process, someone can appreciate his method of "action painting" and using his movements to express himself on canvas, moving away from figurative representation, as well as the tradition of putting his canvas on an easel. The background knowledge of Pollock's significance in art history, and the significance of his new process at the time, can affect how a viewer will perceive his artwork.

## Beliefs and Perception

Our beliefs can affect our visual perception in many ways. One way that beliefs can affect visual perception is confirmation bias, which is when someone sees only evidence and information that will confirm their beliefs. Even if the visual information contradicts what someone already believes, confirmation bias can cause them to interpret visual information based on their biases and come to erroneous conclusions based on these biases. A person with strong religious beliefs might see religious symbols and religious significance in images and in their surroundings. Someone with racist or sexist attitudes could automatically view images of different cultures, or races, or images of women, in a negative way, without delving deeper into what they are seeing. To avoid judging visual input based on bias and beliefs, it can help to have background information and facts about the visual input and to have objective criteria to analyze and judge the visual input on.

## Beliefs and Artwork

Beliefs can affect our perception of an artwork by bringing preconceived notions to our observations of the artwork and affecting our judgement of the work. A person with strong religious beliefs could enjoy and appreciate religious-themed artworks from medieval artists and understand the symbolism used throughout. On the other hand, someone without religious beliefs may immediately dismiss the artwork, finding it uninteresting. They would not appreciate the craftsmanship and the significance of these periods of art, based on their beliefs.

The understanding of the concept of art itself can also influence perception. If people believe that artwork is strictly painting, drawing, and sculpture, they would dismiss performance art or many of the new modern art genres as not actually being forms of artwork. Their beliefs about what constitutes authentic artwork would cause them to fail to examine these forms further, and they could not appreciate these artworks as they were intended.

### **Observation Methods and Perception**

The way in which we observe visual stimuli can affect how we perceive them. When viewing an object from only one angle, the viewer can miss information that could be gained by looking at it from all sides. Looking at an object from high, or a bird's-eye view, can look very different from looking at it with a worm's-eye view, or from below. The distance from which an object is viewed can affect perception as well. Looking at something closely can give clues about the details of an object, whereas looking at it from a distance can give a better idea of the overall object. The length of time that an object is viewed can also affect perception. Looking at an object at a glance will give less visual information than taking the time to observe and study it.

### **Observation Methods and Artwork**

Different observation methods can affect how a person perceives a sculpture. Sculptures are generally meant to be viewable and observed from all sides, and viewing a piece from one side, or from a certain angle can make the viewer miss information. If a large installation sculpture is viewed only from one angle, or only from close up, the viewer could miss the effect of the entire sculpture. It should be viewed from as many angles as possible, and as a whole in addition to close up.

A large painting can be viewed closely, to see the details of brushstrokes and layered color. Viewing a painting from a close distance can also show the perspective of the artist as they were creating it. It can also be viewed from a distance, to capture the entire artwork as a whole and get the effect that the artist was trying to communicate.

### **Multisensory Experiences and Perception**

Our senses can affect each other, and they can even affect how we perceive things visually. Throughout the day, we are barraged by sights and sounds, and we must prioritize what we pay attention to and what we ignore. A sound that is recognized as alarming, such as a car horn or an ambulance siren, will take precedence over other sounds and at the same time draw our gaze. A pleasing or interesting sound can also attract our attention, encouraging us to look in its direction to see the source. If an artwork were to incorporate sound, the types of sounds and directions they are coming from can aid in directing the viewer's eye throughout the artwork and even create a focal point.

In other instances, sound can also be distracting. It will be easier to concentrate on the details of a painting in a quiet room, rather than in a noisy, crowded room. An outdoor sculptural installation near a noisy road can be more difficult to examine than one in a museum gallery.

### **Viewpoints and Artwork**

Artwork can appear differently to different people depending on their viewpoints. Artwork can be viewed from a historical or personal perspective, or from a subjective or objective viewpoint. This painting, *Dance at Le Moulin de la Galette* from 1876 by Pierre-Auguste Renoir, can be analyzed in multiple ways. From a historical viewpoint, it is important to consider the significance of the



artwork in the impressionist style, capturing a fleeting moment on a Sunday afternoon in Paris and the dappled light through the trees. From a personal perspective, someone might react favorably to the warm and inviting scene or unfavorably if they do not like crowds.

Objectively, this artwork can be analyzed using the elements and principles of art, as well as the skill used to execute the rendering. Subjectively, a person might prefer that paintings are rendered more realistically or that a subject is more posed instead of the artist capturing a casual scene.



### **Creating Meaning**

Meaning can be created in artwork in many different ways. Sometimes the meaning of an artwork is immediately obvious and uncontested, and other times it is more complex and subject to various interpretations. Understanding the culture and context in which the artwork is created, as well as the art movement it fits into, can provide clues to its meaning.

Symbols are used to add meaning in ways that are not immediately clear, and they are usually not the focal point of an artwork. Rather, the artist relies on the viewer to see and decipher the symbols. These can have obvious meanings or rely on background or historical knowledge to understand their significance. Subject matter can be used to convey meaning in a more obvious manner. The artist's choice of subject and how it is portrayed can show meaning and intent.

An artist can also use elements and principles to create meaning in their artwork. Colors can signify feelings and moods. Size, placement, emphasis, and repetition can all convey strong ideas or the dominance of one idea over another.

### **Symbols**

Symbols incorporated into artwork are interpreted by the viewer based on their knowledge of these clues and the context they are placed within. This artwork, *The Ambassadors* by Hans Holbein the Younger, was painted in 1533. At first glance, this seems to be a portrait of two men, likely ambassadors based on the title, dressed in fine clothing and posing in front of a small set of shelves. The shelves contain many seemingly random objects, but they were chosen and placed for their symbolic significance within the context of the painting. The globe and maps signify the age of exploration. The gloves and dagger held by the men symbolize authority and luxury at the time. The

elongated shape on the floor is a stretched-out skull, which would look more correct when viewed from the bottom left of the painting. The skull generally symbolizes death. There are also symbols throughout the painting referring to the division between the Catholics and Protestants at the time: a mostly hidden crucifix in the top left and the hymnal juxtaposed with a lute with a broken string. Symbols placed throughout the artwork add meaning and intent to this seemingly innocuous portrait.



### **Creativity and Critical Thinking**

Artistic problems can be solved through creativity and innovation by brainstorming to come up with multiple solutions. Artists solve problems involved with what media and venue to use to express themselves and how to best get their message to their viewers. They decide how to use the elements and principles to convey their message, what subject to portray, what style to use, and even how to explain their artistic process to others. Problem solving using creativity and critical thinking can occur in many ways, including creating thumbnail sketches, keeping a notebook of ideas to draw from for artwork, and experimenting with materials. Artists can brainstorm ideas and come up with the best solution for their current problem. The artist should first assess the problem and decide what they are trying to solve. They can then come up with multiple ideas through writing, sketching, experimenting, and even viewing others' artwork, and then they can choose the best solution and build upon it.

### **Aesthetics and Expressive Features**

Aesthetics is a philosophy in art that seeks to create non-subjective criteria for the judgement of beauty. Aesthetics asks questions such as "What is art?" "What is beauty?" and "What makes art beautiful?" Aesthetics in art also questions what makes a painting good and whether a realistic painting is "better" than an abstract one. The aesthetics movement of the late 19th century favored the beauty of art over practical or moral narratives.

Expressive features in artwork include how the artists uses the elements and principles to communicate mood and feeling. An artist can communicate through the composition of the artwork, imagery, text, color, or a juxtaposition of opposing elements, among other things. These are the characteristics of an artwork that stir emotion within the viewer. The viewer could feel conflict and

opposition through strong, jagged lines or contrasts of colors. They could also feel peace and harmony through the use of analogous colors and soft, flowing elements throughout the artwork.

## **Context**

Context describes the related conditions or circumstances around which something occurs. To understand an artwork, it helps to understand its context or the circumstances in which the artist was working in at the time. This can include their environment, the historical events and traditions that were happening, their cultural values, the social movements at the time, and even the artist's personal values and commitments. Recognizing art in context includes looking at it in perspective — not only of how you see it at the moment, but also how it fits into the history of art, what it was a reaction to, what movement it followed, and what it preceded. You could judge a piece of Dada art simply by its own merit and appearance, but understanding the context of it, the feelings of cynicism and sarcasm as well as their intention of creating antiart, will carry more meaning to your understanding of the artwork and give you a broader perspective of what the artist intended.

## **Media and Techniques**

Media is the plural of medium, and it refers to the physical materials used by an artist to create artwork. Examples of media include paint, oil, clay, ink, metal, or any other material used to create artwork. Artistic media have changed and evolved throughout the years, with the invention and improvement of materials such as the advent of acrylic paint or the invention of tubes for paint portability.

Techniques for artwork include the ways in which an artist uses their technical skills to create artwork. This includes specialized methods for different media. Drawing techniques will differ from painting techniques, and they will also differ from the specialized methods used for printmaking or sculpting. An artist can explore new techniques, learn techniques from books, classes, or studying artwork, and use these techniques in their artwork to improve their methods or change the focus of their art.

## **Museums and Preservation**

The profession of art conservation is devoted to the preservation of artwork for the future. Art conservators protect artwork from future deterioration and damage and restore damaged artwork to as closely to the original form as possible while preserving its integrity. They also examine and document the state of the artwork as it is discovered, or as it is acquired, and they seek to keep it from changing over time. Conservation includes controlling the environment in which art is exhibited, transported, or stored, including the light, temperature, and humidity. They prepare for disaster, control pests, and protect artwork from damage. A conservator must decide on the most appropriate actions that should be taken to restore or preserve an artwork. The process of preventative conservation, to minimize or prevent any further damage to artwork, relies on multidisciplinary fields including science, chemistry, biology, and engineering, as well as art.

## **Golden Mean and Hierarchical Proportion**

The golden mean, also known as the golden ratio, golden number, or Fibonacci number, is a geometric proportion regarded as a way to add beauty, harmony, and balance to a composition. The proportion is 1 to 1.618, and this is used throughout art and architecture as a basis for design. Sometimes this is used as a single rectangle and a single square in these proportions, but this can be divided again and again to further subdivide the composition. These proportions were used by the

ancient Greeks when designing the Parthenon and by Michelangelo in many of his works, among others.

Hierarchical proportion is a technique used by artists to emphasize parts of a sculpture or other artwork. The artist would use unnatural or unusual proportions to depict his or her subjects, bringing the viewer's attention to the more important figures depicted in the art. The artist might show a person of higher status as being larger than someone who is of lower status or who is subservient. Beginning in Renaissance times, artists began to depict their subjects in more realistic proportions in relation to each other.

### **Juxtaposition, Appropriation, and Transformation**

Juxtaposition is the placement of contrasting elements next to each other to create an effect. Artists will contrast elements in their artwork to draw the viewer's eye, emphasizing the similarities and differences of the juxtaposed elements. An artist can also juxtapose imagery or concepts to relay their ideas. René Magritte's painting, *Memory of a Journey* from 1955, juxtaposes a giant feather against the Leaning Tower of Pisa, using scale to grab the viewer's attention.

Appropriation refers to the borrowing of preexisting objects or images in artwork with little to no transformation. Marcel Duchamp's "readymades" are an example of appropriation; he used preexisting objects in his works without changing them or changing them very little.

Transformation refers to the changing of an image or object to present it in a new way. Artists might start with a preexisting idea or object but transform it and use their own style and technique to make it their own artwork.

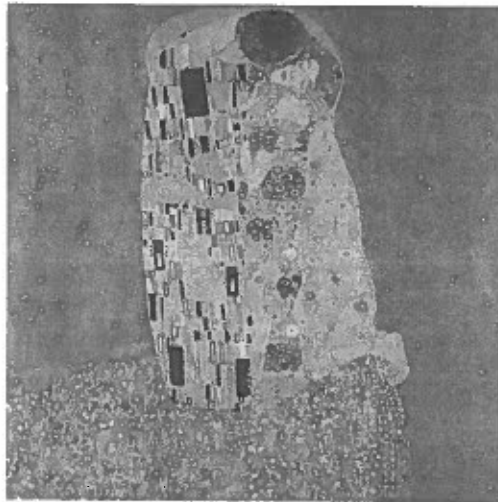
### **Elements of Art**

This painting, Mary Cassatt's *Young Girls* from 1867, shows effective use of the elements of art. Cassatt was an impressionist painter, and she used visible brushstrokes with soft edges to capture moments in time. Cassatt used yellows and orange-reds in the girls' dresses and greens in the background. The warm **colors** advance, whereas the cooler colored background recedes and helps the subjects stand out. The warmth of the colors in the skin tones gives life and vibrancy to the young girls. The rougher brushstrokes of the dresses, hair, and background show an implied **texture**. The implied **lines** surrounding the subjects in the foreground are softened and blurred, giving a softer feel to the subject. Cassatt used a wide range of light and dark **values** to give depth to this artwork. The darker background serves as negative **space**, whereas the subjects are the

positive space. Mary Cassatt used the elements of art to successfully portray the soft, tender nature of youth and innocence in this painting.

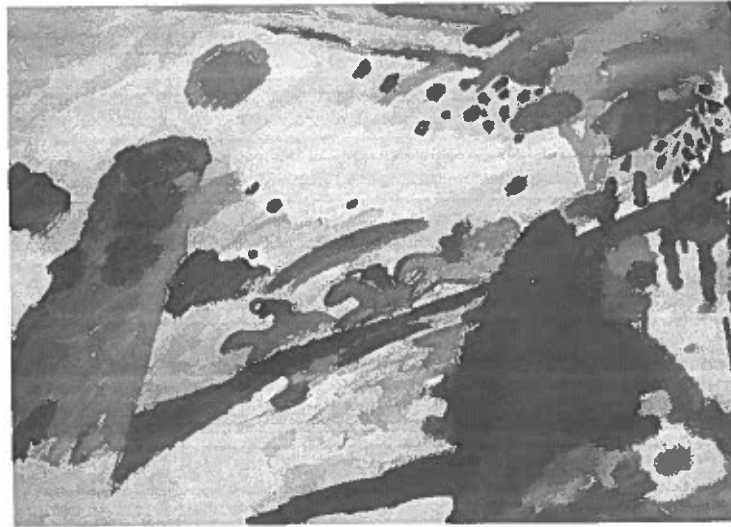


## Principles of Design



Gustav Klimt's *The Kiss* from 1907–1908 is a painting with gold leaf added. It depicts a couple embraced and entwined in a kiss. Klimt used asymmetrical **balance** in this painting, although the figures are centrally located. The patch of meadow underneath them is mainly on the left of the painting, and the darker squares in the clothing are also on the left. This is balanced by the **emphasis**, or focal point, of the woman's face, which draws the viewer's eye. There is **contrast** throughout, with circles, rectangles, and solid areas of color. There is also the contrast of the bright gold with the darker background, causing the figures to stand out. The clothing of both figures, as well as the flowers in the meadow, show different **patterns**. The repeated yellows and golds throughout the painting give a **unity** to the piece. Klimt successfully used the elements of art to create this eye-catching painting.

## Romantic Landscape



In Wassily Kandinsky's *Romantic Landscape* from 1911, he used the principles of design to successfully organize the elements of art. Although the artwork contains mainly darker and muted tones of **color**, such as darker blues and reds, as well as browns, grays and greens, he used one area of brighter orange in the top left. This small area of brighter color **contrasts** with the darker, more muted **values**, and it serves to **balance** the painting, while providing **emphasis** as a focal point to draw the eye. The **lines** and implied lines show **movement** in a triangle shape, leading the eye around the painting, from the upward sloping brown shape in the bottom left, leading up to a blue and whitish line at the top, then back down with a dark-gray line. He uses some dots of dark gray in different places to create **rhythm**, and the repeated colors throughout the painting provide **unity** to the artwork.

### Using Experience to Analyze an Artwork

Using experience to analyze an artwork can help the viewer relate to and understand the artwork by relating to the context surrounding it. Experience can help the viewer feel what the artist is trying to convey. In this example, *Snap the Whip* by Winslow Homer from 1862, children are playing a game outside in a grassy field. The game is called snap the whip; the children hold hands and the main player tries to run and spin to throw the children off at the end of the chain. If a viewer has experienced this game, or even a similar game such as "red rover," they will have a greater understanding of the fun and excitement conveyed by the artist. Someone who grew up in the city without playing in grassy fields will not be able to relate as closely to this image. Relating to an

artwork with experience can help the viewer decide and analyze whether the artist as successfully conveyed their ideas.



### **Using Observation to Analyze an Artwork**

Analyzing art can be done in many different ways. By observing artwork in various ways, the viewer can get a greater overview of the artwork and its message. Viewers can begin by standing back and taking in a wide view of the entire artwork. They can observe what catches their eye and how the artwork leads their eye around. After noting their initial impressions, viewers can take a closer look, observing details such as brushstrokes, use of color, lines, and blending or glazing. Viewers should also consider the subject and messages that the artist is trying to convey, deciding whether the portrayal is successful. In a sculptural form, viewers would look closely at the materials and walk around the sculpture to observe how their view changes from all sides. Keeping in mind the elements and principles of art and how the artist is using them, careful observation of the artwork can help the viewer analyze the success of the art.

### **Experience, Observation, Memory, and Imagination**

Artists will often use their own experiences and observations of their surroundings as sources for their artwork. An artist growing up by the ocean might use the beach as inspiration for their artwork, painting beach scenes and ocean life. A person who grew up in a crowded city might choose to portray the bustle of city life, tall buildings, or even homeless people because this is what they experienced. An artist can observe their surroundings and find the beauty in it, like the Hudson River School painters did when painting beautiful American landscapes. An artist could also draw on memories for inspiration, painting things that they remember from their past or their childhood. Imagination is a rich source of ideas too, and an artist can use their imagination to create new scenes, like surrealist painters often did. Surrealists used their imaginations to combine images in new ways, or even bend or distort ordinary objects. Experience, observation, memory, and imagination are all sources that artists use for their artwork.

### **Experience and Perception**

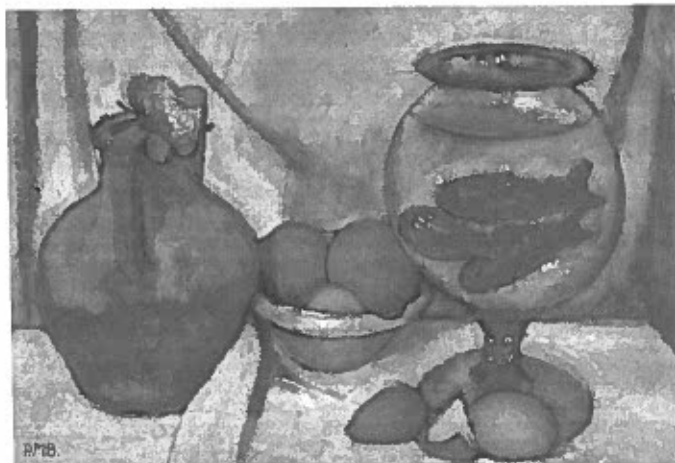
A person's experiences can affect their perception of an artwork by influencing their ideas of what is, or isn't, art. This is an example of street art by Banksy, a well-known street artist whose work has become desirable to find and see. His identity is still unknown, and this mystique adds to the appeal of his art. Street art does have a negative connotation for many. Street art, or graffiti, is generally painted illegally on buildings and is often covered over. The illegal and unwanted aspect could make many people think that it is not an art form. If someone has experienced vandalism on their

home or business, they would be less accepting of street art as an art form. If someone's neighborhood has been filled with unwanted graffiti, they might not want to see it on their own building or in other public places. On the other hand, people who are involved in creating street art view it as a positive experience, and they are accepting of it as an art form.



### Improving Composition

Although there are many ways to compose an artwork and lead the viewer's eye around the work, there are certain considerations that can improve the composition of a work. It is jarring to the eye to see two edges in a painting touch, but not overlap. In this case, the edge of the jug is touching the fruit, but they do not overlap. This causes a spatial ambiguity and does not make it clear that one object is in front of the other. Lines that are known, in the mind, to be straight should be made straight in the artwork. The edge of the table, in the back, does not make a straight line. From the perspective this artwork is composed, the table is tilted farther than the edges of the objects show, and this conflict makes it seem that the objects may slide off the table. The artwork is somewhere in between symmetrical and asymmetrical balance, with the objects placed in the center with similar sizes on each side, carrying similar visual weight, but slightly different. This composition could be improved by creating a purposeful asymmetrical balance, using three different-sized objects instead.





## Use of Media



In this work by J. M. W. Turner from 1801, it is evident that the medium used is watercolor paint. Watercolor is by nature transparent, and painting with watercolor involves letting the white of the paper show through for lighter values. Darker colors are made by using less water for a denser color or by building up layers of colors upon each other. In this landscape painting, Turner used washes for the large areas of color in the top two-thirds of the painting. The colors are delicately built upon each other. A wet-on-wet technique, adding watercolor to already-wet paper, will yield soft edges for the colors. To achieve the edges of the mountains and cliffs, the layer beneath can dry before adding another color on top. These colors were thinned with a lot of water to let the white of the paper show through and create lighter hues. The details at the bottom of the painting would be done with a smaller brush and less water to achieve more detail and sharper lines.

### ***Tilted Arc* by Richard Serra**

Richard Serra's site-specific sculpture from 1981, titled *Tilted Arc*, was installed in Manhattan in Foley Federal Plaza. This sculpture consisted of a 120-foot-long, 12-foot-high leaning plate of steel. This work, although seemingly nondescript, was actually described as ugly and an eyesore by critics. At the same time, it was deemed significant for its placement because it transformed the location it was placed in. By placing the sculpture in this plaza, Serra disrupted many people's daily routines as they walked through the area, causing them to change paths and walk around the sculpture. The sculpture was purposely located where it would redefine the space. Many people petitioned for its removal, but Serra countered that to move the sculpture would be to destroy it

because it was created specifically for the site. Serra was able to successfully transform the space with his strategic sculpture placement. The sculpture was dismantled and removed in 1989



### **Brushstrokes and Impasto**

Vincent van Gogh often used impasto, or thick layers of paint with prominent brushstrokes, in his paintings. Using this painting technique can add texture to a painting, and it can add to the other visual elements present in the artwork. In *Starry Night* (1889), van Gogh used the impasto technique and visible brushstrokes to create movement throughout the artwork. The swirls in the sky lead the eye throughout the painting, and the circles of brushstrokes around the stars and moon accentuate their presence in the sky. The prominent brushstrokes consist of colors placed next to each other, with dashes of color repeated throughout. This creates a repetition of pattern, as well as a visual texture, in addition to the actual texture of the thick paint. The brushstrokes add a visual interest and sense of movement that would be much different if he had simply painted the background in solid colors or blended the colors gradually. The brushstrokes and impasto technique are a significant part of the artwork, transforming a night scene into a vibrant, expressive work of art.

### **The Deconstruction Criticism Theory**

The criticism theory of deconstruction focuses on examining the many potential meanings within an artwork, including ones that are possibly even conflicting with each other. This theory was first used in the 1970s by French philosopher Jacques Derrida. Deconstruction involves finding and recognizing the underlying meaning and implied messages within artwork. When delving into artwork in this way, it is difficult to find and agree upon just one meaning, and it can even challenge preconceived notions and previously agreed upon ideas. This aesthetic theory seeks what is hidden, omitted, or repressed to show how the initial impression is not the only interpretation nor is it necessarily the generally accepted meaning. There could be many unanswered questions within the artwork, such as the intentions of the artist, the significance of the objects or location, or the

identities of the subjects, and this leads to ambiguity of meaning. Stereotypes must be set aside to look for a true meaning.

### Andy Warhol's *Marilyn Monroe*



Andy Warhol's screen printed images of Marilyn Monroe perpetuate the image of her well-known Hollywood persona. Marilyn Monroe was famous for being a beautiful and talented cultural icon, and the repeated image used by Warhol reinforces this image of her celebrity. To use the critical perspective of deconstruction to analyze this artwork, one must go past the initial impression and stereotypes, seeking what is hidden or omitted, looking for other meanings and interpretations. In addition to Monroe's exuberant celebrity personality, there was a darker, troubled side that eventually led to her suicide. The initial impression of this artwork is the superficial, smiling celebrity paparazzi image, with bright colors, repeated as it would have been seen everywhere in media. Delving further past this initial impression yields another possible interpretation, and it reinforces the idea that there is more than one possible way to view and understand this artwork.

### **The Formalism Aesthetic Theory**

The formalist criticism theory deals with analyzing the visual aspects of an artwork, including the elements and principles used. This theory attaches meaning in the artist's use of materials, focusing on how the artwork is made and how it looks, not the narrative it is attempting to convey or any social or historical context. Formalism is useful for analyzing nonrepresentational and abstract art, looking at the artist's use of elements, principles, composition, and media rather than trying to find meaning in the subject matter. With this approach, the critic is looking at the same things in a realistic, representational, or abstract painting, analyzing it in the same way to see if the artist successfully used media and visual elements in their artwork. An extreme form of formalism believes that everything necessary to analyze a work of art is already present in that work and no context or history is applicable to the analysis of artwork.

## James Abbott McNeill Whistler's Nocturne in Black and Gold



James Abbott McNeill Whistler's *Nocturne in Black and Gold: The Falling Rocket* (1875) captures the excitement of fireworks in the night sky. This is a loosely painted, abstracted work, getting away from realistic representation. From a formalism perspective, Whistler successfully used composition, as well as the elements and principles of art, in this work. For the composition, he used the rule of thirds and placed the horizon line at roughly one-third from the bottom of the painting. The emphasis, or focal point, is the brightest yellow in the lower left. Whistler used strong contrast to help the bright lights and fireworks stand out from the dark background. He used repetition of colors to create a unity throughout the work and lead the eye from each colored area. The brighter and lighter colors in the lower third are balanced by the darker hues and splatters of color higher in the painting.

### **The Cultural Perspective Aesthetic Theory**

The cultural perspective aesthetic theory looks at an artwork with consideration to the cultural and social norms that are associated with it or the artist. Instead of focusing on the elements, principles, and form, or the hidden meaning in an artwork, this theory analyzes how an artwork expresses or fits into the cultural or social viewpoint. The concept of culture includes the customs, beliefs, and traditions of a group of people during a certain time. The cultural perspective aesthetic theory could be used on an American artwork, for example, and explain the perspective that is conveyed with consideration of the origin of the artwork. An artwork from another culture will convey different messages depending on its social norms and cultural ideas and looking at the artwork in this way can reveal these messages. Artists will often express themselves and their culture through their artwork.

## African Mask

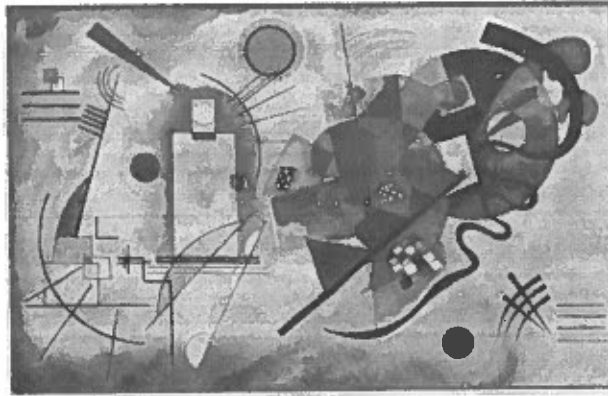


Using the example of an African mask, analyzing this from a cultural perspective of aesthetic theory is much different than using a formalist or deconstruction theory. Instead of finding hidden meanings or analyzing only the visual components, the cultural perspective looks at the connection between the artwork and the culture in which it was made, analyzing how it expresses the culture. African masks were used in ceremonies for religious and social events. The combination of human and animal elements, in this case a human face with animal horns, symbolizes the closeness of humans with the natural environment. In some cases, the person wearing the mask is thought to either communicate with or become the figure that the mask represents. They can represent totem animals, or even the deceased. Masks are an important part of African culture, and they express the significance of cultural ideas through this art form.

### **The Expression Aesthetic Theory**

The expression aesthetic theory focuses on art as the artist's expression of emotions. It sees art as a process of expressing emotion, and the artist does not necessarily know what emotions they will be expressing before creation. Expression is not a calculated process; rather, it is something that occurs from how the artist created their work. To analyze artwork in this manner, the viewer should imagine the artist's process and attempt to experience the emotion that is being conveyed. As artists create the work, they are thought to move from a feeling of oppression to a sense of clarity and freeness by expressing their emotions. They figure out their own emotions while in the process of expressing them, turning it from a feeling into a visual expression. In evaluating artwork with this in mind, the viewer is looking for and understanding what the artist is expressing emotionally.

### Wassily Kandinsky's *Yellow-Red-Blue*



Wassily Kandinsky's *Yellow-Red-Blue* (1925) is an abstract painting filled with shapes and colors. To analyze it using the expression aesthetic theory, one would imagine the artist's process and think about what emotions are being expressed through this artwork. According to the theory, the artist is working out their own emotion while creating the artwork, and this emotion is not fully expressed until the artwork is completed. In this painting, Kandinsky used a combination of bright primary colors, abstract and geometric shapes, and a variety of lines. The eye is led throughout the piece with these lines, and the bright colors catch the eye as well. Primary colors give a sense of simplicity and straightforwardness, and the lines go back and forth from order to a more chaotic feel. The brighter yellow is balanced by the large, darker hues of red and blue, and emotionally the more geometric and brighter left side contrasts with the organic shapes and squiggles on the right, suggesting a contrasting inner turmoil.

### **The Feminist Art Movement**

The feminist art movement sought to establish a fair and equal place for women artists in the art world and to bring to light the accomplishments of prior women artists. These artists sought to transform stereotypes and change cultural attitudes about women, and they tried to do so through their artwork. The feminist art movement expanded the definition and scope of art, the artists we recognize, and who is included in the conversation of art making. Feminist artists gave credit to artists before them, and they introduced new media in their artwork. Because of the accomplishments of this movement, women artists no longer necessarily feel the need to identify themselves as such, or to specifically create artwork that addresses the perspective of women. Women artists began to express their individual concerns and feelings, rather than trying to address and contribute to the feminist viewpoint.

### **The Impressionist Movement**

The impressionist movement marked a departure from the traditional notions of art. At the time, the narrow ideals of art were controlled by institutions such as the Salon and the French academy. These institutions also held control over the careers of artists. The impressionists cast the old rules aside and painted how they wanted to, capturing the changing qualities of light in new ways and scenes as they looked at a particular moment. They captured scenes as they saw them, on the spot, rather than taking sketches back to the studio to complete a painting. Impressionism also began when photography was catching on, and it served as an imitation of and reaction against it. Impressionism imitated the capturing of fleeting moments, while reacting against a faithful photographic reproduction of a scene. This art movement transformed landscape painting, and

impressionism influenced artists to later express their artistic freedom and experiment with methods and media.

### **The Postimpressionist Movement**

Postimpressionist artists rejected the ideas of depicting the world around them, as the impressionists did, and instead sought to explore their emotions and memories to depict highly personal meanings through their artwork. Instead of showing scenes from life, as the impressionists did, postimpressionist artists wanted to go further and show their feelings through abstracted forms and new uses of color. They used symbolism and attempted to evoke emotion in their viewers. Postimpressionist artists did not seek to create a cohesive style; rather, the movement was more about the departure from a faithful depiction of the world or events, and it was about beginning to relay information from the artist's subconscious mind. Postimpressionists used saturated colors and unnatural hues to express emotion in their artwork, taking a new, imaginative approach to representing their subjects. The painterly quality and distinct brushstrokes added to the notion that this was not a faithful representation, but rather an interpretation.

### **Minimalist Art**

The minimalist art movement, like many other movements, sought to challenge the boundaries and conventions of art. By removing themselves and their feelings from their artwork, minimalist artists distanced themselves from the work of the abstract expressionists who came before them. They were interested in creating a new kind of artwork that was unlike any other previous fine art, minimized to its simplest form. Minimalist artwork used prefabricated and construction-related materials, and it showed a preference for simple geometric forms. These artists wanted their art to show no evidence of the artist who created it and stand on its own instead of having personal elements. Paintings lacked brushstrokes and had flat fields of color, and sculptures had clean, straight lines and geometric shapes. The minimalism label referred to artists using a minimal number of colors, shapes, or forms in their artwork and the artwork was stripped of decoration and refined to its simplest form.

### **Kara Walker's Silhouette Artwork**

Kara Walker is an African-American artist known for her black-and-white silhouette artwork on gallery walls, exploring themes of gender, race, violence, sexuality, and identity. Walker is motivated by exposing racial stereotypes and historical narratives that have been glossed over by time. Through her artwork, she questions how skin color defines a person and how black people are represented in culture. From early on, as an artist she felt pressure to represent the "black experience" in a positive light; instead, she to represent it truthfully and expose historical issues. Her artwork has a tendency to make people uncomfortable, and she seeks to create this uncomfortable feeling, to take people out of their comfort zone of what they believe of race, gender, or identity. Her work has been called negative and revolting, and she has even had work covered due to its controversy. Despite the negative attention from some, it has not deterred Walker from portraying difficult subjects.

### **The Dada Art Movement**

The Dada art movement sought to reject the traditional methods and ideas of art creation and essentially to redefine art on its own terms. This wasn't so much of a cohesive style as it was a group of artists looking to collaborate and create art with spontaneity. This group actually mocked the established art scene, and they started debates about the definition of art. The "readymade"

concept contributed to this debate because it was a departure from what was previously considered art. Some Dada artists also sought to debate politics with their artwork, especially rallying against the horrors of war. They issued publications and created photomontages to stand up against political ideas. Dada art critiqued society, politics, and previously established rules for art, and their penchant for the strange, satirical, and irrational was later picked up and used by surrealist artists.

### **Andy Warhol and Pop Art**

Andy Warhol explored the connections between popular culture and art, and he gained international attention for his artwork and for himself. He used many different media types, including painting, screen printing, and even computers, to create iconic pop art. The allure and mystery of his personal life, combined with his public persona, helped to keep him in the spotlight and create interest in him and his work. He reproduced images from mass media that nobody had thought to use before for artwork, and he successfully became synonymous with pop art. His work appealed to a large audience, and he created some of the most widely recognized artworks ever made. Warhol also changed the concept of being an artist by using his factory concept to produce artwork. He predicted the quick rise and fall of celebrities with his "15 minutes of fame" concept, which became the new norm in popular culture.

### **The Social Realism Movement**

Social realism began in the early 1900s with the aim of portraying everyday life, especially that of the working class. It became an important art movement in the 1930s in the United States during the Great Depression. At this time, urban areas were growing, and slums also grew. Social realism artists were motivated by reacting against the idealism of the romantic period. These artists revealed the realities of contemporary life, and they sympathized with the poor and working class. They recorded the realities of what they saw, without glorifying scenes or heightening emotions. While documenting the realities of the poor and working class, social realists were also critical of the government and structures that created these conditions. They wanted to use this new style as a weapon to fight against the government and capitalism, as well as the exploitation of workers, while transforming society.

### **Self-Critique of Artwork**

Self-critique of artwork is useful for analyzing artistic processes and outcomes in order to improve the process and the final product. Self-critique involves thinking about what is successful in an artwork, as well as what could be improved. When doing a self-critique, artists can look at the composition, use of elements and principles, how they portrayed their subject, whether they expressed their ideas effectively, and their use of media. It is helpful to stop often in the artistic process and stand back to critique the work, to see how it is progressing and decide if it is going in the right direction. Sometimes it is also helpful to stop for a while and put the work away, and then look at it again with fresh eyes later. With self-critique, artists become more aware of their progress and improvements and will also learn how to critique other artists' work objectively. They will focus on improving their artwork and on finding ways to grow, rather than repeating mistakes and becoming frustrated.



# Art Education

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## Discipline-Based Art Education

Discipline-based art education (DBAE) involves educating across the following four disciplines: aesthetics, art history, art criticism, and art production. The desires of this approach are to make art education more in line with other disciplines and to standardize the framework for assessment and evaluation within art. With this approach, it is believed that art is for all students, not just for those who have a talent or skill in art creation. It does retain studio art and art creation, but it does not focus solely on the creation of artwork. The goal of this approach is to help students appreciate and understand all types of art and to be able to discuss art using art terms. Curricula created with this approach should give equal weight to the four disciplines and include content from a wide range of visual arts, including other cultures and various styles.

### A DBAE Lesson Plan

A lesson plan based on the DBAE model will include aesthetics, art history, art criticism, and art production. The lesson could be involved and may take several class sessions to complete. The lesson would integrate these parts into the study and connect them all together. If students are learning about a specific artist or art style, for example, they would learn about the history and significance of the artist or style, discuss the aesthetics of the style or the artist's artwork, produce an artwork in this style, and talk about art criticism in relation to the style. The lesson could begin with an introduction and guiding questions to get students thinking about the artist or style, and then it could lead into the history of the style. After discussing the history and an explanation of how it is made, students could produce their own work and then talk about how to judge the work aesthetically.

## The Backward Design Curriculum Model

The backward design curriculum model begins with the identification of the desired results of a lesson, deciding on acceptable evidence that the lesson was successful and learning occurred, and then planning the instruction based on the desired results and acceptable evidence. In identifying the desired results, the instructor should consider what skills the students should master or what knowledge they should gain from the lesson. They identify big ideas to get across to the learner and what they should remember after the lesson. Next, they should consider assessment methods to think of how to find out if the lesson was successful. The students will need to be able to prove that they have mastered the skills or gained knowledge. After this, the instructor can begin to consider how to deliver the information. He or she will consider teaching methods, materials, and resources to get the information to the students.

## Teaching for Artistic Behavior

Teaching for Artistic Behavior is a choice-based approach to teaching art. Students have a choice as to what they will work on, and they learn by practicing problem solving in art. To begin the class, students will observe a short demonstration or participate in a discussion. Some students might try to emulate the technique presented, whereas others use this knowledge for an idea that they have already decided upon. Students will share ideas and collaborate, working as a community of artists. They will learn to persevere through problems and come up with creative solutions. Because students will be working on individual projects, the teacher will work with the students individually or in small groups. They will work at their own pace and assess their progress as they work. They will also learn to speak about and share their work, as well as write an artist statement.

## **5-6-Year-Old Students**

Five-year-olds have limited fine motor ability. They are learning to print and will still often reverse letters and numbers. They have difficulty copying words from a board and will focus on one word at a time because their visual tracking is not developed. At age six, their tracking ability makes reading much easier, but spacing and staying on a line is still difficult. Activities should be chunked into short sessions, with 15-20 minutes being the maximum for quiet sitting. This age group needs carefully planned and consistent guidelines, but at the same time they enjoy active exploration of materials. They can become repetitive for fear of making a mistake when trying something new and will focus more on completing projects quickly than doing it well. These students will need encouragement to continue to finish a work to a satisfactory level of completion and may need to be redirected many times to finish it.

## **7-8-Year-Old Students**

At seven years old, students begin to work more tidily and focus on completing assignments. They tend to enjoy working alone, and they may work slowly, erasing constantly to correct their mistakes. Their ability to reflect on their work is beginning to grow, so introducing self-assessment of artwork could begin now. Printing and drawing go from large to much smaller at this age, and students may have trouble filling up their paper when asked to. Eight-year-olds will be more social and full of energy, working to complete work quickly, and socializing and talking while working. Their pencil grip is maturing, and they can handle more lengthy assignments. They enjoy working in groups and beginning to take on responsibilities. They place importance on peer assessment of their work and may need help with organizational strategies. Eight-year-olds may overestimate their abilities, so shortening assignments or chunking them may be helpful.

## **9-10-Year-Old Students**

Nine-year-olds have increased coordination, which leads to a greater ability to show detail and greater control over a pencil. It is helpful for nine-year-olds to practice with various fine motor skills, including drawing, painting, and fiber arts. This age group is beginning to read to learn and is taking pride in finished works as well as paying attention to detail. Nine-year-olds are competitive and may give up easily when trying to accomplish tasks, so encouragement is helpful. Ten-year-olds enjoy tracing and copying. Their fine motor skills are continuing to increase, and they can begin to use tools such as rulers and templates successfully. They are cooperative and are beginning to be satisfied with their abilities, as well as helping their fellow students. They enjoy being recognized for their efforts and accomplishments and can be productive and conscientious with their schoolwork and homework.

## **11-12-Year Old Students**

Eleven-year-olds are ready to use their fine motor skills to explore more refined skills such as calligraphy, block printing, and new painting techniques. They may enjoy fiber work such as weaving and can use art as a way to channel and express their emotions. They learn well in groups, and they enjoy hands-on learning, as well as puzzles and challenges. They would rather move on to new work than reflect on previous work. Twelve-year-olds are beginning to show skill in specific areas of interest and can set more realistic goals. They have patience and confidence for practicing fine motor skills and are beginning to show interest in more complex skills such as clothing design or architecture. This age group is good at assisting their peers and may begin to show leadership qualities. Their peers' opinions are more important than the teacher's, and their insight and empathy are increasing at this age.

## **High School Students**

High school students tend to have high energy and much more refined fine motor skills than previous grades. They are beginning to have abstract reasoning abilities and are skilled at both self-critique and peer-critique methods. Students in this age group are interested in expressing themselves through art, music, and other creative outlets. They are interested in math and science, as well as geography, current events and world conflicts, the use of natural resources, and basic physics and biology. They are ready to engage more in group discussions, and they are more willing to revise their work and try things multiple times. This age group can learn well in cooperative group situations. They may complain of being bored and respond well to variety and challenges in the classroom. At this age, they may enjoy looking at a problem from many sides and considering multiple solutions.

## **Students with Physical Disabilities**

To work with students in the art classroom who are physically disabled, it is helpful to offer choices in media. If a student is not comfortable with or is having difficulty with a particular media, accommodations can be made to use different media — for example, oil pastels instead of painting. Students with physical disabilities or gross motor issues might find a larger painting or drawing surface easier to work with. Taping the paper to the table can help hold it in place. Tempera paint can be put into a refillable applicator for easier application. Scissors with a double grip can allow the teacher to assist with cutting. Weighted tools can help students hold their materials more steadily and obtain greater control. Some students might find it easier to grip and control larger tools, including thicker pencils, thicker or larger paintbrushes, or thicker pastels or crayons. Glue sticks or larger glue applicators might be easier to control than standard white glue containers.

## **Students with Mental Disabilities**

For students with mental disabilities, chunking projects into small, manageable parts will be beneficial. Presenting one step at a time will make the project easier to work with and giving the student only materials for each step might also help. Flexibility with the project is also helpful because the student might take it in a different direction than originally intended. Large paper can be easier to work with and taping the paper to the table will help the student so that he or she will not need to hold it down. Simpler assignments with a low number of materials that are easy to use and easy to clean up will be beneficial to the student. Frequent praise will encourage the student to continue to work on their project. Some students might be able to create a modified version of the assignment that the main portion of the class is working on, whereas others might need something tailored for their abilities.

## **Visually or Hearing-Impaired Students**

Students with visual impairment can use paint with sand added to it, so that they can feel their design once it has dried. A glue gun can be used to create an outline they can feel for coloring. These students may enjoy working with clay and other materials with a tactile sensation. They will likely find it beneficial to work with larger paper or larger media and will also benefit from being in the front of the room or close to any material demonstration.

Students with hearing impairment may benefit from another student taking notes during a lecture. Making sure the student can see your face when you talk or touching their arm or shoulder to get their attention can be helpful. In some situations, you might wear a speaker with a microphone to make your voice louder so that a student with hearing impairment is able to hear you in the

classroom. Again, these students will likely benefit from being in the front of the room or close to any demonstration.

### **Students with Behavioral Disabilities**

When working with a student with behavioral disabilities in the art classroom, it can be helpful to assign tasks or appoint the student as a helper in the classroom. They can count or pass out supplies or help with cleaning up at the end of class. Praise the student often when they are on task and be consistent with rules in the classroom. Find positive things to say about their efforts or products and allow extra time or accommodations with materials if needed. For example, they might find it enjoyable and soothing to work with clay. These students might find it easier to work in a secluded area of the room because this could help with their concentration on the project. The student could benefit from assignments being broken down into smaller parts and frequent check-ins on their progress.

### **Grades K-3**

Students in grades K-3 should be strengthening their cutting skills by learning to cut along a line and cutting out shapes. They can practice applying glue with glue sticks and with white glue. These students can practice folding paper, including the accordion fold, and they can begin weaving paper. Drawing shapes and different types of lines and coloring in an area with a solid color are good skills for this age group. They can describe texture, recognize space with regard to overlapping and near or far, and describe personal reasons why they like or dislike an artwork. They can name and recognize the primary colors, as well as warm and cool colors, and they can practice mixing colors. Modeling clay into shapes and experimenting with clay materials can begin at this age. These students can also begin to learn about and recognize significant artworks from major artists and styles.

### **Grades 4-6**

Students in grades 4-6 can begin to recognize and describe the elements of art and principles of design in artwork. They can recognize and use positive and negative space, use one-point perspective, and use correct proportions when drawing faces and bodies. Students in these grades can begin weaving fabric, practice graphic lettering including calligraphy, and practice and improve their brush skills for painting. These students can create and describe a value scale and a 12-hue color wheel and use value in drawing to create realistic shadows. They can use art vocabulary to discuss themes and subjects in artwork and explain how thoughts, experiences, and feelings are expressed in artwork. They can recognize and describe different types of balance and symmetry, as well as the difference between geometric and organic shapes. These students can make connections between art and personal experience and begin to “read” an artwork by identifying what the artist is expressing.

### **Grades 7-8**

Students in grades 7-8 can further practice and strengthen the use of value and shading to create realism. They can practice printmaking skills, use stencils, and continue to strengthen their skills in creating perspective in artwork. These students can begin to layer colors to create new colors and demonstrate the use of the elements of art and principles of design in their artwork in three-dimensional artwork. They can demonstrate and recognize symmetry and asymmetry and use hand building techniques to create ceramic projects. These students can express preferences for different artworks and explain their reasoning. They can describe the feelings and experiences they are expressing in their own artwork and analyze the feelings and experiences expressed in others’

artwork. They can describe similarities and differences in artworks and recognize and create foreground, middle ground, and background in artwork to demonstrate space.

### **High School**

Students in high school will continue to use value and shading to portray items realistically. They can draw from life and from photographs and use a grid system to accurately portray a photograph or printed image. These students can focus on longer projects and work with oil paints to achieve blending and glazing in their work. They can work with a pottery wheel and continue to practice hand building techniques. Hand lettering and pen-and-ink work including cross hatching and stippling can be introduced and strengthened at these grade levels. Students can create more realistic and detailed work with graphite and colored pencils and express preferences to work with the media of their choice to achieve their artistic goals. They can present their art and describe the elements and principles, as well as their process for creating their art.

### **Incorporating Historical Art Concepts**

#### Elementary

Elementary students can begin to invent stories to go along with historical artworks and compare their stories to the actual story behind the artwork. They can compare scenes and people from history with what is common in the present day and describe how clothing or other parts of the artwork are different from today. This can lead to a discussion about what life was like at that time in history and why the artist was portraying that scene. They can view historical artworks and describe their feelings about the works, as well as whether they like or dislike them. These students can learn about and recognize major artists and artworks, and then they can create a project in the style of that artist to further reinforce the concepts. They could learn to recognize the subject and styles of historical artworks and group artworks by subject and style. Students could create their own portrait or self-portrait after a discussion about why painted portraits were important in history.

#### High School

In the high school art classroom, students can practice identifying the elements of art and principles of design used in artwork throughout history. They can also begin learning about how the elements of art and principles of design apply to modern and abstract art and discuss the purpose and motivations behind these types of artwork. They can research artists and find artists whose style they enjoy and then find ways to emulate that style through their own artwork. They could analyze the perspective techniques used in Renaissance art and learn about the significance of different art movements. Students could act as a curator, deciding how to put together a collection for a museum to showcase a particular style, movement, or period of time. They could also examine how self-portraits throughout time are similar to and different from modern-day "selfies."

### **Presenting Student Artwork for Display**

There are many possible methods for presenting student artwork for display and increasing the visibility of the school's art program. Art can be hung in the hallways of the school, on bulletin boards, or in display cases. Sculptures and three-dimensional art should be placed in display cases to keep them safe. Two-dimensional work can be attached to black poster board with a 2–3-inch border showing, or it can be matted with matboard. Exhibits can be timed for when parents will be in the school for other purposes, such as enrollment or open house. Artwork could be rotated in other teachers' and administrators' classrooms and offices or the school library. Artwork can be

entered in local competitions and displayed in local businesses. Photos of artwork could be submitted to the newspaper, and art shows could be arranged for the local library or mall.

### **Student Evaluation of Famous Artwork**

Students can use various methods to evaluate famous artwork. They can give their initial impression and explain whether they like or do not like the artwork and then explain why. Students can then study the artwork further, looking at the details and the subject, as well as the use of design elements and principles. It might be helpful to give the student a list of elements and principles to look for in the artwork. Students can also read about the artist and the artwork to gain a greater understanding of the context of the artwork and the intentions of the artist. After students evaluate their initial subjective reaction to the artwork and their carefully studied objective evaluation, they can compare the two and think about what changed, if anything, and why. Background and contextual knowledge of the artwork and artist could change students' opinions of the artwork after giving them more insight into why the artwork was created.

### **Student Self-Evaluation**

One method for students to evaluate their own artwork is with the rubric provided for the project. A student can self-evaluate using the rubric to see if they are meeting the criteria for the project, prior to the artwork being evaluated by the instructor. This can help the student understand how their work will be assessed. Older students might take notes, whereas younger students could use a pictorial system such as smiley faces to rate their work on a rubric.

Students can also create their own criteria for evaluating their artwork. A student might need guidance creating their own list of criteria. Younger students could use a checklist, whereas older students could use a more complex rating system for this. Students could be asked to choose three or five criteria by which to evaluate their work, including use of materials and cleaning up their workspace.

### **Necessary Student Knowledge**

For a student to appreciate artwork, it is helpful for him or her to have a vocabulary to express what they are seeing. Students need to know what the elements of art and principles of design are and how to discern them in different types of art. They should understand how to describe what they are seeing in subjective and objective ways, to explain the success of an artwork, as well as to explain whether they like or dislike it. It is important to go beyond the basics and be able to explain why the student likes or dislikes the work. Background knowledge of an artist and art movement is helpful, too, to understand where the artwork fits within art history and whether the artist was successful at expressing themselves in this style. Students should also understand how to find and read an artist statement and/or description of the artwork to glean more information for appreciating an artwork.

### **Connecting Ideas Between Art and Student's Lives**

#### **Elementary Students**

Elementary students are interested in their friends, family, and pets, as well as themselves. They also enjoy talking about and expressing their favorites of different categories, including food, animals, or games. This age group is beginning to explore who they are in the context of a larger group. They excel in experimenting with materials, and they might be more interested in the process than in the final product. They are comfortable taking risks with materials and are willing to use new materials. To connect ideas between art and their lives, elementary students could

create artwork about themselves, such as a self-portrait, or about their pets, family, and friends. They could create artwork about their activities outside of school, such as sports or trips they have gone on. They could create artwork about some of their favorite items, to express what they like.

### Middle School Students

Middle school students, like elementary students, can still be egocentric and focused on themselves. At the same time, they are developing their own interests and hobbies, as well as figuring out what they are skilled at doing. They value their friends' input, while becoming more self-aware and individualistic. Students in this age group are beginning to take more pride in their finished work. They are less apt to experiment and are more likely to be critical of their work. To connect their lives to artwork, middle school students can create autobiographical artwork including themselves and their new interests. They can work collaboratively with their friends and classmates to create artwork about what they want to express or what they deem is important. Their increased coordination and attention to detail can lead to longer and more involved projects in which they can express their feelings or show details about their lives that they wish to share.

### High School Students

High school students are beginning to distance themselves from their parents and teachers as sources of information and turning instead to their friends and peers. This age group is interested in fairness and justice, as well as current events. They value their friends and social standing and are beginning to think about how they will fit into the adult world. To connect their lives to their art, students could create an autobiographical painting, sculpture, or collage of what is important to them, which could include their friends, their room, their car, or their home. High school students could also portray issues in their artwork that are important to them, such as environmental or political issues. This age group enjoys expressing themselves creatively and can express their identity through artwork. Their motor skills are refined enough that they can express themselves successfully through many different media. Having a goal that is connected to their lives and that they find significant will yield a higher quality of artwork.

## **Technology**

### Creating Artwork

To use technology for creating traditional artwork, a student can watch videos and read tutorials to learn new art techniques, as well as to perfect or practice techniques that they already use. They can read about different methods and materials and see how other artists use these methods and materials.

Students can also use technology for the creation of artwork. Many free or paid programs can be used, including Adobe Photoshop, Adobe Illustrator, or even Microsoft Paint. A student can use these programs to create and then print out digital artwork. A desktop or laptop computer with a trackpad or mouse could be used, or a student could use a tablet with a stylus to draw and edit artwork directly on the screen. Students can use digital cameras to capture images for their artwork and use the photographs as source imagery for traditional artwork or use them in their digital artwork.

### Learning About Artwork

With technology and the Internet, a student can virtually tour a museum and see artworks that they might not be able to see in person. Students can use technology to read about artists and artworks. They can see the newest artwork from various artists and view new shows in museums and galleries. A museum will often have their collection available to view online, including the artwork

that is not currently on display. In addition to this, museums will often produce extra online content to allow people to zoom into artwork or focus on certain artists or collections, furthering the viewer's understanding. In addition to viewing artwork, students can read about artists and artwork from many different sources, including museums, artists, educational websites, and even online dictionaries. Online courses are available for students to learn more about an artist, a technique, or more about art in general.

### Museum Use

A museum can incorporate touchscreen technology for visitors to find out more about a particular artist, painting, or art movement. Museums can also use audio technology to create a docent-led tour experience with headphones and a guidebook. These recorded tours can allow a visitor to have an in-depth tour of the museum on their own time and at their own pace. A docent-led tour can include a prearranged phone conference with an artist as part of the experience, and the visitors on the tour can ask the artist questions. Video can also be used as technology in museums. TV screens can show the video art of different artists, played on a loop for viewers to stop and watch. They could also show an artist talking about their work. These videos might be shown in the gallery area, or they may be put into a special viewing room separate from the gallery where the sound will not distract other visitors.

### **Independent Learning About Art**

For students to learn independently about art, they must know how to find valid information and have a desire to seek out that information. To promote a desire to learn more about art independently, it is helpful to expose students to many various artists, artworks, styles, and materials in the classroom. If a student is interested in the current topic and wants to know more, then opportunities for enrichment can be provided. Instructors can show students how to find information online and how to check if a source is valid. They can provide books to find further information as well and arrange a tour of the library so that the librarian can point out a section for additional resources for the art classroom. The instructor can also encourage students to bring in their artwork and ideas from home and incorporate those in the lessons in the classroom, tying in their independent work to the classwork.

### **Ethical Standards and Creating Artwork**

When creating artwork, it is important to keep in mind copyright issues and not use images or ideas without permission. Copyright is a form of protection for published and unpublished works, and protection begins once the work has been completed. To avoid copyright issues, it is a good idea to work from life or images you have obtained yourself. Copying a famous artwork for your own understanding of the artist's techniques is fine and is commonly done, as long as it is for your own personal use. This artwork cannot be sold or presented as your own work. If using other materials, use materials that are out of copyright, use public domain images, or obtain permission from the originator of the source image. For public domain images, always read the fine print to check for restrictions for using the image. Copyright laws can also vary by state and country, so it is necessary to check specific laws for your area.

### **Formative Assessment**

Formative assessments should inform students about their progress continuously through a course. The teacher can monitor students' progress and intervene if there are issues. They help the teacher understand students' learning styles and needs. A formative assessment can help the teacher see where students are in relation to the learning goals, and then the teacher can help students get



closer to those goals. These are nongraded assessments in which students can practice their skills and get to know their deficiencies in understanding prior to taking a graded assessment. Formative assessments should be engaging, and in an online classroom there is the opportunity to use interactive assessment methods to engage the student. The teacher should model or demonstrate what good work will look like; the student internalizes the goals and process, and he or she is eventually able to see their progress to the goals themselves. Formative assessments can include exit slips, journals, sketchbooks, or even a short ungraded activity.

### **Summative Assessment**

Although art is generally subjective in nature, it is still important to have a summative assessment at the end of a period of instruction to assess student learning. Students can demonstrate their understanding of concepts through performance assessment such as art creation or a demonstration of their use of techniques or materials. Students could also create an oral presentation explaining their artwork, the elements and principles within their art, or their understanding of a concept that was presented in class. Another summative assessment technique is the use of written tests, which could include selected response questions or short answer and essay questions. The summative assessment should provide proof that students have reached the learning goals for that lesson or unit of study before moving on to other topics. Through the results of the summative assessment, the teacher can determine if the students have met the objective for the lesson or unit of study.

### **Performance Assessment**

Performance assessment is an assessment method that is often used in visual arts because through a performance assessment, students can demonstrate their art-making skills. A performance assessment is an authentic task in which students show what they are able to do. This could include the creation of an art project from start to finish, their problem-solving methods for creating art, the demonstration of their skills with a particular technique or medium, or even the creation of a portfolio. Performance assessments allow the instructor to assess a student's performance against their prior performance, rather than against a standard benchmark. The instructor will often provide a rubric or checklist for a performance assessment, so the student can gauge their own progress toward their goal. Students are able to demonstrate what they have learned while also seeing their progress as compared with past performances.

### **Metacognitive Skills**

Metacognitive skills are skills that help a student understand and regulate their own learning. It is a process of thinking about your own thinking. These skills include monitoring one's own comprehension, self-assessment, and correcting work based on the self-assessment. A student with strong metacognitive skills can approach and solve a problem effectively, assess their own progress, and adjust their processes based on their own assessment. In an art classroom, it is important for a student to be able to approach an artistic problem, find solutions, reflect on their processes throughout the project, and adjust their approach based on the results. A student can use a rubric for the project to see if their progress is meeting the goals of the project and adjust his or her approach to meet these goals. Modeling self-assessment strategies in the classroom and having students practice assessment to reflect on their own artwork can strengthen these metacognition skills and help them work independently toward a goal.

## **A Portfolio**

A portfolio is a collection that represents a student's body of work. It can show a student's progress, and it allows students to showcase their best work. It gives evidence of a student's learning and growth throughout a project or course. Portfolios can be used as either a summative or a formative assessment technique. As a formative assessment, a portfolio will show the development of a student's work. Students can chronicle their work as they progress and show the steps taken to create an artwork. A summative portfolio will show a broad range of finished work, and it will display the student's progress and growth throughout a unit or course. The summative portfolio will not include everything they created in class; rather, students will curate their work and decide which works they want to showcase within the portfolio. A portfolio will generally be assessed by a rubric.

## **Using Rubrics to Assess Art**

Rubrics are used to assess student work with set criteria. This is especially useful for art projects, which are generally thought of as being subjectively assessed. Using a rubric to assess artwork will help the instructor grade all work fairly and equally. The teacher sets the expected standards of performance and then assesses the work objectively based on these standards. It is helpful to give the rubric to students while explaining the project, so that the students will understand what the goals of the project are and how their work is being assessed. Then they can work toward reaching the goals on the rubric. The students can assess their own progress throughout the project and adjust their processes to reach these goals. This enhances metacognition skills. Rubrics also help the teacher assess student work efficiently and fairly. All work is graded by the standards set on the rubric, and it is not compared to other students' work or graded subjectively. Rubrics can also expose gaps in student understanding because all students are assessed by the same standards.

## **Standards-Based Assessment**

Standards-based assessment in visual arts focuses on a student's work toward and mastery of a standard. This includes establishing levels of proficiency and assessing the student's proficiency level for each standard. This will not include things that are outside of the standard, such as effort or class participation.

The teacher will develop topics for instruction based on standards, and then he or she will decide what skills students will need to master for these standards. They will establish developing, proficiency, and mastery levels for each skill and then assess the students' work based on these levels. The rubric is created in advance with the lessons, and the student is aware of what they will be learning as well as what they will be assessed on. Standards-based assessment can better communicate student achievement and mastery of skills to students and parents. It can also provide teachers with evidence to reflect upon and adjust their teaching.

## **Cross-Curricular Connections**

Many cross-curricular connections can be made between the art classroom and other subjects. Reading, writing, speaking, and listening standards can be met while writing artist statements, writing about the elements and principles found in an artwork, making oral presentations, researching a project, and listening to other students' presentations. Reading can also be connected to art while exploring book illustrations and how they relate to the text of a novel. Connections can be made to history while explaining the historical context of artworks and art movements. The science of color mixing and light as well as how oil- and water-based materials react to each other touch on science subjects. Measuring paper for cutting or measuring to create a grid for artwork

relates to math. Math is also used when scaling an image up or down, understanding the size of a famous artwork, or converting units of measurement.

### **Using Portfolios for Career-Related Purposes**

In addition to using portfolios for assessment and college entrance purposes, they are also used for interviewing for art-related careers. Throughout college, a student will keep their best work. This could be in digital form or a hard copy. Then when interviewing for a position after college, they can assemble their best work either as a digital portfolio or as a physical portfolio. The work should be related to the job field that they applied for, and it should show mastery and proficiency in skills they would use for that position. The work should be clean and organized, and it should be presented so that the presentation itself does not distract from their work. Only the best work should be presented, and the artist should be prepared to speak about how the work was created and how these skills would transfer to a position at the company. In addition to the degree obtained at school, an employer will also want to see evidence that the person is proficient in the skills needed for the job, and a portfolio can demonstrate these skills.

### **Preparing an Admissions Portfolio**

An art portfolio is required for entry into many art-related college programs. Viewers will check the portfolio for mastery of technical ability, a variety of skills, and personal style. It is important to know the deadlines, as well as any requirements for size or what sort of pieces should be included. Most schools will request to see 10–20 pieces of work, but this will vary. The works should have been completed recently, and they should show a variety and versatility of skills. Works that were done from life, or direct observation, should be included to indicate observational skills. The portfolio should showcase the students' originality and show a theme or technique that the student is passionate about. All works should be free from wrinkles or smudges, and they should be neat and complete. Some schools might ask for a sketchbook as well, and many schools will now require that works are submitted digitally. If submitting artwork online, it is crucial to take quality photos of the work that will show the work accurately and clearly.

### **Job Description, Education, and Skills Needed**

#### Graphic Designer

A graphic designer is responsible for the visual design of print and digital items such as billboards, brochures, signs, corporate communications, logos, website graphics, and more. They will need to be able to communicate with clients to assess their needs, create graphics that will meet the needs, and use a variety of tools to create the graphics. A graphic designer must be creative, technically proficient, and able to keep up with emerging technologies. They will collaborate and communicate with illustrators, photographers, editors, copywriters, web developers, salespeople, and printers. Although skill and creativity are important, it is helpful to have a degree in art or graphic design and to have a portfolio of relevant work to obtain a position. It is also important to have a working knowledge of programs such as Photoshop, Illustrator, and Flash, depending on the position.

#### Curator

A curator is responsible for preserving items in a museum, as well as acquiring collections and loans from other museums or institutions. They will organize artifacts or artwork for display and for storage and manage a staff to care for, display, and catalog items. The curator can also be involved in advertising for the institution, as well as giving tours and holding workshops. They can help with fundraising and public relations and work on authenticating the origin and age of pieces obtained by the museum. They need strong skills in management, organization, critical thinking,

and working with the public. A curator position generally requires a master's degree in history, art, archaeology, or museum studies. The graduate program will likely include an internship in which the student will get experience working within a museum setting, and a graduate might work as a researcher or assistant to get experience prior to obtaining a curator position.

### Animator

An animator is responsible for using a computer or traditional art materials to create animations. Computer animators design 2D and 3D animations for a variety of needs, including television shows, mobile apps, and websites. Many animators are self-employed and work on freelance assignment, although it is possible to be employed with a company, too. A bachelor's degree in computer animation is usually required, as well as a portfolio showing a variety of animation skills. Animators will need to be creative and keep up with emerging technologies. They will need to be able to work with a variety of programs and platforms, and a company will want the prospective animator to be proficient in the programs that the company uses. Internships and freelance positions are valuable for gaining experience because companies will give preference to those with experience and a good portfolio.

### Game Developer

A game developer is responsible for the design and creation process for video games. This includes games on video game platforms, computer games, and even games played on phones and tablets. The game developer might be involved in the design of the game, as well as the coding, creation of prototypes, storyline development, and other parts of the development process. The game developer will need to be creative, keep up with changing technology, and work with a team that includes programmers, graphic designers, and software engineers. Generally, a game developer will have a bachelor's degree in software engineering or computer science, but they will also need to be creative and imaginative to come up with and develop new and innovative ideas for games. The game developer will also often have certification in programming languages such as Visual Basic, C++, or Java.

### Photographer

A photographer is responsible for capturing and editing images with a digital camera and editing software. A bachelor's degree in photography gives the most in-depth and comprehensive training for a career in photography. It includes aspects of marketing and business, in addition to the technical and artistic skills needed for this field. A photographer can work in many fields, including photojournalism, fine arts, commercial photography, and travel photography. Photographers can also work in family and special occasion photography. They need to be proficient with photography equipment and editing software, keep up with new technological advances, and understand how to capture photographs that will suit the needs of their clients or their artistic ambitions. A photographer will need to develop an electronic portfolio, and he or she can work as an assistant to gain experience. A photographer will often display work samples in an online portfolio to gain new clients.

### Illustrator

An illustrator produces artwork that is used in books and publications. The artwork can be created with traditional art materials or digitally. An illustrator will need to know how to create illustrations in many different styles, to suit the needs of clients and to suit each project. They will need to be proficient with different artistic media when illustrating by hand, or they should be proficient with computer illustration software when illustrating digitally. Although an illustrator can obtain a degree in art, experience, skill, and creativity are valued more than education in this field. An illustrator is usually a freelance worker, accepting projects from clients. There are many

different types of illustration, including medical, botanical, and book illustration, as well as illustration for advertising. An illustrator will need to build up a portfolio with a variety of works showcasing their skills and creativity.

### Fine Artist

A fine artist is an artist who creates artwork in their chosen media and style to communicate to their viewers through their artwork. Fine arts include photography and illustration, but in general a fine artist will be self-employed and either create artwork of their choosing or artwork that is commissioned by clients. Although an artist can get formal training in their chosen concentration, such as ceramics, painting, or printmaking, a degree is not necessary to be a fine artist. Instead of a traditional degree, an artist can learn from private classes or an apprenticeship under an artist skilled in their chosen medium. A fine artist needs to be proficient in their chosen media, and he or she also needs good communication skills to communicate with clients and galleries. These artists might need to make oral presentations about their work or create a written artist statement to explain their work.

### Architect

Architects are responsible for designing residential and commercial buildings that are safe, aesthetically pleasing, and within a budget. They will need an understanding of building materials and architectural styles, as well as creativity and good communication skills. An architect will need a five-year bachelor's degree or master's degree, as well as a three-year internship before taking the required state licensing exam. An architect will also consider the impact of the building on the surrounding area or community and can redesign and reuse previously existing spaces. The architect will factor in environmental considerations, work with sustainable design, and decide on building materials to suit a building and site. The architect will also consider the use of interior space in a building, designing the interior to suit the needs of the occupants. An architect needs effective communication skills to speak with clients and to advise people and organizations about the use of space and the design of buildings, working with the clients to find a solution to fit their needs.

### Fashion Designer

Fashion designers design clothing and apparel for a variety of needs, and they are responsible for the creative process of designing garments. They are also involved in producing and marketing the clothing. There are associate's, bachelor's, and master's degrees available in this field, and each will provide the student with a different level of understanding and proficiency of the field. The bachelor's and master's degrees will address more advanced skills including marketing, business, and retail issues in fashion. Fashion designers design clothing, shoes, and accessories and will need to understand past fashion trends while keeping up with the current trends. They might design one-of-a-kind pieces or work with a team to design lines of mass-produced fashion that will be sold in retail stores. A fashion designer should be creative and have a solid understanding of technical skills, materials, and proportions when designing clothing.

### Art Educator

An art educator is responsible for teaching art processes and art history to students of all ages. To teach in a formal setting, such as K-12 or higher education, a degree in art is needed. For K-12 teaching, the educator must obtain teaching certification in their state, as well as a bachelor's degree in art education. This will include a student-teaching experience in a school setting. For higher education, the educator will generally need one degree higher than what they plan to teach — for example, a master's degree to teach undergraduate courses. An art educator will need to have an understanding of materials, techniques, and art history, as well as pedagogy, assessment, and

classroom management. Strong communication skills and a passion for art are also useful for this field. Art education can be a competitive field, so an educator might need to substitute teach or work in a related position prior to obtaining a position in a school.

### **Contributing to Arts Locally**

One way that an artist can contribute to arts in a local community is by displaying their work in public buildings such as government and community buildings or in local businesses where the community can view their work. An artist can also create a mural that will embody the spirit of the community, while becoming a part of the local area. An artist can use their artwork to promote discussion and interaction in a public space. This could include transforming a space with artwork or sculpture that will bring people to that space. They could also engage and include local youth in participating in art, by holding classes for youth or involving them in a community art project. An artist can also participate with local civic and cultural groups to assist with designing items for their groups and problem solve to find ways that art can be integrated into the local community with the help of these groups. These local groups can organize art shows and exhibits of local artists' work with the help of artists in the community.

### **Continuing Education for an Art Professional**

Through continuing education, an art professional is able to keep up with emerging trends in art, learn new techniques, strengthen his or her knowledge of art history and processes, and network with other artists. Continuing education opportunities can be found at museums, colleges, and art organizations. An artist can hear another artist speak about their work on display in a museum or learn about a material or technique that they are unfamiliar with. In a continuing education setting, artists with similar interests will gather to learn about a certain topic, and these artists can then network and learn from each other. By participating in these opportunities in different settings, an artist can become more familiar with the museums or other organizations offering the opportunities and can participate in further opportunities at that organization. An artist can also keep up with emerging trends, becoming familiar with the latest use of materials or thoughts on art movements at a gallery talk or demonstration.

### **Safety**

#### Drawing and Cutting Tools

When using drawing and cutting tools in the art classroom, safe practices should first be modeled by the teacher. Safety issues should be covered in the lesson and demonstration. Elementary students should be given age-appropriate scissors, and they should be instructed to walk with the scissors pointing away from their body if they need to move around in the classroom with scissors. High school students can begin to use paper cutters, utility knives, and X-Acto knives, although proper safety procedures should be covered first and their use should be monitored by the instructor. An X-Acto knife should always have the cap put back on it when not in use, and a utility knife should be retracted back into its handle. If a cutter has a guard, it should be kept in place. Drawing materials should be kept out of mouths, and pencils, like scissors, should be carried while walking with the point facing away from the body. Students should be instructed on how to safely use a pencil sharpener, or in younger elementary grades the instructor can sharpen the pencils. All sharp materials should be counted at the end of class.

#### Clay and Ceramics

When using clay and ceramic materials with elementary grades, it is important for students to understand not to put clay in their mouths and to wash their hands after using clay. If it is an air-dry

clay, it should always be stored in an airtight container or bag to keep it from drying out. For older students using clay tools, the instructor should model safe use of clay tools such as a wire cutter or loops. All tools should be washed with water and dried before storing. The tables and tools should be wiped down with a wet paper towel or rag to remove dust because clay dust is hazardous to breathe. Firing student pieces in a kiln should occur while students are away, if possible. If this is not possible, students should be instructed to stay away from the kiln because of the heat and potential for burns.

### Painting

When working with painting materials, students should understand that no paint or brushes should be put in the mouth. Some paints, such as cadmiums and cobalts, should not make contact with skin. It is generally not good practice to paint with fingers unless it is a designated finger painting medium. When working with any paint, it is important to clean the brushes with appropriate solvent or water so that the paint does not dry on the brushes. Although acrylics, watercolor, and tempera can be cleaned up with water, oil paint requires solvent such as turpentine to clean brushes and surfaces. Turpentine should be handled carefully and not poured down the sink. It should be stored in a cabinet with proper MSDS sheets and a lock so that the teacher has the only access. Oil painting also requires proper ventilation due to the fumes.

### Material Safety Data Sheets

An MSDS sheet, or material safety data sheet, contains the information for the potential hazards associated with a material, as well as how to properly use the material. It describes the health, fire, reactivity, and environmental hazards for the material. These documents are created by the manufacturer of the material and should be read and understood before using the material in the classroom. Students should be instructed on how to properly use each material, what to avoid doing, and how materials should be cleaned up and stored. A fire extinguisher should be in the classroom in case of any flammable materials. All materials should be stored properly, and safety gear should be worn if necessary, including gloves, aprons, and goggles. Hazardous materials should be stored in a fire-resistant, locked cabinet, and all materials should be cleaned up at the end of each class. A designation of AP (approved product) or CP (certified product) should appear on materials for students younger than 18. More hazardous art materials can be used in high school with proper supervision.

### **Proper Care and Storage of Materials**

At the end of each art class, all materials should be cleaned up and stored in their proper place. Procedures should be explained by the teacher at the beginning of the year, and there should be a designated place for each material. Proper care should be explained and modeled at the beginning of each lesson. All surfaces should be wiped down at the end of each class to minimize dust and particles. Brushes should be washed thoroughly and stored in a jar with the handle end down, to protect the bristles. Caps should be put on markers and paints, and glues should be closed so they do not dry out. Drawers and bins should be labeled so students know where to put their materials when they are done. Solvents should be stored separately in a fire-resistant cabinet, and solvent-soaked rags should be stored in an airtight Occupational Safety and Health Administration-approved container to prevent spontaneous combustion. Clay should be stored in an airtight container to prevent drying, and wet cloths should be used to wipe up clay dust.

# TEExES Practice Test

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1. Which of the following architectural styles is known for the use of pointed arches, gargoyles, and a sense of upward visual movement?
  - a. Classical
  - b. Art Nouveau
  - c. Gothic
  - d. Baroque
  
2. Vincent Van Gogh, Paul Cezanne, and Paul Gauguin are artists associated with which style of art?
  - a. Post-Impressionism
  - b. Surrealism
  - c. Fauvism
  - d. Cubism
  
3. Which of these terms refers to a performance or event created in the context of fine art?
  - a. Happening
  - b. Installation
  - c. Sculpture
  - d. Plein air
  
4. When a piece of clay is partially dry but not completely dry, it is \_\_\_\_\_.
  - a. bisque
  - b. greenware
  - c. leather hard
  - d. bone dry
  
5. Which of these painting techniques involves the application of thick layers of paint with visible brushstrokes?
  - a. Sfumato
  - b. Sgraffito
  - c. Wash
  - d. Impasto



6. Which of the elements of art would best direct the viewer's eye when representing this road in an artwork?



- a. Color
- b. Line
- c. Texture
- d. Value

7. Which of the following is an example of an accommodation in the classroom for a student with behavioral disabilities?

- a. Using large paper and taping it to the table
- b. Outlining a design with glue
- c. Using larger tools and offering choices of media
- d. Working with clay in a secluded area of the room

8. Claes Oldenburg was an American sculptor in the 1960s known for creating large scale Pop art sculptures, often of food items. How did his work challenge the traditional means of sculpture?

- a. He challenged the traditional media of metal and marble by sculpting with wire.
- b. He painted his sculptures, which was not traditionally done.
- c. He challenged the traditions of sculpture by using assistants to create his works.
- d. He changed the traditional hard medium of sculpture to a soft, changeable format.

9. Which type of assessment in the art classroom best reflects a student's ability to apply art-making skills?
- Performance
  - Traditional
  - Formative
  - Summative
10. Which statement best describes the purpose of sculptures in the Classical period in ancient Greece?
- Sculptures sought to capture the true likeness of a person.
  - Sculptures were made to honor gods and goddesses.
  - Sculptures were used in fertility rituals.
  - Sculptures were created to provide a resting place for a soul after death.
11. Of these architectural designs, which best embodies the theory of "form follows function"?
- An office building is designed inside a repurposed department store.
  - A bank is designed with a facade to resemble a Greek temple.
  - A stadium is designed to have room for spectators surrounding a central field for the players.
  - A college campus is designed with walking paths that form intricate geometric designs.
12. Which of the following was NOT a goal of the artists of the Impressionist movement?
- To capture fleeting moments of time
  - To portray the momentary effect of light on a scene or object
  - To depart from depicting a scene in a realistic manner
  - To portray exaggerated scenes and heightened emotions
13. Hierarchical proportion was used in many cultures to denote relative importance of figures, including Mayan, Renaissance, and Ancient Egyptian artwork. Which of the following describes the hierarchical proportion with which figures would be portrayed in Ancient Egyptian artwork?
- People of higher status are portrayed on a larger scale than those of lower status.
  - People of higher status are portrayed on a diagonal higher than those of lower status.
  - People of higher status are portrayed more realistically than those of lower status.
  - People of higher status are portrayed with larger features than those of lower status.
14. Which method of layering these multimedia materials is correct for working with wax or oil-based media and water-based media?
- Layering acrylic paint over oil paint
  - Layering watercolor paint over encaustic paint
  - Layering tempera paint over oil pastels
  - Layering crayon over watercolor paint
15. A tertiary color can be created by mixing which of the following?
- Red and yellow
  - Yellow and orange
  - Blue and yellow
  - Orange and green

16. Which of the following was NOT an architectural need or advancement that led to the construction of skyscrapers?

- a. The invention of the first safe passenger elevator
- b. The development of load bearing walls for construction
- c. The refinement of the steel process which led to steel skeletons in buildings
- d. The need for more vertical buildings to create more space in cities

17. Which of the following art related careers will be least likely to depend on the use of computer graphics and image editing programs?

- a. Game developer
- b. Photographer
- c. Curator
- d. Graphic designer

18. Which of the following would reinforce the goals of the Feminist art movement?

- a. Portraying women in a more abstract manner
- b. Creating artwork that supports stereotypes about traditional female roles
- c. Excluding modern art from the canon of female artwork
- d. Embracing materials in female artwork traditionally tied to their gender

19. Which photographic technique will result in a clear and focused subject with a background out of focus, as in the following image?



- a. Using a larger aperture
- b. Using a higher ISO
- c. Using a slower shutter speed
- d. Using a greater distance from the camera to the subject

20. This painting shows religious subject matter with elongated figures, unnatural poses, and dramatic lighting. During which art period or movement would this have most likely been painted?



- a. Medieval
  - b. Renaissance
  - c. Mannerism
  - d. Romanticism
21. How was the Postmodernist art movement similar to the Dada art movement?
- a. They both sought to portray dream-like scenes with accuracy.
  - b. They both sought to depart from the traditions and authority of previous art movements.
  - c. They both sought to bring attention to the contributions of previously unrecognized artists.
  - d. They both sought to explore the emotional response of the artist.
22. An elementary student in the art classroom has difficulty focusing on their project, and is often found wandering away from their desk, distracting other students. Which of the following would be the LEAST helpful accommodation for this student?
- a. The student's project should be broken down into smaller chunks.
  - b. The student should be given larger materials and larger paper to work with.
  - c. The student should be given a secluded area in the room to work and concentrate.
  - d. The student should be given frequent praise during the project.
23. A teacher writes their curriculum focusing first on setting the goals of instruction, then the assessment methods and the lesson plans. Which curriculum design method is this teacher using?
- a. Teaching for Artistic Behavior
  - b. Discipline Based Art Education
  - c. The TABA method
  - d. Backward design

24. Which of the following describes a student's use of metacognitive skills in the art classroom?
- a. A student uses a rubric to assess their progress toward reaching their goals.
  - b. A student answers an essay question about an artist's life.
  - c. A student creates a sketch in their sketchbook drawn from real life.
  - d. A student uses different media than they are used to for creating artwork.
25. An artist paints thin, transparent layers of oil paint on top of another layer of oil paint that has already dried. What is this technique called?
- a. Alla prima
  - b. Impasto
  - c. Glazing
  - d. Plein air
26. Which of the following paint supports would be most ideal for an egg tempera painting?
- a. Canvas
  - b. Paper
  - c. Masonite
  - d. Linen
27. Which of the following art skills would be most appropriate to students in Kindergarten through 3rd grade?
- a. Drawing with two-point perspective
  - b. Mixing secondary colors
  - c. Calligraphy
  - d. Working with oil paints
28. Which of the following safety practices would NOT be done in the art classroom as a result of the MSDS sheets?
- a. A fire extinguisher is kept in the classroom due to flammable materials.
  - b. An apron, gloves, and goggles are used with certain corrosive printmaking materials.
  - c. Solvents are kept in a fireproof cabinet.
  - d. The blade of a utility knife is retracted when not in use.
29. Which of the following art movements did NOT aim to portray life and people in an exaggerated or idealized way?
- a. The Ashcan School
  - b. The Hudson River School
  - c. Romanticism
  - d. Neoclassical

30. What surface would have been used for this painting from the Byzantine era?



- a. Wood panel
- b. Linen
- c. Canvas
- d. Paper

31. A student evaluates a well-known artwork, finding the potential hidden meanings and implied messages within it. Which of the following criticism theories is the student using?

- a. Formalism aesthetic theory
- b. Cultural perspective aesthetic theory
- c. Deconstruction criticism theory
- d. Expression aesthetic theory

32. How did the Impressionism art movement react against the advent of photography in the art world?

- a. Impressionist artists sought to capture fleeting moments and the play of light across objects.
- b. Impressionist artists wanted to use minimal colors to capture a scene.
- c. Impressionist artists wanted to work indoors rather than out in the field.
- d. Impressionist artists sought to capture an impression of a scene rather than a faithful reproduction.

33. An art museum wishes to incorporate technology into their new exhibition showcasing Pop art. Which of the following would NOT be an effective way to incorporate this?

- a. Touchscreen technology could give the viewer more information about the artists.
- b. Multiple video screens showing the artists explaining their process could be set up together in the gallery.
- c. A docent-led tour could include a pre-arranged video call with an artist to discuss their work.
- d. Visitors could be provided headphones and a guide book for a self-led tour experience.

34. Which of the following statements accurately describes an ethical standard relating to artwork?

- a. Permission should be obtained if using source materials that are not public domain or out of copyright.
- b. Copyright for an artwork begins once the artist files for copyright.
- c. Copyright laws are the same in each of the 50 states, but vary by country.
- d. It is permissible to draw or paint a copy a famous artwork and sell copies of it.

35. Which of the following architectural elements is featured in this photograph?



- a. Triangulated pediment
- b. Flying buttress
- c. Ornamental parapet
- d. Transept

36. Which of the following painting techniques would NOT be used to create texture in an artwork?

- a. Sgraffito
- b. Dry brush
- c. Wash
- d. Impasto

37. Which of the following principles of design helps to create the focal point in this painting?



- a. Contrast
- b. Movement
- c. Balance
- d. Rhythm

38. Which of the following is NOT a tool commonly used for printmaking?

- a. Burnisher
- b. Brayer
- c. Gouge
- d. Mandrel

39. Which of the following was a significant contribution of artists during the Renaissance art period?

- a. Lost wax casting
- b. Linear perspective
- c. Paint in tubes
- d. Acrylic paint



40. A wooden sculpture of a youthful human figure shows symmetry and is visually abstracted. It is used for religious purposes. In which culture was this sculpture most likely created?
- Ancient Roman
  - Mycenaean
  - African
  - Egyptian
41. Fresco was a technique often used in the Renaissance art period. Which of the following best describes this process?
- Oil paint was applied to wet plaster.
  - Pigments mixed with plaster were applied to a surface.
  - Tempera paint was applied to dry plaster.
  - Pigments mixed with water were applied to wet plaster.
42. Which of the following is a technique used to create a more interesting composition in an artwork or a painting?
- Intaglio
  - Rule of thirds
  - Tromp l'oeil
  - Middle ground
43. Which of the following best describes some of the characteristics of Baroque architecture?
- Pear-shaped domes, marble or faux finishing, and bronze gilding
  - Hemispherical domes, columns, and decorative pilasters
  - Semicircular arches, barrel or groin vaults, and thick walls
  - Circular domes, pendentives, and mosaics
44. Which of the following is NOT an example of relating context to an artwork?
- Finding more information about the cultural values of African artists
  - Reading about the social movements at the time of Harlem Renaissance artwork
  - Practicing similar techniques of a Pointillist artist
  - Researching a Dada artist's values and personal views
45. Which of the following is the best description of appropriation in artwork?
- Placing contrasting elements next to each other
  - Using unusual proportions to emphasize a part of an artwork
  - Borrowing and using pre-existing images with few or no changes
  - Changing an image and presenting it in a new way
46. Which of the following recommendations is the NOT a way to improve the composition of a still life?
- Arranging the items in a symmetrical grouping
  - Overlapping items rather than having the edges touch
  - Using accurate perspective
  - Including a focal point in the arrangement

47. Which of the following describes a similarity between Minimalist art and Color Field painting?
- a. The use of mainly primary colors
  - b. Paint extending onto the edges of the canvas
  - c. A focus on consumer items as the subject
  - d. Large, flat areas of color with minimal brush strokes
48. Which of the following best describes the mezzotint process?
- a. The artist uses gouges to cut away the pieces of material that will not hold ink.
  - b. The artist works from dark to light, roughening and smoothing areas of a plate to change their ability to hold ink.
  - c. The artist melts fine particles of acid-resistant powdered rosin onto a metal plate, which is then dipped in acid.
  - d. The artist uses a burin to carve lines into a plate, and these lines hold the ink for printing.
49. Which of the following will most likely benefit a person seeking a career in graphic design?
- a. Certification in programming languages such as Visual Basic, C++ or Java
  - b. An apprenticeship under an artist skilled in their chosen medium
  - c. A working knowledge of programs such as Photoshop, Illustrator, and Flash
  - d. Experience with pedagogy, assessment and classroom management
50. Which of the following is NOT a common file format for images?
- a. JPG
  - b. GIF
  - c. AVI
  - d. PNG
51. Which of the following is an example of a triadic color scheme?
- a. Orange, green, and purple
  - b. Blue, green, and purple
  - c. Red, yellow, and orange
  - d. Orange, blue, and green

52. In this still life, which technique does the artist use to create visual interest?



- a. The arrangement in the artwork forms a pattern.
- b. The still life is comprised of an analogous color scheme.
- c. A variety of shapes are arranged throughout the work.
- d. The objects in the still life are arranged asymmetrically.

53. An artist is creating a drawing from life. They are keeping their eyes subject, only glancing occasionally at their paper, creating an outline of the subject. Which type of drawing is this artist creating?

- a. Gesture drawing
- b. Blind contour drawing
- c. Perspective drawing
- d. Crosshatch drawing

54. Which of the following is NOT an accurate difference between acrylic paint and oil paint?

- a. Acrylic paint dries much more quickly than oil paint.
- b. Oil paint is more flexible than acrylic paint when dry.
- c. Acrylic paint can be cleaned with water, while oil paint requires solvents.
- d. Oil paint has no visible color shift when it dries, while acrylic paint becomes darker when it dries.

55. The concept of infinity is often used in patterns in Middle Eastern art. Why is this concept significant?

- a. To contrast the infinity with man's finite existence on earth
- b. To cover large areas of walls with the same pattern
- c. To allow different artists to easily copy the same pattern
- d. To represent the magnitude of the soul

56. Which of the following is NOT a characteristic of traditional Japanese woodblock printing?
- They often depicted landscapes, history, geishas, and scenes from everyday life.
  - They used large, flat areas of color in the composition.
  - They used primarily black ink for the prints.
  - They began by drawing in ink then gluing it to the wood block for carving.
57. Which of the following is an accurate statement regarding digital photography versus film photography?
- Digital photography is slower and more expensive than film photography.
  - Digital photography has more limited storage space than film photography.
  - Digital photography requires specialized equipment for developing the photographs.
  - Digital photography can be more easily edited than film photography.
58. An artist wants to create a pen and ink drawing with a lot of detailed work. Which surface would work best for this endeavor?
- Watercolor paper
  - Canvas
  - Illustration board
  - Charcoal paper
59. Which of the following is NOT a common oil painting medium?
- Poppy oil
  - Linseed oil
  - Grapeseed oil
  - Stand oil
60. Which of the following best describes the daguerreotype process?
- An image is created on paper coated with silver iodide.
  - An image is created on a silvered copper plate.
  - An image is created on a glass plate.
  - An image is created on a tin plate.

61. This metalworking technique involves forming metal threads into a lace pattern. Which of the following is the name of this technique?



- a. Filigree
- b. Enameling
- c. Fusion
- d. Soldering

62. This painting by Vincent van Gogh uses which of the following color schemes?



- a. Complementary
- b. Triadic
- c. Warm
- d. Analogous

63. Which of the following watercolor techniques would this artist have used to create the hazy sky and clouds in this painting?



- a. Dry brush
- b. Wash
- c. Crayon resist
- d. Wet on wet

64. An art critic analyzes an artwork based on the use of elements and principles, not delving into the context associated with the artwork. Which of the following criticism theories is this critic using?

- a. Formalism
- b. Expressionism
- c. Deconstructivism
- d. Representationalism

65. An artist's oil painting has dried and the paint has begun to crack. Which of the following is a possible cause of this issue?

- a. The artist varnished the oil painting after it dried.
- b. The artist mixed linseed oil with their paint.
- c. The artist did not prime the canvas before painting.
- d. The artist worked in layers and used a glazing technique.

66. Which of the following pigments is NOT hazardous due to the use of toxic metals?

- a. Cadmium red
- b. Cadmium yellow hue
- c. Cobalt blue
- d. Flake white

67. If a graphic artist wanted to create a logo that could be resized for large banners without becoming pixelated, which of the following would be the best method?

- a. Creating a logo in Photoshop and saving it as a .jpg
- b. Drawing a logo by hand and scanning it, saving it as a .gif
- c. Creating a vector-based logo and saving it as an .eps
- d. Tracing a hand-drawn logo in Photoshop and saving it as a .tif

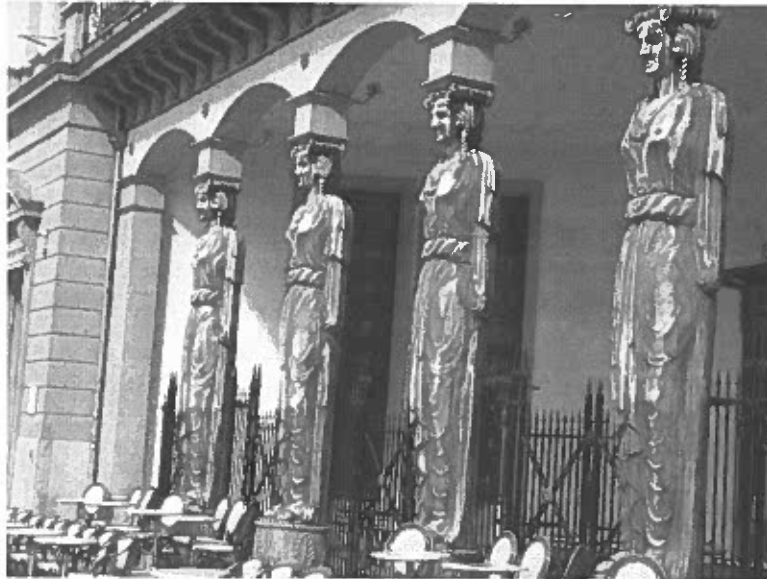
68. Which of the following was a reason that Baroque architecture spread throughout South America in the 1600s and 1700s?

- a. South American architects read about this style and began to use it.
- b. Spain colonized Central and South America.
- c. Architects from France emigrated to South America.
- d. Baroque architecture was a reaction against the previous Neoclassical architecture.

69. Which of the following video file formats would be the most ideal for saving and sharing a high-definition video?

- a. .mp4
- b. .wmv
- c. .mpeg
- d. .mov

70. Which of the following is the correct name for this architectural element of a statue created for use as a column?



- a. Balustrade
- b. Pilaster
- c. Caryatid
- d. Obelisk

71. Which of the following is NOT an aim of video sculpture?

- a. To integrate video aspects into an object, location or performance.
- b. To diverge from the standard narrative video configuration.
- c. To present videos in new and innovative ways.
- d. To show a video in a linear format with a beginning and end.

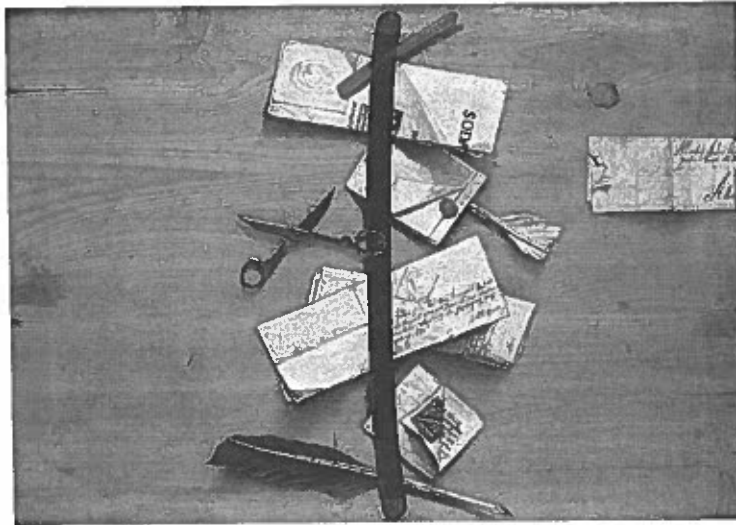
72. If an artist wanted to create multiple prints using a printmaking technique, which of the following techniques would NOT be appropriate to use?

- a. Linocut
- b. Screen-printing
- c. Intaglio
- d. Monotype

73. How does the traditional creation of porcelain challenge the perception of the "Made in China" slogan, which calls to mind mass-produced products made inexpensively in China?

- a. Porcelain is no longer made in China.
- b. The creation of porcelain is labor intensive.
- c. The materials used for porcelain are very expensive.
- d. Porcelain can only be made by artisans.

74. This painting is an example of which of the following painting techniques?



- a. Alla prima
- b. Plein air
- c. Tromp l'oeil
- d. Sgraffito



75. During which of the following artistic movements would this painting have been created?



- a. Neoclassical
- b. Mannerism
- c. Medieval
- d. Post-Impressionism

76. Which of the following best describes a way that visual art has influenced popular culture?

- a. Artists appropriated images from comic books to use in their artwork.
- b. The bright colors and repetition of Pop art were subsequently used in fashion and advertising.
- c. Mass-produced objects were a subject in the artworks.
- d. Artists used commercial methods such as screen-printing.

77. Which of the following best describes why watercolor paper should be stretched before it is painted on?

- a. So the paint will adhere to the surface
- b. So the colors will mix properly
- c. To make the paper into a larger surface
- d. So that it will not warp

78. Which of the following principles of design is most evident in this painting?



- a. Balance
- b. Contrast
- c. Emphasis
- d. Rhythm

79. If an artist wanted to create a drawing with a great amount of detail, which of the following drawing instruments would be best suited for this?

- a. Vine charcoal
- b. Red conte crayon
- c. 2H pencil
- d. Black chalk

80. Which of the following is an instrument used to support and steady the artist's hand while painting or drawing?

- a. Mahlstick
- b. Tortillion
- c. Frisket
- d. T-square

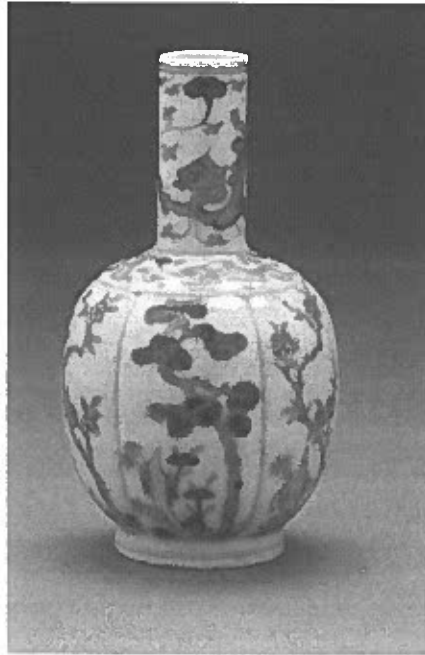
81. If an artist wanted to use pen and ink to emulate the visual color blending of the Pointillism art movement, which of the following would be the most appropriate technique?

- a. Stippling
- b. Cross hatching
- c. Hatching
- d. Wash

82. Which of the following painting surfaces does NOT need to be primed with a primer before it is painted on?

- a. Wood panel, when using oil paints
- b. Canvas, when using acrylic paints
- c. Wood panel, when using egg tempera paints
- d. Watercolor paper, when using watercolor paints

83. An art critic analyzes this vase with deliberation over the meanings of the dragon, pine, and bamboo painted on the surface. Which of the following methods is this critic using?



- a. Formalism aesthetic theory
- b. Cultural perspective aesthetic theory
- c. Expressionism aesthetic theory
- d. Deconstructivism aesthetic theory

84. Which of the following describes the main issues that were expressed through the Muralism art movement of Latin America?

- a. The rights of women and children
- b. Freedom of speech and artistic expression
- c. The desire for better schools and education
- d. Political and social justice

85. An artist creates a sculpture from a block of marble, carefully removing pieces by use of a chisel. Which of the following sculptural techniques is this artist using?

- a. Casting
- b. Modeling
- c. Subtractive
- d. Assemblage

86. Which of the following terms describes the method with which this fiber art was created?



- a. Embroidery
- b. Weaving
- c. Knitting
- d. Crochet

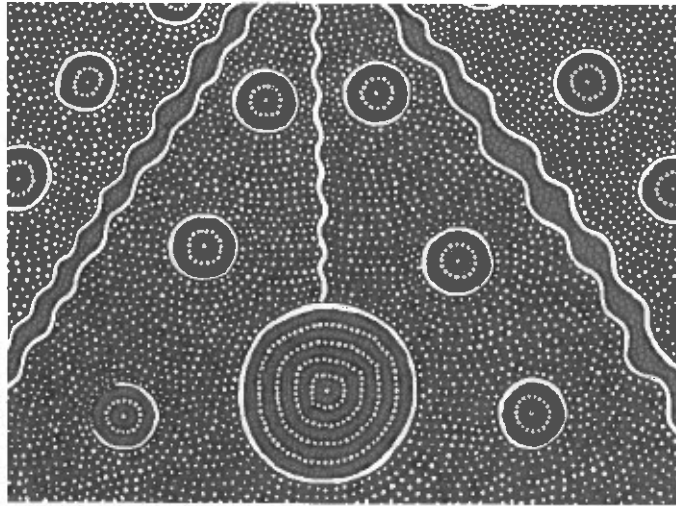
87. Which of the following terms refers to hanging artworks in groupings on the wall at eye level as well as above and below eye level?

- a. Exhibition-style
- b. Gallery-style
- c. Salon-style
- d. Museum-style

88. Which of the following best describes why Ansel Adams created black and white environmental photographs instead of color?

- a. Color photography had not yet been invented.
- b. If the photographs were in color, they would be mainly green.
- c. He did not have experience with producing color photographs.
- d. He could control the outcome of the prints better with black and white.

89. Which of the following cultures would have produced this dot style painting?



- a. Aboriginal
- b. African
- c. Chinese
- d. Brazilian

90. Which of the following media was accepted as a fine art in the early to mid-1900s?

- a. Oil painting
- b. Photography
- c. Performance art
- d. Gouache

91. Which of the following theories of art would recognize the subject of this artwork as a girl playing the piano, and its importance as an extension of our perception?



- a. Expressionism
- b. Representationalism
- c. Formalism
- d. Deconstructivism

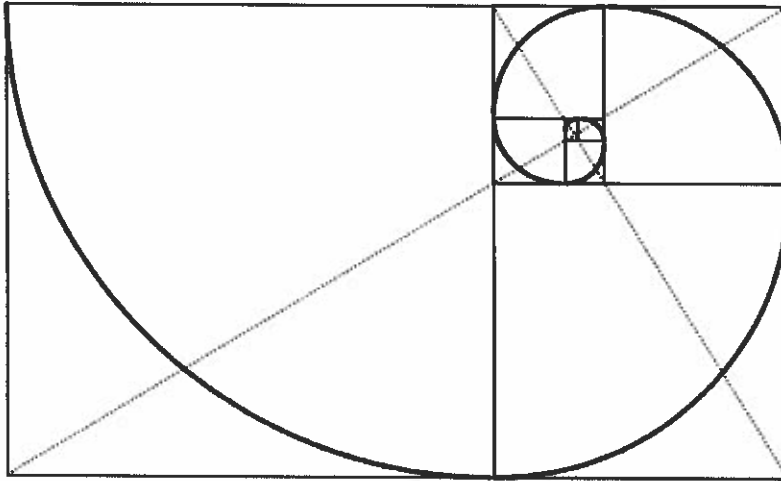
92. Which of the following image resolutions are considered ideal for printing an image versus publishing an image online?

- a. 300 dpi for printing, 72 dpi for online
- b. 720 dpi for printing, 100 dpi for online
- c. 100 dpi for printing, 75 dpi for online
- d. 500 dpi for printing, 250 dpi for online

93. Which of the following is a criticism of some environmental art, including Robert Smithson's "Spiral Jetty"?

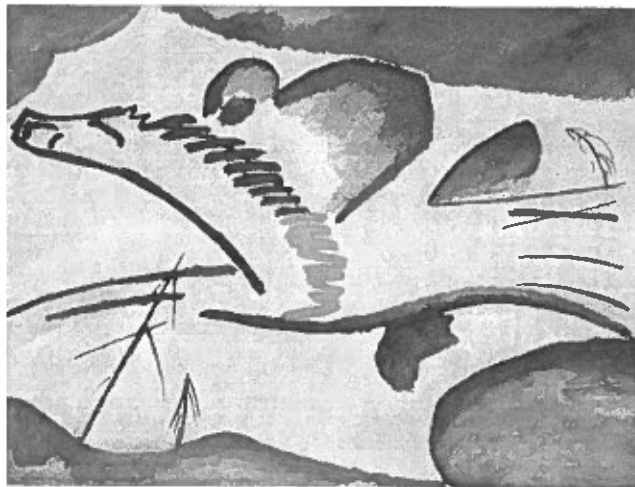
- a. Environmental art should not be categorized as art.
- b. Environmental art should include other artistic media.
- c. Environmental art can neglect to focus on environmental issues.
- d. Environmental art can permanently damage the land it was created on.

94. Which of the following is NOT one of the names for this method of composition for art and architecture?



- a. Golden Mean
- b. Pi
- c. Golden Ratio
- d. Fibonacci number

95. Which of the following describes an analysis of this artwork using the formalism aesthetic theory?



- a. The artist loosely represented a horse as the subject of this artwork.
  - b. The artist expressed his feelings through the varied use of lines.
  - c. The artist used both primary and secondary colors in this artwork.
  - d. The artist used the subject to express his experience with equestrianism.
96. Which of the following metals used for jewelry making is an alloy of antimony, tin and copper?
- a. Pewter
  - b. Silver
  - c. Aluminum
  - d. Titanium

97. Which of the following terms is NOT associated with knitting?
- a. Chain stitch
  - b. Purl
  - c. Casting on
  - d. Stockinette
98. Which of the following accurately describes characteristics of gouache paint?
- a. It can be thinned with turpentine or other solvents.
  - b. It is only available in black, white, and primary colors.
  - c. It cannot be re-wet or reworked.
  - d. It is opaque and dries to a smooth, matte finish.
99. Which of the following types of clays is an earthenware that is generally a reddish-brown color, and is more porous and less durable than other types of clay?
- a. Stoneware
  - b. Terra cotta
  - c. Porcelain
  - d. Raku
100. Which of the following artworks was instrumental in the acceptance of fiber arts as an artistic medium?
- a. Kara Walker's "Gone"
  - b. Yayoi Kusama's "Dots Obsession"
  - c. Judy Chicago's "The Dinner Party"
  - d. Miriam Schapiro's "Big Ox No. 1"



## Answers and Explanations

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1. C: Gothic architecture, which was a style used in Europe from the mid-12th to the 16th century, is known for its tall designs with a sense of upward movement. This was a departure from the previously dark, damp buildings of the Romanesque style. Gargoyles were used as drainage spouts, and pointed arches were a commonly used visual element in this style.

2. A: Van Gogh, Cezanne, Seurat and Gauguin are all associated with the Post-Impressionism movement. This movement sought to explore the emotional response of the artist and was a departure from the naturalism of Impressionism. These artists used bold colors and while they portrayed real-life subjects, they also began to use distorted, geometric forms in their artwork. They sometimes used exaggerated colors and bold outlines as well.

3. A: A happening is a performance or event created in the context of fine art. These began in the 1950s, and they include audience participation as a main component. Happenings can be planned or improvised, and are meant to be a changing, unique work of art that cannot be preserved in a museum. Happenings might include music, dance, poetry, or performance, and can have a large or small audience depending on the artist's intentions.

4. C: When clay is partially but not completely dry, it is leather hard. At this stage the piece can still be carved or trimmed. When the piece is completely dry, it is considered bone dry. A bone-dry piece is fragile and cannot be carved or trimmed at this stage. An unfired ceramic piece is called greenware, and after the piece is fired once in a kiln it is considered bisque. A bisque ware piece can be glazed and fired again.

5. D: The impasto technique is the application of thick layers of paint, usually with oil or acrylics. The visible brushstrokes can become a visual element that leads the viewer's eye around the painting, and the paint can be applied by a brush or a palette knife. With this technique, the artist can create texture, and can control how the light reflects off of the layers of paint. Vincent Van Gogh was known for working with this technique.

6. B: The element of art, line, would best direct the viewer's eye when representing this road in an artwork. A line can be curvy, straight, wavy, broken, or even implied, so the road would not have to be outlined with a border, the lines could be implied. A line can be used to indicate movement in an artwork, and to lead a viewer's eye into the artwork, bringing them toward a focal point.

7. D: Students with behavioral disabilities can benefit from the tactile feel of working with clay, and can also benefit from working in a secluded, quiet area of the room. These students can benefit from being free of distractions and noise and working with their hands. Using larger paper and tools can benefit students with physical disabilities or visual impairment and outlining a design with glue can be beneficial for students with visual impairments so that they can feel the design.

8. D: Claes Oldenburg was an American sculptor known for creating large scale Pop art sculptures. He created soft sculptures, often of food items, beginning in 1962. In doing this, he changed the traditional hard medium of sculpture to a soft, changeable format that challenged the idea of sculpture. Oldenburg was later known for his large-scale outdoor sculptures of ordinary objects, including a clothespin and a rubber stamp.

9. A: A performance assessment is an authentic task that focuses on the student's ability to demonstrate their art skills or their use of methods and materials. Traditional assessment consists of standard tests, such as multiple choice and essay tests. A formative assessment tests a student's

understanding and progress throughout a course, while a summative assessment checks a student's knowledge at the end of a unit or lesson.

10. B: Sculptures in the Classical period in ancient Greece were made to honor their gods and goddesses. The technical skill of Greek sculptors allowed them to depict human anatomy with great accuracy, and at the same time they idealized the human figure. They often depicted figures and scenes from mythology and used sculptures to adorn temples. The statue of Zeus at Olympia was created during this period in ancient Greece.

11. C: The architectural term "form follows function" suggests that a building's design, or form, should be led by its function. If architecture is designed with its facade or looks primarily in mind, or if a new space is fit into a preexisting building, it does not follow this principle. When a stadium is designed with its form following its purpose, with room for spectators surrounding the central field, the form is following the function of the design.

12. D: Artists of the Impressionist movement sought to capture fleeting moments in time and the momentary effects of light. They were departing from the realistic depiction of previous art movements such as realism and using the newly invented paint in tubes to paint outside to portray these moments in a new way. Artists of the romanticism movement portrayed exaggerated scenes and heightened emotions.

13. A: In the hierarchical proportion used in artwork in ancient Egypt, scale was used to show the importance of people in relation to each other. People of higher status would often be sculpted or drawn as larger than those of lower status. This proportional organization would not necessarily be used in battle scenes or more chaotic portrayals of groups of people.

14. D: To prevent a water-based media from being resisted by an oil or wax-based media, it is recommended to layer the water-based media underneath the oil or wax-based media. Acrylic, watercolor, and tempera are all water-based, while oil paint, encaustic, and crayons are oil and wax based, which will all resist the water-based media. Layering a water-based media on an oil or wax-based media can cause the top layer to not stick to the bottom layer.

15. B: A tertiary color is created by combining a primary color with a secondary color. The tertiary color will be named by combining the names of the two colors used. In this instance, the name of the tertiary color would be yellow-orange. The primary colors are red, yellow and blue, while the secondary colors are orange, green and purple or violet.

16. B: The refinement of the steel process, which led to steel skeletons for buildings, allowed buildings to be constructed at greater heights. The steel skeletons allowed builders to depart from load bearing walls, which did not allow for tall buildings such as these. The invention of the first safe passenger elevator, as well as the need for more vertical spaces to save room, also led to the construction of skyscrapers.

17. C: An illustrator will most likely need to be proficient at using computer graphics programs such as Adobe Photoshop and Illustrator for their work, although some work can be completed by hand as well. A photographer will use digital photo editing software to refine their photographs before printing or publishing them online. A graphic designer will use a range of computer graphics programs to create their designs. A curator would be the least likely to need proficiency in these programs.

18. D: In the Feminist art movement, female artists began to embrace and use materials that were traditionally tied to their gender, including embroidery and textiles. They sought to challenge

stereotypes and cultural attitudes and bring attention to the contributions of female artists throughout history, including all art movements. They used new media that was not yet male-dominated to communicate with their viewers, and used self-portraits, appropriated images, collage, and other methods to get their messages across.

19. A: A larger aperture will result in a clear and focused subject with the background out of focus, otherwise known as a shallow depth of field, creating a clearer focal point in the photograph. To create a shallow depth of field, you would use a larger aperture, and decrease the distance from the camera to the subject. A higher ISO changes the sensitivity to light but does not affect depth of field and shutter speed can be slowed to blur motion, but will not affect the depth of field.

20. C: The Mannerism style, beginning at the end of the Renaissance in the 1520s, focused on mainly religious subject matter and included techniques such as elongated limbs, dramatic lighting, and unnatural, artificial poses. These artists departed from the compositional techniques of the Renaissance period and created compositions on a more flattened plane. They also experimented with portraying emotions in their artwork and using bright colors.

21. B: Both Postmodernism and Dada art sought to depart from the authority and traditions of previous art movements. Dada was considered "anti-art," challenging the previous ideas of art. Postmodernism was anti-authoritarian and refused to recognize the authority of any previous art movement, questioning authorship, originality, and subjectivity. They both wanted to move forward in their own way without relying on previous ideas and traditions.

22. B: In this situation, larger paper and larger materials would be the least likely accommodation to help this student. This accommodation is more often given to students with physical disabilities or vision impairment. A student with behavioral disabilities should be given a secluded area to work in, have their assignment broken down into smaller chunks with frequent check ins, and should be given frequent praise to help them stay on task during the class.

23. D: Backward design entails starting with the end point, or the goals of instruction, and then basing the assessments and the lessons around meeting those goals. The backward design method entails identifying what skills or knowledge the students should master by the end of the lesson or unit, then designing the instruction and assessments for the students to master the skills and information.

24. A: A student uses their metacognitive skills to assess their own learning, and this can include self-assessment and correcting their own work based on their self-assessment. When a student uses a rubric to check their progress toward reaching their goals, they are using their metacognitive skills. These skills help a student understand and regulate their own learning, and when the student uses them they can get themselves closer to their learning goals.

25. C: When an artist paints layers of transparent oil paint on top of one another, after each layer underneath has dried, this is called glazing. Glazing is a technique used to build up colors that will blend visually, without blending them on the palette. Glazing is often used to create complex colors such as skin tones. The artist needs to understand the transparency of different pigments to use this technique.

26. C: Egg tempera requires a rigid support so that the paint will not crack or flake off the support. Masonite or a wood panel would be the most ideal support for this paint. On paper or a fabric such as canvas or linen, the paint will crack and flake. To use these flexible supports, the paint also needs to be able to flex to some degree.

27. B: Mixing secondary colors is an appropriate skill to be introduced in these early grades. Students should be learning to name and recognize the primary and secondary colors and begin to mix the secondary colors as well. Using two-point perspective, hand-lettering, and using oil paints are all skills appropriate to introduce in later grades, such as middle or high school.

28. D: The safety while using a utility knife is not dictated by the MSDS sheets. The Materials Safety Data Sheets explain the hazards associated with certain materials, and what precautions should be taken because of these hazards. This includes flammable or corrosive materials that are used in the art classroom. Students should understand how to properly use, clean up, and store each material that they are using.

29. A: The Ashcan School sought to portray life and people in a realistic, unidealized manner, and thought the working class was a worthy subject. Artists of the Romanticism movement portrayed scenes with exaggerated and heightened emotions, while artists of the Neoclassical movement portrayed people with themes of heroism and classical mythology. The Hudson River School depicted idealized landscapes of the views surrounding the Hudson River Valley.

30. A: A painting from the Byzantine era would have been made on a wood panel, for several reasons. Canvas and paper were not used yet for paintings. Canvas became popular during the Renaissance times since canvases were able to support larger works and make them lighter. This painting would have been done with tempera, which will crack if flexed, so using a non-flexible surface like a wood panel would be ideal for the medium.

31. C: The deconstruction criticism theory involves finding hidden meanings and implied messages within an artwork. This theory seeks to analyze what is hidden, omitted, or repressed within the artwork, and shows that the initial impression of the artwork is just one of many potential interpretations. The artist's intentions, and the significance of subjects, objects or locations, could all lead to different interpretations of the artwork.

32. D: While the artists of the Impressionism movement tried to capture fleeting moments in time, like photography, they also reacted against photography by capturing an impression instead of a faithful reproduction. Impressionist artists often worked outdoors to capture the play of light on the scene and used a wide range of colors to imitate the light they saw. Their loose brushstrokes and vivid colors captured the impression of a scene rather than a realistic reproduction of it.

33. B: While video screens showing the artists discussing their artwork or showing video artwork are effective ways of incorporating technology in an exhibit, having multiple screens playing in one gallery can be distracting. One video screen per gallery, or video screens in separate viewing rooms, would be preferable so that they do not distract the visitors from each other or from another artwork.

34. A: If not using your own source material, and the source material is not out of copyright or in the public domain, you should obtain permission from the source. Copyright for an artwork begins once the artwork is completed. Copyright laws vary by state and country, so it is important to always check. It is not permitted to sell a copy of a famous artwork as your own.

35. B: This photograph features a pair of flying buttresses, which are masonry supports that transmit the thrust of a roof or vault into the outer support. The flying buttress is an inclined bar that flies out from the wall to carry the weight of the vault or roof. This type of support was developed in Gothic architecture, departing from the previously hidden supports. The flying buttress was instrumental in supporting the high ceilings characteristic of Gothic churches.

36. C: A wash is a large, flat area of color. Sgraffito involves scratching through paint to reveal the layer or surface underneath, and this can add texture to a painting. With dry brush, the artist loads paint onto the brush with minimal water or oil medium, and this can create a scratchy texture in the painting where the brushstrokes are visible. Impasto painting involves layers of thick paint, which can create a texture.

37. A: This artist used contrast to create the focal point of the painting. The light value of the bar, coupled with the bright red of the clothing, draw the viewer's eye. These both contrast heavily with the dark background and the muted colors throughout the rest of the artwork. Together the light line and red clothing catch the viewer's attention and emphasize the tightrope walker in the painting.

38. D: A mandrel is a tool used to size and shape a ring for jewelry making. It is a tapered piece of metal on which rings fit. A burnisher is a smooth metal tool used to smooth the surface of the plate for intaglio printmaking. A brayer is a rubber roller used to roll ink onto a surface for printmaking. A gouge is a tool used for relief printmaking, used to cut away parts of the surface before applying ink.

39. B: Renaissance artists were the first to use linear perspective in their artwork, giving it greater realism and more accurate depth. Prior to this, artists were aware of the relation of sizes for objects close up or far away, but Filippo Brunelleschi is credited with discovering geometric perspective in 1413, and artists began using vanishing points and horizon lines following this discovery.

40. C: African sculptors often used wood to create masks and sculptures of human figures. They emphasized symmetry and pattern, and would stylize, or visually abstract, the figure rather than depicting the figure in a naturalistic way. These sculptures were often used for religious purposes including display on altars or use in rituals. They would emphasize youthful characteristics as well as health and physical strength.

41. D: The fresco technique involved mixing pigments with water and applying the mixture to wet plaster. Once the plaster dried, the pigments would be visible. This made the pigments and the painting into a permanent part of the wall. The painting technique is time sensitive since the paint must be applied while the plaster is still wet. This technique was used by Michelangelo on the Sistine Chapel ceiling.

42. B: The rule of thirds is a compositional technique used in painting, photography and other two-dimensional artwork to add visual interest to the composition by not putting the subject in the center. The scene is divided into three parts both horizontally and vertically, the subject is centered on a point where those dividing lines intersect. In a landscape, the horizon line will often fall on the lower line.

43. A: Baroque architecture is characterized by pear shaped domes, marble or faux finishing, and bronze gilding, among other things. It originated in Italy in the late 16th century. Hemispherical domes, columns and decorative pilasters are characteristics of Renaissance architecture. Semicircular arches, barrel or groin vaults, and thick walls are characteristics of Romanesque architecture. Circular domes, pendentives, and mosaics are characteristics of Byzantine architecture.

44. C: Context describes the related conditions or circumstances around which something occurs. Understanding the context can help a person understand the artwork better, by looking at the circumstances in which the artist was working in at the time. This can include their environment,

the historical events and traditions happening, their cultural values, the social movements at the time, and even the artist's personal values and commitments.

45. C: Appropriation involves using pre-existing images or objects in an artwork with few or no changes. Marcel Duchamp's "ready-mades" are one example of this. Transformation is changing an object or image and presenting it in a new way. Juxtaposition involves placing contrasting elements next to each other. Hierarchical proportion uses unusual proportion to draw a viewer's eye to the more important figures in an artwork.

46. A: A still life arrangement will have a better and more interesting composition when it is asymmetrical. It can still be centered but should still have elements of asymmetry. Using incorrect perspective can be distracting to the viewer. Having edges of objects touch rather than overlap causes spatial ambiguity rather than showing which object is closer. A focal point should be included in the arrangement to draw the viewer's eye.

47. D: Color Field painters and Minimalist artists both used large, flat areas of paint in their artwork with minimal brush strokes. Color Field painting is also characterized by the extension of the paint to the edges of the canvas, suggesting the colors go on for infinity. Neither groups focused on using primary colors, although the De Stijl art movement did. Pop art used popular and consumer items as their subjects.

48. B: For a mezzotint, the artist will roughen and smooth areas of a plate to change their ability to hold ink. The artist works from dark to light, roughening parts for shading, and smoothing parts for lighter areas. Using gouges to cut away material describes linocut and woodcut. Melting fine particles of acid resistant material onto a plate describes aquatint. The use of a burin to carve lines describes the intaglio process.

49. C: A graphic designer will be responsible for the design of print and digital items. They would not need certification in programming languages, or an apprenticeship under an artist or designer. They also would not need experience with pedagogy, assessment and classroom management. A graphic designer will benefit from a working knowledge of the programs they will likely use for their job, including Photoshop, Illustrator and Flash, among others.

50. C: AVI is one of the oldest video formats and is not an image format. JPG, GIF, and PNG are all common image file formats. JPG stands for Joint Photographic Experts Group. GIF and PNG files both use lossless compression, while JPG is highly compressed and lossy. They can each be used for specific purposes while saving image files, depending on the desired final product.

51. A: A triadic color scheme is composed of three colors that are evenly spaced around the color wheel. This could be comprised of the three primary colors, or the three secondary colors, as in this example. This would not include analogous, which are next to each other, or complementary colors, which are directly across from each other on the color wheel.

52. D: To create visual interest in this artwork, the artist Claude Monet arranged the still life asymmetricaly. This is an effective method of creating a visually interesting composition. The arrangement does not form a pattern, nor does it use an analogous color scheme. The shapes used throughout the still life are primarily circles, seen in the various fruits spread out on the table.

53. B: A blind contour drawing involves the artist keeping their eyes on the subject, only occasionally checking to see where their pencil is on the paper. The artist is strengthening their hand-eye coordination and creating a contour drawing of the subject while keeping their gaze on

the subject. This is typically used as a drawing exercise rather than a way to faithfully capture a subject or scene.

54. B: When acrylic paint dries, it becomes a sort of plastic that is flexible and will not crack when bent. This makes acrylic ideal for painting on multiple surfaces. Oil paint is less flexible and is prone to crack when flexed. Acrylic dries much more quickly than oil, and can be cleaned up with water. It does dry slightly darker when the white binder in the paint turns clear.

55. A: Artists in the Middle East often repeat a pattern in a way that could go to infinity. This is used to contrast against man's finite existence on earth, and to disregard this temporary presence. These patterns were also used on surfaces to represent the dissolution of matter, which is another important concept for these artists. These patterns could be highly intricate and ornate.

56. C: While strong black outlines were often used, Japanese woodblock prints used a rich palette of colors. The water-based inks used by these artists provide a large range of colors that could be vivid and transparent. When multiple layers were used, they had to be placed with precision as subsequent areas were carved out of the wood and more ink was applied to the prints.

57. D: Film photography is slower and more expensive to work with than digital photography. It requires specialized equipment to produce the prints from film. The storage space is limited to how many exposures are available on the film. Digital photography is easier to edit and manipulate than film photography, due to the availability of photo editing software. There are both free and paid programs that can be used to edit the photographs.

58. C: Watercolor paper and charcoal paper will both have a rough surface that is not suitable for detailed pen and ink work. Canvas is not suitable to draw on unless primed, and even then will have a rough surface. Illustration board is a firm, smooth surface that is made for detailed illustration work. It would be the most suitable choice out of these.

59. C: Poppy oil, linseed oil, and stand oil are all used in oil painting. Linseed oil is the most commonly used, and it gives the colors a glossy effect while slowing drying time. Poppy oil is good for lighter colors, as it is less likely to yellow than linseed oil. Stand oil will dry more quickly than linseed oil and can be used to thin oil paint.

60. B: For the daguerreotype process, an image is created on a silvered copper plate. The subject had to stay still for 15-30 minutes. A calotype creates an image on paper coated in silver iodide. An ambrotype involves creating a print on a glass plate, while a tintype involves creating a print on a tin plate. These were all used before the film camera was invented.

61. A: This technique of creating a lace pattern from thin strips of metal is called filigree. Creating a filigree piece involves careful bending of wire. A filigreed piece can be simple or ornate and complex. Many pieces of metal can be combined in this technique. The metal first needs to be annealed, or heated then cooled slowly, to make it easier to bend and work with.

62. D: This painting uses an analogous color scheme. Analogous colors are next to each other on the color wheel. This helps to create a sense of unity in the artwork. Complementary colors would be across from each other, while a triadic color scheme consists of three colors evenly spaced on the color wheel. Warm colors would include red, yellow, or orange.

63. D: This painting shows the wet on wet technique, where the artists adds wet paint to the already wet paper. This produces hazy edges instead of crisp edges, and allows colors to bleed into one

another. A wash would be one solid or gradient. Dry brush would produce sharp edges, and a crayon resist would reveal a drawing underneath the paint.

64. A: This critic would be using the formalism aesthetic theory to analyze this artwork. This is concerned primarily with how the artwork looks, including the use of elements and principles, and does not take into account the context or narrative related to the artwork. With this theory, all artwork would be approached and analyzed in the same way, so it is especially useful when analyzing non-representational and abstract artwork.

65. C: Painting on an unprimed canvas can cause cracking as the fabric pulls the oils out of the paint. A canvas or board should always be primed with a quality primer to produce the best results. Varnishing the painting after it has dried, mixing linseed oil with oil paint, and working in layers using a glazing technique will produce good results as long as they are done properly.

66. B: When a paint is labeled as 'hue,' it is created to look as visually similar to its hazardous counterpart as possible but created without the toxic metals. Cadmium orange hue will be similar to cadmium orange in color but will not contain a hazardous metal. Flake white contains lead which is a hazardous metal. Cadmium and cobalt are also toxic metals and should be handled with care.

67. C: To create a scalable logo that will not become pixelated at any size, it is important to create a vector-based logo. This can be done in Adobe Illustrator or other programs. An image in vector format can be rescaled to very large or very small without any loss of quality, unlike a raster image that is made up of pixels. A raster image can generally only be scaled down without loss of quality.

68. B: When Spain colonized parts of Central and South America in the 1600s, they began to influence the architecture of those regions. The highly ornate Baroque style was used in many shrines and cathedrals. Mexico was the wealthiest of these colonies, and they created some intricate and extravagant cathedrals using the Baroque style. This style was also used in Peru, Portugal, and Brazil.

69. A: An .mp4 file will have the best combination of smaller file size and high-quality video output. A .wmv file, or Windows Media Video, is a very small file which is good for sharing, but as a result is compressed and will be of low quality. An .mpeg will be a small file and low in quality. An .mov file is an Apple Quicktime Movie file. They are fairly large files and will have a higher quality than many other formats.

70. C: A caryatid is a sculpture of a draped female that is created as a column. This architectural element was first used in Greek architecture. A balustrade is a series of pillars that support a rail, sometimes on a balcony. A pilaster is a flat, upright element that appears as a column attached to a wall. An obelisk is a tall, freestanding four-sided structure that ends in a pyramidal point.

71. D: Video sculpture artists seek to use video in new and innovative ways. They incorporate video into objects, places or performances, and diverge from the traditional narrative video format that has a beginning and an end. Video sculpture originated with artist Nam June Paik in 1963. It now allows performance artists to have a greater degree of permanence to their performances.

72. D: The monotype method of printing is not used to make multiple prints. To create a monotype print, the artist draws or paints on a smooth, nonabsorbent surface, then the media is transferred to a sheet of paper. This is done by hand or with a printing press. Linocut, intaglio, and screen-printing are all printmaking methods used to make multiple prints.



73. B: The traditional creation of porcelain in China is very labor intensive and can involve a 30-step process from the beginning to the end. Highly skilled artisans create traditional porcelain, and this takes time as well as specialized knowledge. This process challenges the perception of the “Made in China” slogan, which calls to mind mass-produced items that are made quickly and cheaply. Porcelain parts, however, can be mass-produced in factories.

74. C: This painting is an example of *tromp l’oeil*, which means “to deceive the eye” in French. The painting is made to look realistic, as if they are actual objects on a wooden surface. The artist would have great skill and mastery of their media to create this optical illusion. *Alla prima* is a wet-on-wet technique, and *plein air* is when the artist paints outdoors. *Sgraffito* involves scratching through the surface of paint to reveal the surface underneath.

75. A: This painting by French artist Jean Auguste Dominique Ingres is called *Virgil reading The Aeneid before Augustus, Octavia and Livia*. This was painted in the Neoclassical style, which was a departure from the highly ornate Baroque style. Neoclassical artists were attempting to revive the subjects and styles of the Classical period, including Greek and Roman art.

76. B: Pop art was an art movement that used comic images, and items from popular culture. This movement subsequently influenced popular culture with its bright colors and designs, as well as its use of mass-produced items in the artwork.

77. D: Prior to using watercolor paper for a watercolor painting, it is best to stretch the paper. This is done by taping it to a surface, wetting it, and allowing it to dry. Then the paper is painted on. This helps to keep the paper from warping when the painting is completed. This can also be accomplished with a pad of watercolor paper that is glued on all sides.

78. D: The principle of design most evident in this painting is rhythm. Rhythm is the repetition of an element, but with some variance, unlike pattern which is an exact repetition. In this artwork, the trees are repeated in different sizes and distances, and slightly different shapes. It creates a rhythm throughout the artwork. Balance, contrast and emphasis are not as pronounced in this artwork as the rhythm is.

79. C: Pencils come in many degrees of hardness, but a 2H pencil will be hard enough to keep a sharp point and allow the artist to create a detailed drawing. Vine charcoal, conte crayon, and chalk will all be much softer and will not keep a sharp point. They are more suited to sketches and looser drawings than a pencil with a hard lead.

80. A: A mahlstick, or maulstick, is a stick with a padded top that an artist can use to rest and steady their hand when drawing or painting. This also keeps the artist from touching or resting their hand on the artwork. A tortillion is rolled paper used for blending pencil or charcoal, and frisket is a liquid or plastic that is used for masking. A t-square is used for drawing horizontal lines.

81. A: Stippling would be the best technique to use to emulate pointillism. Stippling involves creating dots with the pen and ink, and if an artist used different colors for these dots, the eye would visually blend the colors, much like the dots of paint in pointillism. Cross hatching and hatching involve lines, while a wash is a flat area of color.

82. D: Oil paint, acrylic paint, and egg tempera will all work best with using a primer to prepare the surface before painting. This also keeps the paints from soaking into the surface, and in some cases, eating away at the surface. Many canvases and supports are now available pre-primed. Watercolor paint does not require a primed surface, it is best used directly on watercolor paper. Watercolor paper is made for this purpose.

83. B: The critic is using the cultural perspective aesthetic theory to analyze the symbols painted on this vase. The dragon, bamboo, pine and other symbols hold cultural significance to the Chinese people. The dragon can represent fortune and luck, while pine is a symbol of longevity. Bamboo represents virtue. This theory is concerned with the cultural norms associated with the artist and how they express them in their work.

84. D: The Muralism art movement allowed artists in Latin America to express their ideas about political and social justice. The movement included artist Diego Rivera, among others, and was popular in Mexico as well as other countries in Latin America. This mural movement resulted in colorful and expressive public works of art that artists also used to depict their cultural background.

85. C: The subtractive method of sculpting involves removing pieces of material to create the sculpture. Chiseling marble or other stone, and carving wood or other materials would all be considered subtractive. Casting involves melted material such as metal that is poured into a mold. Modeling involves adding materials to build the sculpture, and assemblage is joining different materials together.

86. A: This fiber artwork was created with the embroidery method. Embroidery involves decorating fabric by using a needle to add yarn or thread in blocks of color or decorative patterns. Embroidery can be used for simple lines and patterns, or more complex representational images, as shown here. It can be used to decorate clothing or household items, or to create decorative artwork.

87. C: Salon-style exhibition involves hanging the artwork at, above and below eye level in groupings. This is different than the standard museum style of a single row of artworks with the center of each work at average eye level. This originated in 1667 at the Royal Academy salon in Paris, where there were too many works to hang in a single row. Thus, the works crowded the wall from floor to ceiling instead.

88. D: Although Adams initially experimented with color photography, he was able to control the results of his black and white prints better than color prints. He had high standards for his work and the black and white process suited these standards better at the time. He did look forward to a time when he would be able to apply these same high standards to color photography.

89. A: Aboriginal dot painting began in the early 1970s in Papunya, Australia. The artists would abstract their designs by filling in the designs with dots, to try to conceal any secret or sacred meanings within them from outsiders. Acrylic paints have allowed them to use brilliant colors in these designs. These paintings might also have stripes, lines, and other geometric patterns.

90. B: Photography began to be accepted as a fine art rather than a craft in the early to mid-1900s. Alfred Stieglitz and Ansel Adams were both instrumental in leading the charge for this acceptance. Since its invention, photography was used to capture family photographs and historical events, and was used for photojournalism, all of which were considered craft instead of art.

91. B: The representationalism theory of art claims that artwork needs represent something that exists to be art. This makes artwork an extension of our perception. The representation does not need to be literal, but the audience should understand the representation. In this painting, Renoir simply and clearly used the subject of a girl playing a piano, which is something the audience will recognize as a representation of something that exists.

92. A: The ideal and standard resolution for printing a digital image is 300 dpi. At this resolution the image should come out clear and not pixelated. The resolution can be much lower for publishing

online - 72 dpi - and it will appear clear on the screen. A lower resolution than this can appear pixelated on the screen, and an image saved at screen resolution is not suitable for printing.

93. D: A criticism of some environmental art, including Smithsonian's "Spiral Jetty," is that it can permanently damage the land on which it was created. Environmental art is considered art, although it is difficult to exhibit in a gallery as-is, and usually this is done by displaying photos of the artwork. It will often focus on environmental issues, and it does contain parts of the surrounding environment to create the artwork.

94. B: In addition to this proportional composition aid being called the Golden Mean, Golden Ratio, and Fibonacci Number, it can also be referred to as the Golden Number or Phi. This was used in ancient Greek architecture including the Parthenon. It can also be seen in da Vinci's "The Last Supper," and is thought of as a way to effectively compose an artwork or the proportions of a work of architecture.

95. C: To analyze artwork using the formalism aesthetic theory, one would consider the formal elements of the artwork, including the artist's use of elements and principles throughout the work. Analyzing the use of colors would be included in this analysis. This method does not consider the artist's background, emotions, or the narrative behind the work. This method would also not be concerned with the subject of the artwork.

96. A: Pewter is an alloy of tin, antimony and copper. An alloy is a combination of a metal and an element, or of different metals. Tin is too soft for many uses, so when it is combined with other metals it can be stronger and used for other purposes. Silver is an element as well as a precious metal, and aluminum and titanium are both elements too.

97. A: A chain stitch is associated with crochet, not knitting. A chain stitch is created, for example, as the first row of an afghan, and the subsequent row is worked off of this chain. Purl, stockinette, and cast on are all terms associated with knitting. Casting on is creating the first stitch on the knitting needle. The main stitches are knit and purl, and the basic pattern is stockinette.

98. D: Gouache is a paint medium that is often used for illustration due to its opaque colors and smooth, matte finish. It also dries quickly which is an advantage in illustration. Gouache can be rewet and reworked and comes in a wide range of colors. It is water soluble, meaning it only needs water for thinning and cleaning. Turpentine and other solvents would not be used with gouache.

99. B: Terra cotta is easily identified by its reddish-brown color. It is a type of earthenware, fired below 1200°C. Stoneware is a mid- to high fire clay, with colors ranging from light gray to brown, and it is more durable than terra cotta. Porcelain is a high fire clay made with kaolin, and it is generally white when fired. Raku is a firing technique that uses a wide variety of clays, including stoneware clays.

100. C: Judy Chicago's "The Dinner Party" was instrumental in fiber art's acceptance as an artistic medium rather than a craft. This artwork celebrated the accomplishments of women from history and included needlepoint and embroidery among the materials. This helped to elevate the status of fiber arts to something liberating and fun for artistic purposes, rather than a traditional craft used by women.

# How to Overcome Test Anxiety

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Just the thought of taking a test is enough to make most people a little nervous. A test is an important event that can have a long-term impact on your future, so it's important to take it seriously and it's natural to feel anxious about performing well. But just because anxiety is normal, that doesn't mean that it's helpful in test taking, or that you should simply accept it as part of your life. Anxiety can have a variety of effects. These effects can be mild, like making you feel slightly nervous, or severe, like blocking your ability to focus or remember even a simple detail.

If you experience test anxiety—whether severe or mild—it's important to know how to beat it. To discover this, first you need to understand what causes test anxiety.

## Causes of Test Anxiety

While we often think of anxiety as an uncontrollable emotional state, it can actually be caused by simple, practical things. One of the most common causes of test anxiety is that a person does not feel adequately prepared for their test. This feeling can be the result of many different issues such as poor study habits or lack of organization, but the most common culprit is time management. Starting to study too late, failing to organize your study time to cover all of the material, or being distracted while you study will mean that you're not well prepared for the test. This may lead to cramming the night before, which will cause you to be physically and mentally exhausted for the test. Poor time management also contributes to feelings of stress, fear, and hopelessness as you realize you are not well prepared but don't know what to do about it.

Other times, test anxiety is not related to your preparation for the test but comes from unresolved fear. This may be a past failure on a test, or poor performance on tests in general. It may come from comparing yourself to others who seem to be performing better or from the stress of living up to expectations. Anxiety may be driven by fears of the future—how failure on this test would affect your educational and career goals. These fears are often completely irrational, but they can still negatively impact your test performance.

**Review Video: [3 Reasons You Have Test Anxiety](#)**  
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## Elements of Test Anxiety

As mentioned earlier, test anxiety is considered to be an emotional state, but it has physical and mental components as well. Sometimes you may not even realize that you are suffering from test anxiety until you notice the physical symptoms. These can include trembling hands, rapid heartbeat, sweating, nausea, and tense muscles. Extreme anxiety may lead to fainting or vomiting. Obviously, any of these symptoms can have a negative impact on testing. It is important to recognize them as soon as they begin to occur so that you can address the problem before it damages your performance.

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The mental components of test anxiety include trouble focusing and inability to remember learned information. During a test, your mind is on high alert, which can help you recall information and stay focused for an extended period of time. However, anxiety interferes with your mind's natural processes, causing you to blank out, even on the questions you know well. The strain of testing during anxiety makes it difficult to stay focused, especially on a test that may take several hours. Extreme anxiety can take a huge mental toll, making it difficult not only to recall test information but even to understand the test questions or pull your thoughts together.

**Review Video: [How Test Anxiety Affects Memory](#)**  
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## Effects of Test Anxiety

Test anxiety is like a disease—if left untreated, it will get progressively worse. Anxiety leads to poor performance, and this reinforces the feelings of fear and failure, which in turn lead to poor performances on subsequent tests. It can grow from a mild nervousness to a crippling condition. If allowed to progress, test anxiety can have a big impact on your schooling, and consequently on your future.

Test anxiety can spread to other parts of your life. Anxiety on tests can become anxiety in any stressful situation, and blanking on a test can turn into panicking in a job situation. But fortunately, you don't have to let anxiety rule your testing and determine your grades. There are a number of relatively simple steps you can take to move past anxiety and function normally on a test and in the rest of life.

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## Physical Steps for Beating Test Anxiety

While test anxiety is a serious problem, the good news is that it can be overcome. It doesn't have to control your ability to think and remember information. While it may take time, you can begin taking steps today to beat anxiety.

Just as your first hint that you may be struggling with anxiety comes from the physical symptoms, the first step to treating it is also physical. Rest is crucial for having a clear, strong mind. If you are tired, it is much easier to give in to anxiety. But if you establish good sleep habits, your body and mind will be ready to perform optimally, without the strain of exhaustion. Additionally, sleeping well helps you to retain information better, so you're more likely to recall the answers when you see the test questions.

Getting good sleep means more than going to bed on time. It's important to allow your brain time to relax. Take study breaks from time to time so it doesn't get overworked, and don't study right before bed. Take time to rest your mind before trying to rest your body, or you may find it difficult to fall asleep.

**Review Video: The Importance of Sleep for Your Brain**

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Along with sleep, other aspects of physical health are important in preparing for a test. Good nutrition is vital for good brain function. Sugary foods and drinks may give a burst of energy but this burst is followed by a crash, both physically and emotionally. Instead, fuel your body with protein and vitamin-rich foods.

Also, drink plenty of water. Dehydration can lead to headaches and exhaustion, especially if your brain is already under stress from the rigors of the test. Particularly if your test is a long one, drink water during the breaks. And if possible, take an energy-boosting snack to eat between sections.

**Review Video: How Diet Can Affect your Mood**

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Along with sleep and diet, a third important part of physical health is exercise. Maintaining a steady workout schedule is helpful, but even taking 5-minute study breaks to walk can help get your blood pumping faster and clear your head. Exercise also releases endorphins, which contribute to a positive feeling and can help combat test anxiety.

When you nurture your physical health, you are also contributing to your mental health. If your body is healthy, your mind is much more likely to be healthy as well. So take time to rest, nourish your body with healthy food and water, and get moving as much as possible. Taking these physical steps will make you stronger and more able to take the mental steps necessary to overcome test anxiety.

**Review Video: How to Stay Healthy and Prevent Test Anxiety**

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## Mental Steps for Beating Test Anxiety

Working on the mental side of test anxiety can be more challenging, but as with the physical side, there are clear steps you can take to overcome it. As mentioned earlier, test anxiety often stems from lack of preparation, so the obvious solution is to prepare for the test. Effective studying may be the most important weapon you have for beating test anxiety, but you can and should employ several other mental tools to combat fear.

First, boost your confidence by reminding yourself of past success—tests or projects that you aced. If you're putting as much effort into preparing for this test as you did for those, there's no reason you should expect to fail here. Work hard to prepare; then trust your preparation.

Second, surround yourself with encouraging people. It can be helpful to find a study group, but be sure that the people you're around will encourage a positive attitude. If you spend time with others who are anxious or cynical, this will only contribute to your own anxiety. Look for others who are motivated to study hard from a desire to succeed, not from a fear of failure.

Third, reward yourself. A test is physically and mentally tiring, even without anxiety, and it can be helpful to have something to look forward to. Plan an activity following the test, regardless of the outcome, such as going to a movie or getting ice cream.

When you are taking the test, if you find yourself beginning to feel anxious, remind yourself that you know the material. Visualize successfully completing the test. Then take a few deep, relaxing breaths and return to it. Work through the questions carefully but with confidence, knowing that you are capable of succeeding.

Developing a healthy mental approach to test taking will also aid in other areas of life. Test anxiety affects more than just the actual test—it can be damaging to your mental health and even contribute to depression. It's important to beat test anxiety before it becomes a problem for more than testing.

**Review Video: [Test Anxiety and Depression](#)**  
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## Study Strategy

Being prepared for the test is necessary to combat anxiety, but what does being prepared look like? You may study for hours on end and still not feel prepared. What you need is a strategy for test prep. The next few pages outline our recommended steps to help you plan out and conquer the challenge of preparation.

### Step 1: Scope Out the Test

Learn everything you can about the format (multiple choice, essay, etc.) and what will be on the test. Gather any study materials, course outlines, or sample exams that may be available. Not only will this help you to prepare, but knowing what to expect can help to alleviate test anxiety.

### Step 2: Map Out the Material

Look through the textbook or study guide and make note of how many chapters or sections it has. Then divide these over the time you have. For example, if a book has 15 chapters and you have five days to study, you need to cover three chapters each day. Even better, if you have the time, leave an extra day at the end for overall review after you have gone through the material in depth.

If time is limited, you may need to prioritize the material. Look through it and make note of which sections you think you already have a good grasp on, and which need review. While you are studying, skim quickly through the familiar sections and take more time on the challenging parts. Write out your plan so you don't get lost as you go. Having a written plan also helps you feel more in control of the study, so anxiety is less likely to arise from feeling overwhelmed at the amount to cover. A sample plan may look like this:

- Day 1: Skim chapters 1–4, study chapter 5 (especially pages 31–33)
- Day 2: Study chapters 6–7, skim chapters 8–9
- Day 3: Skim chapter 10, study chapters 11–12 (especially pages 87–90)
- Day 4: Study chapters 13–15
- Day 5: Overall review (focus most on chapters 5, 6, and 12), take practice test

### Step 3: Gather Your Tools

Decide what study method works best for you. Do you prefer to highlight in the book as you study and then go back over the highlighted portions? Or do you type out notes of the important information? Or is it helpful to make flashcards that you can carry with you? Assemble the pens, index cards, highlighters, post-it notes, and any other materials you may need so you won't be distracted by getting up to find things while you study.

If you're having a hard time retaining the information or organizing your notes, experiment with different methods. For example, try color-coding by subject with colored pens, highlighters, or post-it notes. If you learn better by hearing, try recording yourself reading your notes so you can listen while in the car, working out, or simply sitting at your desk. Ask a friend to quiz you from your flashcards, or try teaching someone the material to solidify it in your mind.

### Step 4: Create Your Environment

It's important to avoid distractions while you study. This includes both the obvious distractions like visitors and the subtle distractions like an uncomfortable chair (or a too-comfortable couch that makes you want to fall asleep). Set up the best study environment possible: good lighting and a



comfortable work area. If background music helps you focus, you may want to turn it on, but otherwise keep the room quiet. If you are using a computer to take notes, be sure you don't have any other windows open, especially applications like social media, games, or anything else that could distract you. Silence your phone and turn off notifications. Be sure to keep water close by so you stay hydrated while you study (but avoid unhealthy drinks and snacks).

Also, take into account the best time of day to study. Are you freshest first thing in the morning? Try to set aside some time then to work through the material. Is your mind clearer in the afternoon or evening? Schedule your study session then. Another method is to study at the same time of day that you will take the test, so that your brain gets used to working on the material at that time and will be ready to focus at test time.

### **Step 5: Study!**

Once you have done all the study preparation, it's time to settle into the actual studying. Sit down, take a few moments to settle your mind so you can focus, and begin to follow your study plan. Don't give in to distractions or let yourself procrastinate. This is your time to prepare so you'll be ready to fearlessly approach the test. Make the most of the time and stay focused.

Of course, you don't want to burn out. If you study too long you may find that you're not retaining the information very well. Take regular study breaks. For example, taking five minutes out of every hour to walk briskly, breathing deeply and swinging your arms, can help your mind stay fresh.

As you get to the end of each chapter or section, it's a good idea to do a quick review. Remind yourself of what you learned and work on any difficult parts. When you feel that you've mastered the material, move on to the next part. At the end of your study session, briefly skim through your notes again.

But while review is helpful, cramming last minute is NOT. If at all possible, work ahead so that you won't need to fit all your study into the last day. Cramming overloads your brain with more information than it can process and retain, and your tired mind may struggle to recall even previously learned information when it is overwhelmed with last-minute study. Also, the urgent nature of cramming and the stress placed on your brain contribute to anxiety. You'll be more likely to go to the test feeling unprepared and having trouble thinking clearly.

So don't cram, and don't stay up late before the test, even just to review your notes at a leisurely pace. Your brain needs rest more than it needs to go over the information again. In fact, plan to finish your studies by noon or early afternoon the day before the test. Give your brain the rest of the day to relax or focus on other things, and get a good night's sleep. Then you will be fresh for the test and better able to recall what you've studied.

### **Step 6: Take a practice test**

Many courses offer sample tests, either online or in the study materials. This is an excellent resource to check whether you have mastered the material, as well as to prepare for the test format and environment.

Check the test format ahead of time: the number of questions, the type (multiple choice, free response, etc.), and the time limit. Then create a plan for working through them. For example, if you have 30 minutes to take a 60-question test, your limit is 30 seconds per question. Spend less time on the questions you know well so that you can take more time on the difficult ones.

If you have time to take several practice tests, take the first one open book, with no time limit. Work through the questions at your own pace and make sure you fully understand them. Gradually work up to taking a test under test conditions: sit at a desk with all study materials put away and set a timer. Pace yourself to make sure you finish the test with time to spare and go back to check your answers if you have time.

After each test, check your answers. On the questions you missed, be sure you understand why you missed them. Did you misread the question (tests can use tricky wording)? Did you forget the information? Or was it something you hadn't learned? Go back and study any shaky areas that the practice tests reveal.

Taking these tests not only helps with your grade, but also aids in combating test anxiety. If you're already used to the test conditions, you're less likely to worry about it, and working through tests until you're scoring well gives you a confidence boost. Go through the practice tests until you feel comfortable, and then you can go into the test knowing that you're ready for it.

## Test Tips

On test day, you should be confident, knowing that you've prepared well and are ready to answer the questions. But aside from preparation, there are several test day strategies you can employ to maximize your performance.

First, as stated before, get a good night's sleep the night before the test (and for several nights before that, if possible). Go into the test with a fresh, alert mind rather than staying up late to study.

Try not to change too much about your normal routine on the day of the test. It's important to eat a nutritious breakfast, but if you normally don't eat breakfast at all, consider eating just a protein bar. If you're a coffee drinker, go ahead and have your normal coffee. Just make sure you time it so that the caffeine doesn't wear off right in the middle of your test. Avoid sugary beverages, and drink enough water to stay hydrated but not so much that you need a restroom break 10 minutes into the test. If your test isn't first thing in the morning, consider going for a walk or doing a light workout before the test to get your blood flowing.

Allow yourself enough time to get ready, and leave for the test with plenty of time to spare so you won't have the anxiety of scrambling to arrive in time. Another reason to be early is to select a good seat. It's helpful to sit away from doors and windows, which can be distracting. Find a good seat, get out your supplies, and settle your mind before the test begins.

When the test begins, start by going over the instructions carefully, even if you already know what to expect. Make sure you avoid any careless mistakes by following the directions.

Then begin working through the questions, pacing yourself as you've practiced. If you're not sure on an answer, don't spend too much time on it, and don't let it shake your confidence. Either skip it and come back later, or eliminate as many wrong answers as possible and guess among the remaining ones. Don't dwell on these questions as you continue—put them out of your mind and focus on what lies ahead.

Be sure to read all of the answer choices, even if you're sure the first one is the right answer. Sometimes you'll find a better one if you keep reading. But don't second-guess yourself if you do immediately know the answer. Your gut instinct is usually right. Don't let test anxiety rob you of the information you know.

If you have time at the end of the test (and if the test format allows), go back and review your answers. Be cautious about changing any, since your first instinct tends to be correct, but make sure you didn't misread any of the questions or accidentally mark the wrong answer choice. Look over any you skipped and make an educated guess.

At the end, leave the test feeling confident. You've done your best, so don't waste time worrying about your performance or wishing you could change anything. Instead, celebrate the successful completion of this test. And finally, use this test to learn how to deal with anxiety even better next time.

**Review Video: [5 Tips to Beat Test Anxiety](#)**  
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### **Important Qualification**

Not all anxiety is created equal. If your test anxiety is causing major issues in your life beyond the classroom or testing center, or if you are experiencing troubling physical symptoms related to your anxiety, it may be a sign of a serious physiological or psychological condition. If this sounds like your situation, we strongly encourage you to seek professional help.

## Thank You

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We at Mometrix would like to extend our heartfelt thanks to you, our friend and patron, for allowing us to play a part in your journey. It is a privilege to serve people from all walks of life who are unified in their commitment to building the best future they can for themselves.

The preparation you devote to these important testing milestones may be the most valuable educational opportunity you have for making a real difference in your life. We encourage you to put your heart into it—that feeling of succeeding, overcoming, and yes, conquering will be well worth the hours you've invested.

We want to hear your story, your struggles and your successes, and if you see any opportunities for us to improve our materials so we can help others even more effectively in the future, please share that with us as well. **The team at Mometrix would be absolutely thrilled to hear from you!** So please, send us an email ([support@mometrix.com](mailto:support@mometrix.com)) and let's stay in touch.

If you'd like some additional help, check out these other resources we offer for your exam:

<http://MometrixFlashcards.com/TEXES>

## Additional Bonus Material

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Due to our efforts to try to keep this book to a manageable length, we've created a link that will give you access to all of your additional bonus material.

Please visit <http://www.mometrix.com/bonus948/texasartec-12> to access the information.

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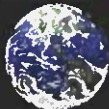
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