

**Genre** Informational Text

**Essential Questions**

What does it take to found a new country? What challenges have to be overcome?

A three-masted sailing ship with white sails is shown on a dark, turbulent sea. The sky is filled with falling snow or rain, creating a sense of a harsh, winter storm. The ship is positioned in the upper left quadrant of the cover.

# The Starving Time

**THE EARLY STRUGGLE TO  
SURVIVE IN AMERICA**

*by Kristine Cruikshank  
illustrated by Rebecca Green*

## A TIME OF DISCOVERY

After Columbus reached America in 1492, many other explorers followed. The next 200 years or so was a time of discovery and adventure. The explorers of this era came from Old World countries that included Portugal, Spain, England, France, and the Netherlands. They set sail to discover and lay claim to areas in the New World. When explorers and settlers arrived, they often found native people and, sometimes, even other settlers already living there.

In the beginning, people in the New World and people from the Old World traded goods, technology, and culture. This was called the Columbian Exchange. Thanks to the Columbian Exchange, coffee, apples, oranges, horses, pigs, cattle, and domestic sheep were introduced to the New World. Likewise, corn, potatoes, tomatoes, alpacas, llamas, and turkeys were sent back to the Old World.

The Columbian Exchange also involved movement of people. Many settlers from the Old World migrated to the New World in search of opportunity. This movement of people, known as *migration*, sometimes spread infectious diseases. People from the Old World brought smallpox, measles, whooping cough, chicken pox, bubonic plague, and typhus to the New World. These diseases had a severe impact on Native Americans because they lacked immunity to these foreign illnesses.



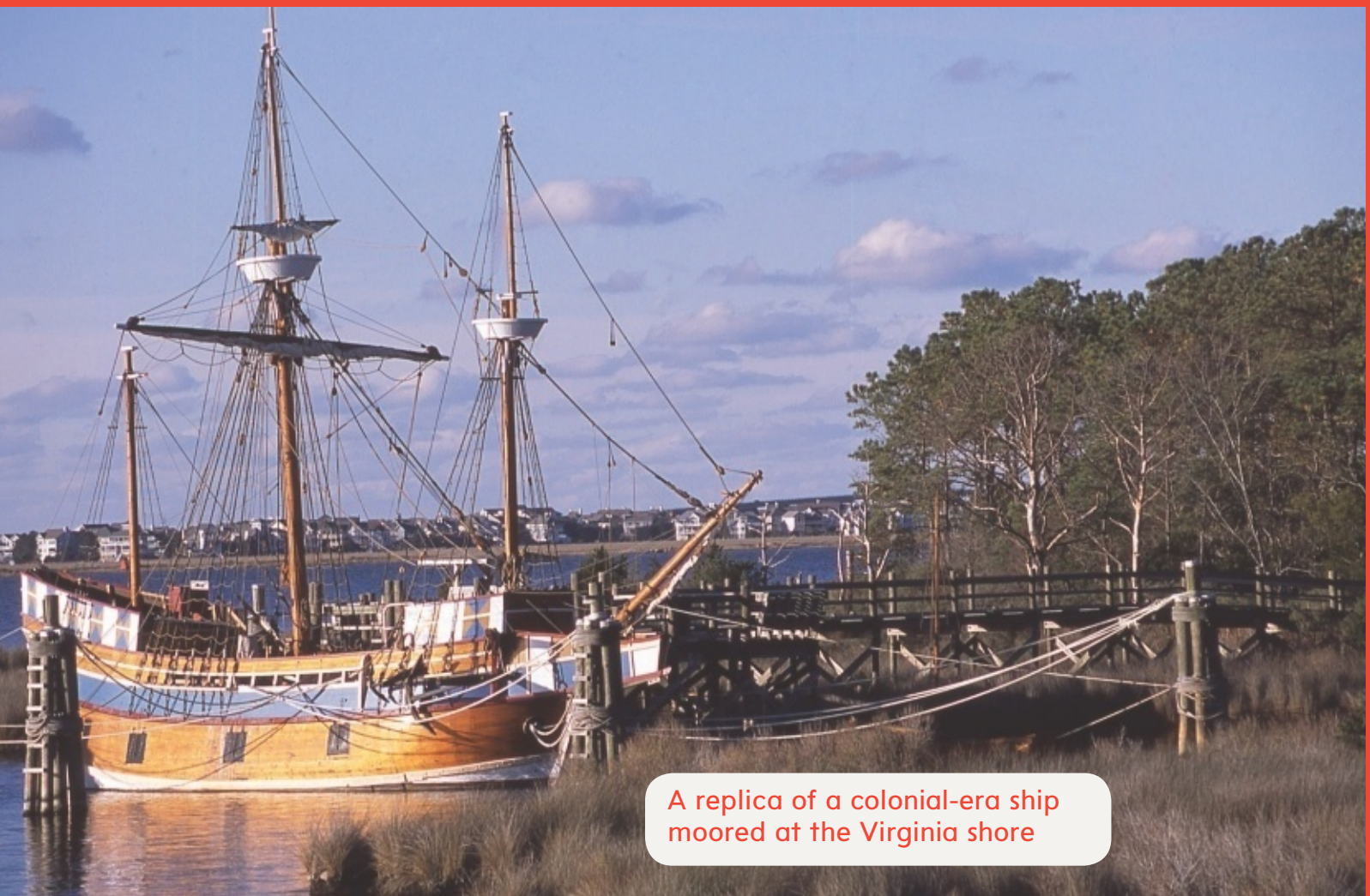
## THE NEW ENGLAND COLONIES

During the 1600s, France, England, Spain, and the Dutch Republic were competing to acquire territory in North America. King James I of England pursued this goal by creating colonies on the eastern coast of North America. These colonies would later be named the New England Colonies.

King James I chartered different companies to create the first settlements in the New England Colonies. These companies expected to create profit for investors via the mining and trading of precious metals, particularly gold and silver. In the 1530s, Spanish explorers had traded for or seized a great deal of gold in Central and South America. The English companies hoped similar profits could be made in North America.

The first two companies chartered by King James I were collectively known as the Virginia Company of London, or the Virginia Company. One of the companies, the Plymouth Company, sent settlers to establish a colony on the coast of present-day Maine in 1606. That same year, the second company, known as the London Company, sent settlers to establish a colony on the coast of Virginia. The colony in Maine was unsuccessful, and the settlers abandoned it shortly after its creation.





A replica of a colonial-era ship moored at the Virginia shore

The first colonists sent to Virginia came from a variety of backgrounds. Over one third of the settlers were members of the *gentry*. Gentry is a designation reserved for the most privileged members of English society. The Virginia Company recruited gentry who had a military background, and expected these gentry to counter any attacks by Spanish colonists and Native Americans and to protect the colony and the financiers' investments.

The first group of settlers also included a minister and a variety of skilled artisans, including bricklayers, carpenters, a blacksmith, a mason, a tailor, a barber, and two surgeons.

These first settlers had very little knowledge of farming. The Virginia Company expected the colonists to prosper by trading with the Native Americans and by shipping back the precious metals they mined. However, the Virginia Company did not recognize the need for the colonists to be self-sustaining. During recruitment, they told the colonists to focus on mining and trading, not farming. It would be a costly mistake.

## TRANSATLANTIC NAVIGATION

How did the colonists get to the New World? During this time, people used sailing ships equipped with basic navigational equipment. All food, liquids, and supplies for the long and treacherous journey were carried aboard the ships. Ship maintenance was time-consuming and difficult work. Storms could damage a ship, and in the worst case, send it to the bottom of the sea. Even with these dangers, people were willing to make the journey. These individuals were drawn by the promise of life in the New World, of wealth, and of adventure.

At the time, ships were propelled entirely by winds and ocean currents. As a result, Atlantic travel was restricted to specific routes. The Atlantic has a regular pattern of winds, called the *trade winds*. If a ship sailed west from Europe to the New World using the trade winds, it was first carried southward along the African coast before it went west across the Atlantic.

To return to Europe from the New World, a ship followed the trade winds northward along the North American coast. Eventually, the ship entered into an eastward wind pattern that blew from the west. Called the *westerlies*, these winds carried the ship back across the Atlantic.

The time of year that the ships sailed was also a critical factor. From June through November, tropical storms and hurricanes presented a serious threat. Strong winds and tall waves could tear sails, shatter masts, and damage hulls. Because of this, ocean travel dates were set during times that would reduce encounters with storms.

Trade routes in coastal New England presented considerable danger to ships during this era.





In addition to storms, another threat to the ships was an absence of wind. Without wind, they were at the mercy of ocean currents for propulsion. Ocean currents can support only very slow travel. If travel was delayed long enough due to lack of wind, the sailors ran an increased risk that supplies would be used up before their ship reached its destination.

Furthermore, sailors did not have modern navigation technology. They used a compass to estimate direction. To estimate their speed, they used a floating device known as a *chip log*. A chip log is a small wooden board attached to a length of rope. After the board was tossed over the rear of the ship, sailors measured how long it took the rope to unspool. Sailors also used celestial navigation to check the calculated position frequently. Celestial navigation is the use of the sun, the moon, and stars such as Polaris, the North Star, to navigate a ship.

An expert sailor using celestial navigation could determine the ship's latitude to within several miles, the approximate time of day, and the direction of true south. However, navigation errors were common. Navigation errors could lead to disaster by lengthening journeys, which put stress on limited supplies. They could also redirect ships into dangerous waters.



Like many early settlers, the Pilgrims came to North America to make a better life for themselves.

Despite the known dangers of transatlantic travel, the Virginia Company's plan was to send the colonists supplies via ship. These supplies included essentials, such as food. The plan may have seemed like a good idea to the Virginia Company, but it failed to take into account that travel between Europe and North America during the 1600s was slow and dangerous. Supply ships might be blown off course, stranded at sea, or sunk in swirling waters. If any of this happened, the supplies would not arrive when they were needed.

Settlers who survived the transatlantic journey ran into additional challenges. Once they landed in the New World, they had to find a place where they could settle and build a community. A good place needed some natural protection, like forests, coasts, or mountains. It also needed to have freshwater, game for hunting, and easy access to supply ships. English settlers also had to be wary of other settlers, such as the Spanish or French, who might challenge them and their right to settle the land. Settlers also needed to make friends and find ways to trade with the Native Americans who were already living in the area. For the colonists who came to settle Jamestown, Virginia, this meant interacting with the Powhatan.

## THE POWHATAN

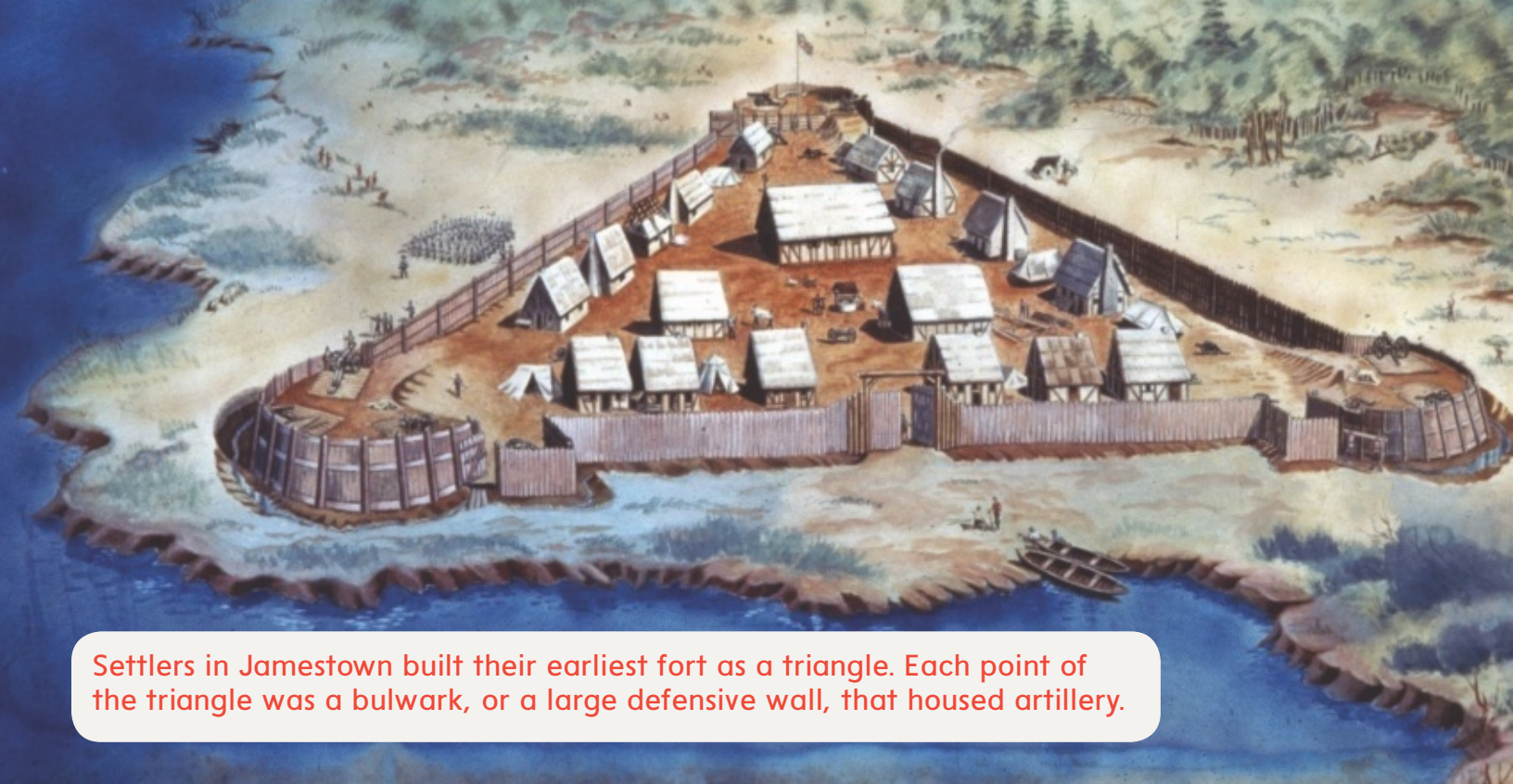
By the 1600s, Indians had lived in the Virginia region for more than 12,000 years. When exploring the area, the English first encountered the Powhatan Chiefdom, a collection of tribes that lived in the coastal plains of Virginia and had an estimated population of 15,000 people. The Powhatan lived in towns that consisted of several families living in longhouses called *yehakins*, which are large structures made of bent saplings and tree bark.

The Powhatan positioned their villages on high ground that overlooked waterways. They traveled long distances along rivers using dugout canoes. They gathered fish, oysters, and crabs from the rivers. Because the healthy soil and weather were suitable for plants, the Powhatan could tend crops without needing to irrigate.

The seasonal cycle played an important role in Powhatan life. Corn, beans, and squash were harvested during summer and fall. Fish, berries, and nuts were gathered during spring. When food was scarce, the Powhatan gathered oysters and clams. Food was most scarce during late winter through early spring. They supplemented their diet with increased hunting. They hunted deer, turkey, rabbit, and a variety of small animals. They called this coastal area home.







Settlers in Jamestown built their earliest fort as a triangle. Each point of the triangle was a bulwark, or a large defensive wall, that housed artillery.

## JAMESTOWN—THE EARLY YEARS

In 1606, the Virginia Company sent three ships with 105 colonists to North America to establish a colony. They arrived in North America on April 26, 1607. When they landed, they opened a sealed letter containing orders from the Virginia Company. The letter told the colonists to establish their settlement inland to protect against Spanish naval attacks. The letter also named the members of the colony's governing council, which included Captain John Smith. The colonists navigated upriver and found what they would call Jamestown Island, which they considered a suitable site.

The settlers were surprised to find that the island appeared to have few Native Americans. However, what the settlers did not realize was that the Native Americans had avoided the island for good reason. They knew it was poorly suited for settlement. Salt from seawater contaminated the area and made drinkable fresh water scarce. In addition, swampy conditions attracted vast numbers of mosquitos. Lastly, the island's isolation reduced its ability to support large animals suitable for hunting.

Ignorant of the problems, the colonists selected Jamestown Island for settlement. They liked it because it was easily fortified. They also liked its strategic position. The colonists began to establish their settlement by constructing a fort consisting of three walls, a storehouse, a church, and several houses.

Violent conflict between encroaching colonists and the Powhatan hampered early trading efforts. Circumstances briefly changed thanks to the efforts of John Smith. On June 2, 1608, Smith led an exploratory mission to locate economic opportunities in the Chesapeake Bay region. During this time, the group successfully traded with Native American tribes. Despite Smith's success during the mission, trade was never able to provide fully for the colony.

The colony's efforts to find gold and silver were also unsuccessful. Unfortunately, all that glitters is not gold, and the settlers in Jamestown found only pyrite. Although it is made of iron and sulfur, pyrite has the appearance of gold. For this reason, it is sometimes called "fool's gold." Trade and mining failed to generate profit for Virginia Company investors.

Because trade was less successful than expected, the colonists became increasingly dependent on supply ships from England. The first supply ship, led by Christopher Newport, arrived at the colony in early 1608. By the time he arrived, the colony's population had fallen to fewer than forty people.

Newport brought critical supplies, but he also brought many new settlers. To make the situation worse, a fire broke out within the colony shortly after the supply ship arrived, destroying stored food and supplies.



The Virginia Company's failure to prioritize farming experience would plague Jamestown. Very few of the settlers were skilled at farming, and the efforts the colonists did make to replenish food stocks were hindered by a drought in the region. Farming stopped almost completely. The drought also affected the Native Americans. Despite the Powhatan's own food concerns, the colonists still pressured them into trading. As the drought continued, the colonists periodically stole food from the Powhatan when the tribe was unwilling to trade.

A second supply ship arrived in the autumn of 1608. It carried vital supplies, as well as skilled laborers. Unfortunately, the colony was still unable to farm the food they needed to survive, and so the supplies were short-lived.

Tasked with discovering a shorter route to Virginia, Captain Samuel Argall's ship arrived at the colony in early 1609. He was shocked to discover that the colony was once more teetering on the brink of collapse. Damp conditions had destroyed the colony's meager supply of grain. Argall provided what little supplies he could, then returned to England.



To rescue the colony, the Virginia Company sent a fleet of nine ships to Jamestown in the summer of 1609. These ships carried more colonists and enough supplies to last through the winter. Most of the needed supplies were packed into one ship rather than spread evenly throughout the fleet. This main supply ship, the *Sea Venture*, also carried the new leaders for the colony.

Seven weeks into the voyage, the ships encountered a massive storm. During the storm, the ships were separated from one another. By mid-August, only seven of the nine ships had arrived safely in Jamestown. Unfortunately, the *Sea Venture*, along with its abundant supplies, was not one of them.

During the storm, the *Sea Venture* had begun taking on water. Admiral Sir George Somers recognized that the ship would certainly sink. To save the crew, he deliberately wrecked the ship onto shallow reefs in eastern Bermuda. The ship was permanently damaged. Over the course of nine months, the passengers and crew built two new ships using wood scavenged from the shipwreck and from trees. They named the ships *Deliverance* and *Patience*.



The seven ships that arrived at Jamestown in mid-August brought new colonists but few supplies. When John Smith was badly injured in a mysterious gunpowder explosion, he was forced to return to England for treatment. When Smith's successor, George Percy, became the new leader of the colony, he faced numerous difficulties. Winter was coming soon, and with hundreds of new people to feed on top of the colony's existing population, the food supplies were dwindling to nothing.

The lasting drought had also affected the food supplies of the Powhatan. During Smith's leadership, the Powhatan had reluctantly traded food for European goods. However, with Smith gone and the drought diminishing their own food supplies, the Powhatan's relationship with the colonists worsened. They sent an order to Percy that the colonists and the livestock must stay inside the fort. After putting up with the colonists for many months, the Powhatan's patience had finally come to an end.

In his journal, Percy wrote that colonists were being given meager rations of half a can of meal a day. Even with these strict limitations, he figured their supplies would only get them halfway through the winter. To survive, the colonists killed and ate seven horses that had arrived on the supply ships in August. They also ate dogs, cats, mice, and even shoe leather. The colonists became weak from starvation and were unable to fight off illnesses such as dysentery and typhoid.





Only sixty colonists survived the winter of 1609, with many succumbing to starvation, disease, and harsh winter conditions. This winter came to be known as the “Starving Time.”

Many factors led to this desperate period. The colonists’ lack of farming experience and the drought were major factors. Poor leadership also contributed to food scarcity. The selection of Jamestown Island, for example, led to problems with farming and hunting. The limited freshwater on the island made agriculture difficult. In addition, the small population of large animals on the island resulted in a rapid depletion of game suitable for hunting.

Another factor that contributed to food scarcity was the colony’s dependence on supply shipments from England. The Virginia Company planned to supply the colony regularly with shipments of food, equipment, and tradable goods. Disastrously, some shipments arrived later than expected or did not arrive at all.



A cloth map of early Jamestown that has been weathered by age

It was not until May 23, 1610, that the *Deliverance* and the *Patience* reached Jamestown. The crew expected to find a thriving colony. Instead they found the terrible aftermath of the Starving Time. Most of the colonists had died. Many of the survivors were emaciated and sick. Unfortunately, the arrival of the *Deliverance* and the *Patience* did not improve the situation. Because many of the supplies carried aboard the *Sea Venture* were destroyed, these two ships did not bring the critical supplies.

Given the desperate circumstances, the colonists decided to abandon the settlement. On June 7, 1610, the survivors boarded the remaining ships and departed for England. While sailing down the James River toward the Atlantic Ocean, they encountered three new ships, the latest supply mission from England. Thomas West, the newly appointed governor of the colony, was aboard one of the ships. He ordered the fleeing colonists back to the settlement. Ultimately, this supply mission became a turning point.

## THE OUTCOME OF THE COLONY

Following the Starving Time, conditions at Jamestown improved considerably. This was largely due to the efforts of John Rolfe, a business leader from London. John Rolfe had been part of the group that had shipwrecked in Bermuda, and had come aboard the *Deliverance* and the *Patience* with the latest supplies. Rolfe transformed the economic life of the colony. He used his business knowledge to establish a plan. His plan was to develop the agricultural capacity of Virginia. He focused his efforts on tobacco, a cash crop that could be exported to Europe for considerable profit. At the time, the dangers of using tobacco were poorly understood. Tobacco exports assured the financial security and permanence of the Virginia Colony.

After many years, the original site of the colony eventually fell into disrepair and ruin. Centuries later, however, renewed interest led to the excavation and preservation of the site. Today, people from around the world travel to Historic Jamestowne to learn about the first permanent English settlement in North America.

Archaeologists excavate around the site of Historic Jamestowne.





You will answer the comprehension questions on these pages as a class.

### Text Connections

1. What goods were introduced to the Old World from the New World by the Columbian Exchange? What was introduced to the New World from the Old World?
2. Why was it so important for ships to sail at certain times of the year?
3. What diseases did people from the Old World bring to the New World? Why were these diseases particularly dangerous for Native Americans?
4. How many colonists survived the winter of 1609? Why did so many perish?
5. Think of the struggles the colonists faced, such as disease, lack of supplies, and lack of experience in farming. How would being better prepared have changed life for the colonists? How do you think being prepared helps people face challenges?

### Did You Know?

The original thirteen British colonies in America were in New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia. It was those colonies that came together to form the United States.



## Write

Write about some of the challenges Native Americans faced when colonists arrived.

## Look Closer

### Keys to Comprehension

1. How did tobacco help save the Virginia Colony? What do we know now about tobacco?
2. During the drought, when food was scarce, what was the relationship like between the colonists and the Powhatan? Quote details from the text to support your answer.

### Writer's Craft

3. Reread the following sentence from the selection: "They supplemented their diet with increased hunting." Based on the context, what do you think the word *supplemented* means?

### Concept Development

4. Why were supplies shipped to the colony often delayed? Which specific reasons does the author give?





Read this Science Connection. You will answer the questions as a class.

### Text Feature

**Parentheses** contain additional text that clarifies information presented in the main body.

## Don't Be Fooled

In “The Starving Time,” you read about how the Jamestown settlers struggled to find valuable items to trade with the Powhatan people. Additionally, their efforts to find precious metals like gold were hampered by the discovery of pyrite, also known as “fool’s gold.”

You can find the element gold (Au) on the periodic table of elements. While pure gold ore is made from a single element, pyrite is different. It is a combination of iron (Fe) and sulfur (S). On the surface, however, it looks nearly identical to gold. If you discover a chunk of yellow rock, how can you tell the difference?

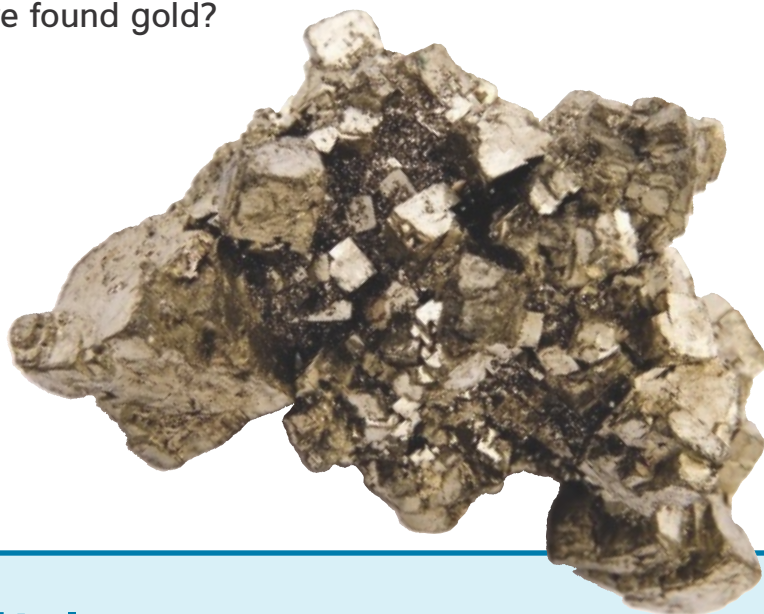
One way to distinguish gold (top photograph) from pyrite (bottom photograph) is to look at their color. Gold is silvery yellow, and it has more luster, or shine, than pyrite. Since it is made from iron, pyrite tarnishes more easily than gold. When a metal tarnishes, oxygen in air or water causes a chemical reaction that leads to corrosion and a lack of luster. The gold that is found in nature does not combine easily with oxygen, and therefore is less likely to appear tarnished. It is important to note, though, that gold is often mixed with other metals in order to give it strength. Therefore, gold jewelry may tarnish.

Gold is also much softer than pyrite. In order to test a metal’s strength, take an iron nail and scratch it. Gold will be easily cut, and you will see a large scratch where the nail was dragged across its surface. Pyrite, on the other hand, is much harder than gold. A nail will not be able to make a scratch in the surface of pyrite.

Despite their similarities, a couple of simple tests can help you distinguish pyrite from gold. Unfortunately, some of the Jamestown settlers did not know this at the time. They were fooled by “fool’s gold,” but now, you do not have to be.



1. Why is the periodic table of elements important in distinguishing gold from pyrite?
2. How can an iron nail help you tell if you have found gold?
3. When oxygen reacts negatively with metal, the metal tarnishes. Why is gold jewelry more likely to tarnish than pure gold?



## Go Digital

Research the Mohs Scale for Hardness. How much harder is pyrite than gold? What mineral is the hardest? What mineral is the softest?