

Teachers College Reading and Writing Project
A Mini-Unit on Writing Compare and Contrast Essays

Stubby the Dog: Unexpected Canine Hero
(An adapted excerpt from an informational book by Molly Picardi)

The year is 1917. All across Europe many countries are at war. At the time, people had never experienced a war so big and so violent and they began to call it The Great War. Today we call it World War I. In 1917, the war had already been going on for three years and thousands of people had died in the fighting. Far across the Atlantic, in a small city called Hartford, Connecticut a new puppy was born. Who would have guessed that this small bit of fluff would one day become a celebrated World War I hero?

Stubby was born in Connecticut during the height of World War I. He spent his puppy days wandering around Yale University, looking for food or a friend to help him out. The war meant many families had abandoned pets because it was hard to feed and care for them, when men and women were serving overseas. Stubby had been abandoned. He was a stray dog without an owner or a place to call home. In July of 1917, Stubby wandered onto a field at Yale where soldiers were training to help fight the war in Europe. Technically, dogs weren't allowed at army training, but the officers of the 26th Yankee division made an exception because they knew Stubby would help keep the soldiers' spirits high. With his friendly personality, Stubby quickly became a beloved mascot for the soldiers in the 26th division.



Stubby poses with members of the 26th Yankee Division at their training facility in New Haven, Connecticut in 1917

When the troops were **deployed** to France in 1918, Stubby accompanied them. Overseas, he was injured in a mustard gas attack. This experience taught Stubby to smell the mustard gas before his human comrades could. His keen sense of smell and his knowledge of mustard gas combined to mean that he could warn soldiers that mustard gas was in the air. This saved them from impending danger.

“Stubby, is there gas?” one soldier asked, when Stubby began to whine. “Look, he’s nodding his head!” another cried.”

“Get your gas masks on, soldiers!” yelled the Captain. “And get off the field.”

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The soldiers ran for safety, Stubby at the front of the pack, leading the way.

In this way Stubby was able to help protect the lives of his fellow soldiers. Overall, Stubby served for 18 months and helped soldiers in 17 battles. All the while, he boosted the morale of the troops stationed in France. After the war Stubby returned home with Private Conroy, one of the members of the 26th Yankee Division. As the most decorated dog of World War I, Stubby was celebrated in many victory parades and even went on to meet three US presidents. Stubby died peacefully in 1926 and is honored to this day at the Smithsonian Museum of Natural History in Washington DC.



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Rags: Hero Dog of WWI

This excerpt is adapted from Rags: Hero Dog of WWI: A True Story, by Margot Theis Raven, a picture book that is in many classroom libraries. It tells part of the story of Rags, a heroic dog of World War I. During World War I, strays sometimes attached themselves to a person or combat unit and then went to war side by side those humans. These soldier-dogs were not initially militarily trained, but they were gratefully received and employed by U.S. forces in WWI. The dogs bravely risked their lives and lifted the spirits of the troops. Read on to learn how a young soldier, Donovan, finds a stray dog who becomes a hero.

Many, many years ago during WWI, there lived a real dog who began life in an alleyway of a Paris café. The dog was a shaggy mutt, a small, scrappy gutter-pup, who belonged to no one but the streets where he roamed. He didn't even have a name except for the angry ones café owners yelled to chase him from their garbage. The stray lived by his wits alone, for he hadn't a friend in the world since the day he was born. Then one July evening sirens blared. They warned the people of Paris to shutter windows and blackout lamps so they wouldn't be seen by enemy planes. Danger filled the streets, so the dog took shelter in an empty doorway just as the night turned dark as a pocket. The mutt didn't know his life was about to change when an American soldier stumbled in the inky blackness and—YIPE!—stepped on his paw.

Later, on the battlefield of WWI

Donovan made Rags a little gas mask to protect him from the enemy's poisonous gas. Rags hated it. It blocked his nose; he couldn't smell. He'd push it off with his paws, but Donovan would put it right back on. "We don't want you going west on us, pal," he'd say in the way soldiers spoke of dying. Rags didn't understand Donovan, but his voice calmed him like a nap in the sun. So he'd keep the mask on.

Then one day, October 9, 1918, a major battle began in Argonne Forest. Fog was so thick Donovan couldn't see his lines. The air was choked with poison. Men were trapped. Donovan tightened their gas masks and tied a message on Rags. It told the rear soldiers where to fire to help the men.

Donovan's mouth was tight with worry as he gave Rags the command, "Go find. Find the rear guard. With your sharp ears you'll hear them—they are where the big guns are." Rags began the run back where a big blast hit nearby. It sprayed metal like hard rain over Rags. It cut his paw, his ear, his eye. It threw Donovan to the ground, tore off his mask. Rags's mask was gone, too. Rags licked Donovan's face. Donovan struggled to his feet. They moved together. Donovan and Rags, limping, staggering toward the rear. Another shell hit.

It flipped Rags to the ground. Rags was hurt. But he kept crawling to the soldiers who needed his message. Rags could hear the rear guard—the soldiers who fired the big guns.

Rags made it the rear guard and a soldier opened the message he carried.

Wounded Donovan was taken to a field hospital. "Rags?" he gasped as he awoke to find his dog beside him.

Then loudly, the big guns began to fire! CRASH, BOOM... blasted the shells from the rear guard to rescue the trapped men. Rags turned his face up to Donovan at the good sound. He knew.

"You did it, pal!" Donovan's smile broke wide over Rags. "You saved them."

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Exemplar Extended Response

The authors of “Stubby the Dog: Unexpected Canine Hero” and “Rags: Hero Dog of WWI” both explore unusual friendships between dogs and soldiers.

- Explain why the dogs and soldiers come together.
- Explain how the dogs helped the soldiers.
- Use details from both articles to support your response.

Both “Rags: Hero Dog of WWI” and “Stubby the Dog: Unexpected Canine Hero” are about stray dogs who helped soldiers during WWI. War can be really scary, so it was helpful to have a dog as a best friend. More than that, the dogs saved lives and helped the soldiers in many ways.

Rags helped Donovan in many ways. Rags was a stray before he met Donovan. He was wandering around the streets of Paris eating scraps. He and Donovan came together when Donovan stepped on his paw. Rags and Donovan became really good friends and that helped them both. It changed Rag’s life. The text said, “Rags didn’t know his life was about to change.” Rags went to war with Donovan. During a battle in Argonne Forest, Donovan couldn’t see the lines and the air was full of poison. Donovan got injured, and other soldiers were in danger. They needed to know where to shoot. Donovan “tied a message on Rags. It told the rear soldiers where to fire to help the men.” When Rags delivered the message to the soldiers, a big blast “sprayed metal like hard rain over Rags.” Later, when another shell hit, the text said that Rags “kept crawling to the soldiers who needed his message.” Donovan said that Rags saved the men.

Stubby also helped his soldiers in many ways. Stubby was living by himself before he met the soldiers. The text said, “Stubby had been abandoned.” This is the same as Rags. When he wandered onto the field at Yale and met the soldiers, he started to help them right away. The text said, “Stubby would help keep the soldier’s spirits high.” This means he would cheer them up when things felt tricky. Just like Rags went to war with the soldiers, so did Stubby. He helped even more than before. Stubby could smell mustard gas and warn the soldiers if there was mustard gas in the air. In the text, it says that this “saved them from impending danger.” Specifically, Stubby was able to help soldiers in 17 battles. Many soldiers lived because Stubby helped them.

Even though Rags and Stubby both helped their soldiers during war, the help they gave was different. Stubby used his nose to save the soldiers, which is different from Rags who used his “sharp ears” to find the rear guard. Also, Rags helped in one battle, but Stubby helped in many battles. But the help that both Rags and Stubby gave was important. Everyone would be lucky to have a dog as a best friend!

Owen & Mzee

Adapted from a book by Isabella Hatkoff, Craig Hatkoff, and Dr. Paula Kahumbu

In Kenya, a country in Africa, a baby hippopotamus lived with his mom and many other hippos. The hippos lived near a freshwater river where they could eat and rest.

But one day, a huge storm flooded the river and washed the hippos closer to the salty sea. There was a village by the sea, and the hippos decided to stay there. They liked to eat the grass from people's yards. This made the villagers angry. But the people could not make the big hippos leave the village. That's because hippos can weigh up to 8,000 pounds!

One morning, huge waves from the sea crashed onto the shore. The hippos were separated and the baby was left alone. The villagers tried to rescue the baby hippo. But when they tried to move the hippo with ropes and nets, it made the hippo scared and angry. One brave villager named Owen Sobien used a shark's net to catch the baby hippo. The villagers were so happy that Owen Sobien saved the hippo, that they named the baby hippo "Owen" too!

The villagers didn't know what to do with baby Owen. They called Dr. Paula Kahumbu at Haller Park. Haller Park is an animal sanctuary, a safe place for animals to live. Because Owen didn't have his mom, he would not be able survive on his own. Dr. Paula said baby Owen should come to live at Haller Park.

Dr. Paula went to pick up Owen from the seaside village. When she arrived at the village, she had trouble getting Owen into the truck. He was angry because he lost his mom. He was angry from the nets wrapped around him. And now he was angry that Dr. Paula was trying to get him into the truck.

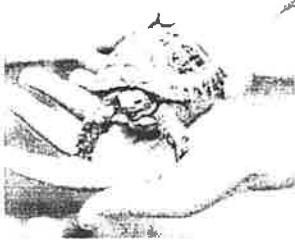
When Owen finally arrived at Haller Park, Dr. Paula cut Owen's ropes and nets to let him go. They put him in a big cage full of trees and bushes.

An old tortoise named Mzee also lived in the cage. He was 130 years old! Mzee liked to be alone. Owen ran right up to Mzee and hid behind him. This is a normal thing that baby hippos do. They hide behind their mothers. Did Owen think Mzee was his mother?

At first, Mzee kept walking away from Owen. But soon, Mzee and Owen were becoming friends! Sometimes Mzee would walk toward Owen, and then Owen would snuggle next to Mzee. Owen and Mzee also ate their meals right next to each other.

Later on, Owen and Mzee were together all the time. They swam together, ate together, and slept right next to each other. Both animals are large and could have decided to be mean to each other. But they didn't.





A turtle is small, but a tortoise is big.



Owen the hippo and Mzee the tortoise are about the same size

Dr. Paula isn't sure why Owen and Mzee get along so well. Maybe Owen thinks Mzee is his mother, since Mzee is also large and round like a hippo. Maybe Mzee was tired of being alone and was ready for a friend. Or maybe they like being friends even though they are different animals.



Owen and Mzee snuggle together

Suryia & Roscoe

Adapted from a book by Bhagavan “Doc” Antle with Thea Feldman

One day, an orangutan named Suryia and an elephant named Bubbles were out for a walk in South Carolina. Suryia and Bubbles lived in a wildlife preserve. A wildlife preserve is like a zoo, but the animals don’t live in cages. Suryia was riding on Bubbles’ back and they were on their way to the river. Then, they heard a noise in the bushes. What could it be? It was a dog named Roscoe! The dog ran right up to Suryia and Bubbles. Oh no! Bubbles the elephant wasn’t sure what to do.

But Suryia the orangutan jumped down and ran toward Roscoe. Would Roscoe run away? No! Roscoe ran toward Suryia at the same time! Suryia hugged Roscoe with his long and hairy orangutan arms. Roscoe wagged his tail back and forth. When dogs wag their tails, it means they are happy. Even though they just met, Suryia and Roscoe were already friends.

The three animals walked to the river to play. Bubbles the elephant went in the water to splash around. Suryia and Roscoe stayed on the land to play. When it was time to go back home to the wildlife preserve, Roscoe followed Suryia and Bubbles inside. Roscoe was hungry. Suryia tried to share his banana with Roscoe, but Roscoe didn’t like bananas. Then Suryia tried to share his orangutan food with Roscoe, and Roscoe loved it! The people working at the wildlife preserve tried to find Roscoe’s owners. But they couldn’t find anyone who knew Roscoe. They decided that Roscoe could stay and live at the wildlife preserve forever!

Now, Suryia and Roscoe are always together. They play together. They walk together. When they walk, Suryia holds Roscoe’s leash. When it’s time to swim, Roscoe paddles and Suryia holds on tight since orangutans don’t swim. Suryia and Roscoe play together, eat together, and snuggle together. They are best friends!



Suryia and Roscoe are best friends

Mr. Ferris and His Wheel

Adapted from a book by Kathryn Gibbs Davis

Every few years a special celebration is held in different parts of the world. This celebration is called "The World's Fair." The fair is designed for countries to show off the things that inventors and builders have created. More than 125 years ago, Chicago hosted The World's Fair.

The planners of the fair in Chicago created a contest to see who could design a monument that would be the main attraction to the fair. The planners wanted it to be even better than Paris' Eiffel Tower, which had been the main attraction at the last World's Fair in Paris, France.

George Washington Gale Ferris, Jr. was an engineer who saw the contest and had an idea. He proposed a design for a huge structure. It would be big. And it would move. He designed a giant wheel that could lift people up and carry them around and around. At the top of the wheel, people would be able to see the entire fairgrounds!

The planners were doubtful. They did not think such a structure would be safe for people to ride. They didn't think the giant wheel would be strong enough. They worried the wheel would break. But Mr. Ferris had a plan. He knew there was a new kind of metal, called steel, that was stronger and lighter than any other. He could use steel to build the wheel.

The judges finally agreed to give Mr. Ferris a chance to build his giant wheel for the fair. But they would not give him the money to buy the supplies. Mr. Ferris tried to borrow money from banks. The banks denied him loans for the money because they thought his idea sounded impossible. So Mr. Ferris had to use his own savings to order the supplies and get started.

To start building, Mr. Ferris and his crew had to dig down into the ground to make a foundation, or strong base. It was January and the ground was frozen. That meant digging was hard. The crew had to use dynamite to blast through the ground. But when they did, they found quicksand which almost sucked in the men and equipment! Eventually the crew dug down past the quicksand and they were able to put steel poles into the ground. These poles were the foundation of the giant wheel.

Throughout the building process, people doubted Mr. Ferris. Even his business partner wanted to give up and quit. But Mr. Ferris was confident that his giant wheel would work.

Finally, two months before the World's Fair was to open, the wheel was finished and ready for people to ride. The wheel was safe! Mr. Ferris was the first to ride inside one of the little passenger cars with windows that hung from the Ferris wheel. When other people started going for rides, they didn't want their ride to end.

The original Ferris Wheel was so popular that one year later, another one was built in California. That wheel, and all others after it were called "Ferris wheels," named after Mr. Ferris. There may be only one Eiffel Tower, but today, Ferris wheels can be found at fairs and carnivals all over the world.



Ferris Wheel at the Chicago World's Fair 1893

Balloons Over Broadway

Adapted from the book by Melissa Sweet

Tony Sarg started inventing things when he was very young. One of his first inventions was a system of ropes that he could pull on from his room inside the house which opened the doors of the chicken coop outside in the yard. With one tug, Tony could feed the chickens without getting out of bed!

When Tony grew up, he kept making inventions using ropes. He made marionettes, puppets that hung from ropes. He held the ropes and let the puppets hung below. By pulling on the ropes in certain ways, Tony could make the puppets move just like real people.

Tony moved to New York City where there was a famous store called Macy's. The owner, Mr. Macy, wanted to create a special display of puppets in the windows of the store. Mr. Macy asked Tony to design moving puppets for the windows. And so Tony did. Soon, his puppets were on display in the windows of Macy's. Shoppers would stop outside the store windows and see the amazing little puppets moving all by themselves.

In 1924, Mr. Macy wanted to create a celebration for his employees. Many employees had come from other countries and missed the music and dancing they would do in their old homes. Mr. Macy thought a parade on Thanksgiving Day would be a nice way for his employees to celebrate in their new home, New York City. Mr. Macy asked Tony for help. Tony said yes.

Tony designed and created a parade with decorated floats, people in costumes, and wild cats in cages. However, the lions and tigers in the cages scared the children watching the parade. Mr. Macy asked Tony to think of something safer than wild animals in cages.

Tony wanted to replace the live animals with puppets. But how could he make puppets that were big enough for everyone at the parade to see? First, Tony designed the huge puppets to be built out of rubber. They looked like giant balloons connected to sticks that people held below. But they were still heavy, and they didn't go very high up for everyone to see.

The next year, Tony wanted balloons that he could move like puppets at the parade. He also wanted them to fly higher. So he made a plan. Instead of having his balloons made of rubber, he made them out of silk—a lightweight but strong fabric. He connected the balloons to ropes held by people on the ground. People could pull the ropes to make the balloons move in certain ways, just like puppets. The balloons were filled with helium, a lightweight gas that made them float.



To fly large balloons before parade

When people paraded these new, moving balloons down the streets, spectators were astounded. They had never seen anything like it! The parade was such a success, that Mr. Macy's store still has a parade each year on Thanksgiving Day with giant balloons moving like puppets in the sky.

Antarctic Expedition G7/8

Adapted from the book by Katy Lennon

Antarctica is Earth's southernmost continent. It's so large that it covers 9% of Earth's surface, and it's covered in icy and snow. Much of Antarctica is covered by huge sheets of frozen ice rivers are called glaciers. In some parts, the ice is 7,000 feet thick. The outside temperature in winter can be as low as -128 degrees Fahrenheit. Because weather conditions are extremely harsh, researchers and visitors mostly visit in the summer months (which are December, January, and February since Antarctica is in the Southern Hemisphere) when temperatures warm up to -32 degrees Fahrenheit.

Despite these extreme conditions, explorers and researchers have been venturing to Antarctica since the 1800s. Some explorers wanted to be the first to reach the South Pole. However, researchers wanted to spend time living in Antarctica in order to study the glaciers, rocks, and wildlife. One such man was the Australian geologist and explorer Douglas Mawson. He had already visited Antarctica with British explorer Ernest Shackleton in 1907 when their group tried to reach the South Pole. Just four years later, Mawson returned to the frozen continent with a team of researchers. His plan was to be there for three years and he and his crew would study the rocks, glaciers, wildlife, and weather.

In order to conduct research, the crew would need to leave their base camp and go out on an expedition, or long trip to gather data. Mawson and his crew of two other men had been on the expedition for 35 days when things began to go badly. One of his crew men, Belgrave Ninnis, died when he suddenly fell down a steep crevasse, a long hole formed by a severe crack in the ice. Later on, Mawson's other crew member, Xavier Mertz, died of illness. Mawson was the only member of his crew to survive and return to the base camp.



Mawson Expedition

Although he had done research, he had to leave his camera, film, and supplies out on the ice because he was too weak to haul them on his sled. Furthermore, he had no more dogs to pull his sled, because in desperate hunger, he killed his dogs in order to provide food for himself.

The danger and risk of Mawson's expedition did not deter later explorers and researchers from traveling to Antarctica. Today, scientists go to Antarctica to study the ice, atmosphere, and ocean. They are able to learn how planet Earth works and study the effects of human-induced problems like pollution.

There are several research stations in Antarctica, but the largest is called McMurdo. McMurdo is the home of the United States Antarctic Program. McMurdo is a series of many buildings

similar to a small town. The research station has laboratories, living quarters, a firehouse, a power plant, stores, and clubs. All these buildings are equipped with water, telephone, and power. Researchers then set off on expeditions, just like Mawson did so many years before, in order to conduct research. When they set off, they take enough food and supplies to last several weeks. This way, if weather conditions change, the scientists can safely survive away from McMurdo for extended periods of time. One of the tools scientists use is a sophisticated Global Positioning System (GPS). GPS allows researchers to know their exact location, and also to monitor the movement of glaciers. GPS monitors located at different parts of a glacier send their exact position one time a day. Scientists compare each day's position to understand how much or how fast a glacier moves.



McMurdo Station in Antarctica

Other research conducted in and around Antarctica centers on its wildlife. One species scientists study is penguins. They monitor how the penguins breed, feed, and interact with one another. Other animals are found off the coasts of Antarctica. For example, killer whales and seals in the ocean have a predator-prey relationship. By studying the Antarctic's waters, scientists have discovered that fish stocks have been depleted due to years of illegal and unregulated fishing.

In order to preserve not only the wildlife and environment of Antarctica, scientists and conservationists from the United States, Australia, Japan, Norway, and South Africa have successfully made the continent a "nature preserve." These five countries are enforcing the Antarctic Treaty which states that the environment must be protected and that research is the highest priority. The treaty goes on to forbid military activity, nuclear testing, and radioactive waste cannot be discarded there. Finally, the treaty makes it clear that Antarctica cannot be owned by



Penguins in Antarctica

any one country. Fifty countries have signed the Antarctic Treaty and they meet once a year to find new ways to keep the continent safe from harm.

One result of researching Antarctica is that now people have an increased interest in the continent. With added interest, comes desire to visit and see it for yourself. This means that tourism is also part of Antarctica. Cruise ships travel to Antarctic waters in the summer months and allow passengers to behold with their own eyes the crystal blue icebergs and pristine white snow and ice. Passenger planes can also land on Antarctica, bringing people and their guides on guided ice hikes and camping trips. Visitors are expected to “leave no trace behind.” Even leaving behind something biodegradable, such as a banana peel, is troublesome. It will freeze before it ever has the chance to break down. And although cruise ships may stay at sea and not affect the land, there is the risk of pollution should they leak fuel into the water.

When compared with the rest of Earth’s land, Antarctica remains relatively untouched. Scientists feel strongly that by studying in Antarctica, they can learn valuable information about Earth, and how humans can help to preserve it. Tourists see Antarctica as a giant nature preserve, and they want to go and appreciate the landscape for themselves. Whether one is a professional researcher, or just a curious viewer, Antarctica is a special kind of natural beauty.

Destined for Space

Adapted from the book by Don Nardo

Humans have been exploring new lands for centuries. Both the thrill of being the “first” to reach a place and the large amount of research that can be done in new places draws people to continue exploring. In the famous television show *Star Trek*, outer space was dubbed, “the final frontier.” Humans have been trying to get to space for decades. Some countries have special agencies devoted to the advancement of space exploration. One such agency is the United States’ NASA (National Aeronautics and Space Administration). Its aim is to peacefully launch spacecrafts. Over the last 50 years, NASA has learned much about this *final frontier*. And the exploration isn’t over yet.



The sun peeking over the Earth

NASA was created in 1958 as a result of the Space Race between the United States and the Soviet Union. World War II had ended. Although they had been allies during the war, when it ended, each country tried to ensure it was considered the world’s most powerful nation. This sense of competition was evident as each country tried to outdo the other with regard to reaching and exploring parts of space. At first, the Soviets were more successful, when in 1957, they successfully sent an unmanned satellite called *Sputnik* into space.

The United States and NASA felt pressure to keep up. Early into its existence, NASA had major launch successes. One was the *Freedom 7*, piloted by astronaut Alan Shepherd, which spent several minutes in space. Another was the *Gemini 5*, piloted by C. Gordon Cooper and Charles Conrad Jr., which allowed the astronauts to practice space docking, or connecting one spacecraft to another while in orbit. Perhaps NASA’s most memorable space launch was in 1969 when the *Apollo 11* successfully landed on the surface of Earth’s moon. Astronaut Neil Armstrong walked out onto the lunar surface and famously stated, “That’s one small step for a man, one giant leap for mankind.” Not only was Neil Armstrong’s landing a historic moment in scientific achievement for the whole human race, it also provided the United States with a major victory over the Soviet Union. The United States was the first nation to put a man on the moon.

As with all kinds of exploration, risk is always a factor. Even with properly built spacecraft and well-trained astronauts, tragedies can occur. For example, in 1967 NASA’s *Apollo 1* space capsule accidentally caught fire during a ground test, and three astronauts were killed. To date, 21 astronauts from various countries and space agencies have died in spacecrafts.

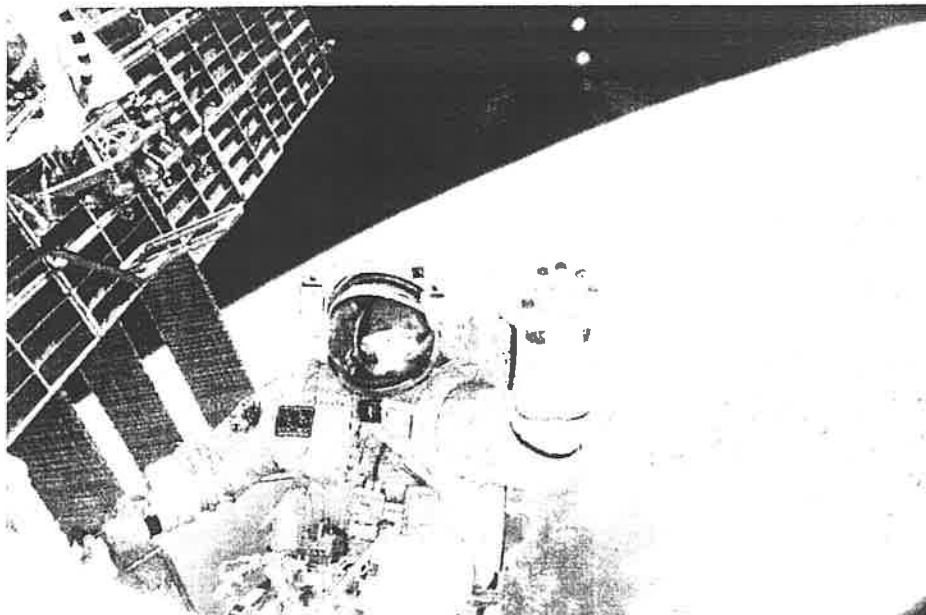
After Neil Armstrong’s first walk on the moon, NASA continued to innovate by launching six more moon missions. Astronauts were able to do scientific research on the moon and even brought moon rock samples back to Earth. From the samples, astronauts were able to learn more about what the moon is made of, the age of the whole solar system, and even how the solar system was formed. Astronauts



also conducted special tests that allowed them to measure how far away the moon is from Earth. In fact, they discovered that the moon is actually moving away from the Earth by 1.5 inches per year!

As a result of NASA's Apollo program, space stations have been built in space where astronauts from various countries can dock and conduct research. The largest space station is the International Space Station (ISS) which is funded by the United States, Japan, Canada, and the countries that are part of the European Space Agency. One of the things astronauts at the ISS study is how being in space for extended periods of time affects the human body. They feel that if people continue to venture farther and farther into space, and eventually want to *live* in space, then

scientists will need to know how well humans can survive somewhere other than Earth. Other types of research at the ISS include studies on human bone growth, genes, and creating new vaccines. The space station also allows astronauts to take pictures of Earth. From the pictures, scientists can study how Earth's surface



changes over time.

Scientists are always discovering new ways to reach farther into space. But traveling farther than Earth's moon would take a very long time. Therefore scientists have sent satellites and probes, which are like robots, to places such as Mars. Photos taken by the probes show that Mars has volcanoes. This is evidence that Mars and Earth have common features. Perhaps this means that there are also similar lifeforms on Mars, or that someday humans could live on Mars too?

It seems the more humans learn about space, the more motivated they are to get there themselves. This means it won't just be astronauts from agencies like NASA who go to space in the future. Some say that eventually there will be colonies of people living in space. People might mine the surface of the moon's soil and rocks looking for minerals. Some say that mined materials could be used to build or expand the colony's existing structures.

But before humans actually go off to live in space, they can already visit. Space tourism has allowed people to travel up into space, and for a short time, experience what it's like to feel weightless. The Russian Space Agency has even taken tourists to visit the ISS! In fact, the Russian Space Agency has raised at least \$20 million from space tourism. They've used this money to fund more space research and exploration.

Some argue that the Russian Space Agency has figured out an excellent way to raise money to explore space, while at the same time providing a new kind of tourism to citizens. Others say that before people spend time trying to learn about space, first they should focus on fixing problems like war, disease, and hunger here on Earth. And scientists argue that by continuing to try to reach new areas of space, new technologies are always being developed, and these new technologies benefit everyone.

Settlement: Jamestown and the Founding of English America (Lexile 890)

James Horn, The Gilder Lehrman Institute of American History, adapted by Newsela staff

1 Three ships left London, England, for North America in 1606 to set up England's first colony in America. Captain Christopher Newport led the group. The largest of the ships was the Susan Constant, which carried 71 passengers and crew. The Godspeed followed with 52 men on board, and the smallest ship, Discovery, had 21 men. Others had tried to do this but failed. Sir Walter Raleigh set up three voyages between 1584 and 1587. Sir Humphrey Gilbert led the first try. It failed, and Gilbert's ship sank on the return to England.

2 The next group landed on Roanoke Island in 1585. In the winter of 1586, they searched the Chesapeake Bay for harbors for larger ships. England was at war with Spain and it needed spots from which to attack Spanish treasure ships crossing the Atlantic. But problems with Native Americans and the freezing winter forced them to return to England.

The Lost Colony of Roanoke was yet another failure

3 In 1587, a third attempt was led by John White. It also failed, and all 117 men, women, and children disappeared. It was known as the Lost Colony of Roanoke.

4 In 1604, England's King James I signed a peace treaty with Spain. However, the king still wanted colonies in North America. He wanted to find gold or silver mines, new crops, a route to the Pacific Ocean and trade with Native American peoples. On April 10, 1606, the king gave permission to the Virginia Company to set up two colonies. One was on lands that today lie between North Carolina and New York. The other stretched up to Maine. The Virginia Company of London was a trading company that sponsored the southern colony.

5 The ships arrived on April 26. They settled about 50 miles from the entrance to Chesapeake Bay along the James River. They named the settlement Jamestown after their king.

Powhatan ruled thousands of native people

6 Virginia was ruled by the powerful chief Powhatan. He ruled about 34,000 people throughout 30 tribes. The colonists tried to be friendly so they could trade their goods. At first it went well, but then several hundred warriors attacked the settlement and things changed. The colonists quickly built a fort for protection that faced the James River.

7 The colonists felt safer, but disease, Native American attacks, bad drinking water and poor food killed about two-thirds of the men. By December, only 38 colonists were

alive. Jamestown was dying.

- 8 More people and supplies came in early 1608. Captain John Smith did not find gold or a way to get to the Pacific, so he made a new plan. He said the colony should begin making goods that could be sent back to England.

Virginia Company wanted more profit from Jamestown

- 9 The Virginia Company of London wanted Jamestown settlers to send it more money. More goods were produced and the search for gold started again.

- 10 Hundreds of colonists arrived between 1608 and 1609, which angered the Powhatans. In the winter of 1609, the Powhatans trapped the colonists on Jamestown Island. They cut off their food and during “the starving time,” almost 200 people died in the colony.

- 11 New leaders brought even more people to Jamestown in the spring of 1610. These leaders made new laws. The people had to go to church twice a day. No one could swear, and stealing and trading with the Indians without permission were now punishable by death.

In the early 1620s, tobacco was becoming king

- 12 By the early 1620s, much tobacco was being grown and sent to England. Between 1618 and early 1622, at least 3,000 new settlers arrived. Native Americans were losing more land. England was happy because it was richer. The Native Americans were angry and on March 22, 1622, they attacked settlements all along the James River. One-quarter of the colony’s white population was killed.

- 13 King James then took control of Virginia, which became England’s first royal colony in America. The final defeat of the Powhatans and tobacco brought success to Jamestown after 1625.

- 14 Jamestown taught the English a hard lesson. The New World gave many people a richer life than they could have had in England. It also destroyed the lives of the Native Americans, whose lands were taken by colonists so the new country could grow and become rich.

Settlement: Jamestown and the Founding of English America (Lexile 1020)

James Horn, The Gilder Lehrman Institute of American History, adapted by Newsela staff

- 1 Shortly before Christmas in 1606, three small ships left England for North America. The plan was to set up England's first permanent colony there. The fleet commander was Captain Christopher Newport, who had made many voyages to the Caribbean and knew as much about American waters as any Englishman alive.
- 2 The largest of the ships was the Susan Constant, which carried 71 passengers and crew. The Godspeed followed with 52 men on board, while the smallest ship, Discovery, with 21 men, ferried supplies and messages between the larger ships.
- 3 This expedition was not the first attempt to establish a colony in America. Sir Walter Raleigh set up three voyages between 1584 and 1587. His half-brother, Sir Humphrey Gilbert, led the first attempt but failed.
- 4 The next attempt landed on Roanoke Island in 1585. In the winter of 1586, a small group searched the Chesapeake Bay areas for deeper harbors. England was at war with Spain and needed places for attacking Spanish treasure ships crossing the Atlantic. But problems with Native Americans and the harsh winter forced their return to England.
- 5 The third attempt, made in 1587, was led by John White. It ended in failure with the disappearance of 117 men, women and children. This became known as the Lost Colony of Roanoke.

King James Wanted to Colonize North America

- 6 In 1604, King James I of England signed a peace treaty with Spain and no longer needed ports for attacking Spanish ships. Yet he still wanted to claim land in North America, search for gold or silver mines, find a passage to the Pacific Ocean and trade with Native American peoples. On April 10, 1606, the king granted a charter to the Virginia Company to create two colonies. One was on lands that today would be between North Carolina and New York. The other stretched up through Maine. The Virginia Company of London sponsored the southern colony and created a local council with an elected president.
- 7 The settlers arrived off the Virginia coast on April 26. Along the James River, the council selected a site on a peninsula about 50 miles from the entrance to the Chesapeake Bay. They named the settlement Jamestown for their king.
- 8 The English had settled in a region ruled by a powerful Indian chief named Powhatan, the father of Pocahontas. The Native Americans called the area Tsenacommacah and it included more than 30 tribes. The colonists tried to establish friendships to encourage trade. An attack on the English settlement by several hundred warriors in May changed

things, however. The colonists quickly built a triangular fort facing the James River.

Jamestown Struggled Until More Colonists and Supplies Arrived

- 9 Early explorations found that the area was rich in natural resources. The Indians hinted at great wealth in the mountains to the west. The colonists felt safe in their fort. However, after Captain Newport returned to London in June 1607, disease, Native American attacks, polluted drinking water and bad food killed about two-thirds of the men. Jamestown was dying.
- 10 More colonists and fresh supplies came in 1608. Captain John Smith led two explorations west but found no gold and no river to the Pacific Ocean. His new plan was for the colony to produce goods that could be sent back to England.
- 11 Meanwhile, the Virginia Company of London wanted more money from the colonists. The colony manufactured more goods and the search for gold started again. Efforts were also made for the Powhatans to become Christians.

More Colonists Led to More Problems

- 12 Hundreds of colonists arrived between 1608 and 1609, which led to more problems with the Powhatans. In the winter of 1609, the Powhatans trapped the colonists, cutting off food supplies to Jamestown Island. During “the starving time,” the colony’s numbers dropped from about 280 to 90. Only the arrival of Sir Thomas Gates, Lord Delaware, and hundreds of new settlers in the spring of 1610 saved the settlement.
- 13 These men set up new laws. The people had to go to church twice a day. No one could swear, and words of treason against the leaders, stealing company goods and trading with the Indians without permission could be punished by death. A person could be whipped for other minor wrong-doings.
- 14 By the early 1620s, the colony was booming and the white population had risen to well over 1,000. As tobacco exports increased, planters sought more workers, so between 1618 and early 1622, about 3,000 new settlers arrived. Yet the spread of English settlements and taking of Indians’ lands brought misery and bitterness to the native peoples. Led by Opechancanough, who became chief after the death of his brother, Powhatan, the Native American warriors attacked settlements all along the James River on March 22, 1622, killing about 350 settlers.

Virginia Company Of London Went Out of Business

- 15 The uprising and further losses of life and property were devastating blows to the Virginia Company of London, and it went out of business. King James took control of Virginia, which became England’s first royal colony in America. The war with the Powhatans continued, but colonists quickly rebuilt plantations to keep up with the demand for tobacco. The success of tobacco farming and the final defeat of the Powhatans brought success to Jamestown after 1625.

The English learned hard lessons about what a colony must do to survive. Jamestown

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- 16 presents two sides of the American story. England's New World offered opportunities for advancement unthinkable at home, yet colonization unleashed powerful forces that were catastrophic for the Native American peoples, whose lands were taken by colonists so the country could grow and become rich.

Settlement: Jamestown and the Founding of America (Lexile 1180)

James Horn, The Gilder Lehrman Institute of American History, adapted by Newsela staff

- 1 Shortly before Christmas in 1606, three small ships left London, England, to establish a settlement on Chesapeake Bay in North America. The largest of the ships was the 120-ton Susan Constant that carried 71 passengers and crew. The commander of the fleet, Captain Christopher Newport, had made many voyages to the Caribbean and knew as much about American waters as any Englishman alive.
The Godspeed followed with 52 men on board, and the smaller ship Discovery, carrying 21 men, served as a ferry for supplies and messages between the larger ships. Altogether, 39 sailors and 105 colonists set out to establish England's first permanent colony in North America.
- 2 This expedition was not the first attempt to colonize the mid-Atlantic coast. Sir Walter Raleigh sponsored three voyages between 1584 and 1587. His half-brother, Sir Humphrey Gilbert, led the first failed attempt. The next group settled on Roanoke Island in 1585 and looked for deep-water rivers near the Chesapeake Bay that would make superb harbors for ocean-going ships. England was at war with Spain, and this was a good place for attacking Spanish treasure fleets crossing the Atlantic. But problems with Native Americans and the harsh winter forced them to return to England with Sir Frances Drake.
- 3 The third attempt made in 1587 under the leadership of John White also ended in failure and the disappearance of 117 men, women and children. This came to be known as the Lost Colony of Roanoke.

King James allowed English settlements in North America

- 4 In 1604, King James I of England signed a peace treaty with Spain and no longer needed ports for attacking Spanish ships, but he still allowed English settlements in North America as long as they were located in areas that other Europeans had not claimed. On April 10, 1606, the king granted a charter to the Virginia Company to create two colonies. One was on lands that today would be between North Carolina and New York, while the other stretched up through Maine. The Virginia Company of London was a trading company that sponsored the southern colony and created a local council headed by an elected president.
- 5 The expedition aimed to establish England's claim to North America, search for gold or silver mines, find a passage to the Pacific Ocean (the "Other Sea"), harvest the natural resources of the land and trade with Indian peoples. The settlers arrived in Virginia on April 26, and the council selected a site on a peninsula along the James River about 50 miles from the entrance to the Chesapeake Bay, which they named Jamestown for their king.

6 The region was ruled by the powerful Indian chief Powhatan, the father of Pocahontas. The Native Americans called the area Tsenacommacah, and Powhatan ruled more than 30 tribes with as many as 34,000 people. The colonists had been instructed to be cautious and to establish friendships that would encourage trade. Initial contact was friendly, but an attack on the English settlement by several hundred warriors in May changed things and the settlers quickly built a triangular fort facing the James River.

Despite ample resources, the colony suffered setbacks

7 Early explorations found the area to be rich in natural resources. The Indians said there was great wealth in the mountains to the west. Behind the walls of the new fort, the settlers' prospects appeared to be rosy. However, after Captain Newport returned to London in June 1607, the colony suffered setbacks. During the summer and fall, disease, Native American attacks, polluted drinking water and poor diet led to the deaths of about two-thirds of the men. By December, only 38 of the original 104 colonists survived. Jamestown was on the brink of collapse.

8 More colonists and fresh supplies arrived early in 1608. The English continued to search for precious minerals and a river passage through the mountains that would lead them to the Pacific. Captain John Smith led two explorations but found no mineral deposits or a passage. When he took over leadership of the colony in September 1608, Smith urged colonists to begin producing goods that could be sent back to England. Meanwhile, the Virginia Company of London wanted more money from the colony. There was also more emphasis on religion as colonists began to convert the Powhatans to Christianity.

"The starving time" nearly killed the colony

9 The arrival of several hundred people during 1608 and 1609 led to a steady deterioration in relations with the Powhatans. In the winter of 1609, the tribes sealed off Jamestown Island to starve the colonists into leaving. During "the starving time," the colony's numbers dropped from about 280 to 90. The settlement was only saved when Sir Thomas Gates and then Lord Delaware arrived with hundreds of new settlers in the spring of 1610.

10 These men set up strict new laws. People were to attend church services twice daily, and anyone who swore was punished. Words of treason against the leaders, theft of company goods and trading with the Indians without permission were all punishable by death. Lesser offenses might carry the penalty of whippings.

11 By the early 1620s, the colony was booming and the white population had risen to well over 1,000. As tobacco exports increased, planters sought more workers. Yet the spread of English settlement and taking of Indians' lands brought misery and bitterness to local peoples.

Native American attacks killed one-quarter of colonists

12 Led by Opechancanough, who became chief after the death of his brother, Powhatan, the Native American warriors attacked settlements all along the James River on March

22, 1622, killing about 350 settlers, or one-quarter of the colony's white population. The uprising and losses of life and property over the next year were devastating blows to the Virginia Company of London, and it went out of business in 1624. King James then took control of Virginia, and it became England's first royal colony in North America. The war with the Powhatans went on, but colonists quickly rebuilt plantations to keep up with the demand for tobacco. The success of tobacco and the defeat of the Powhatans finally brought success to Jamestown after 1625.

The English learned the hard lessons about what a colony must do to survive.

- 13 Jamestown also presents two sides of the American story. On one hand, England's New World offered opportunities for social and economic advancement unattainable at home; while on the other hand, colonization unleashed powerful destructive forces that were catastrophic for the Native Americans, whose lands were taken as America grew and became rich.

The Plymouth Colony

Excerpted from *Colonists and Independence*, p. 8-11

By Sally Senzell Isaacs

Looking for Religious Freedom

- 1 In 1620, a ship called the *Mayflower* left the port of Plymouth, England, and headed toward Virginia. The wind blew it off course, and it landed in Massachusetts. There were 102 English people on the *Mayflower*. Many of them were called Puritans or Separatists. They wanted to separate from some of the practices of the Church of England. Their beliefs were not welcome in England. The Puritans moved to the Netherlands for a while, but they became unhappy there, too, so they set out to live in the New World—America. These Puritans became known as Pilgrims. Besides the Pilgrims, the *Mayflower* passengers included a captain, a professional soldier, and some adventurers who wanted to make money in America.

A Deadly Winter

- 2 The Pilgrims were a brave group, but they did not know much about living off the land. Luckily an American Indian named Squanto decided to help them. Squanto had learned to speak English because he was kidnapped in 1615 and sold in England as a slave. Squanto escaped and returned to New Plymouth in 1619. He helped the Pilgrims talk to the local Indians and keep things peaceful. He also taught them how to plant corn, trap animals, and spear large fish.

- 3 The Pilgrims' first winter in America was deadly. They could not plant crops in the hard, winter soil, so they had little food. Diseases such as pneumonia killed half of the Pilgrims. The 50 remaining Pilgrims worked hard to stay warm and healthy. When spring came, they planted corn and picked wild berries. The next fall another ship, the *Fortune*, arrived in New Plymouth with 35 new colonists.

Colonial Life

Living, Learning, and Laws

- 4 Far from the Old World, the colonists started a new life. More newcomers arrived each year. Each colony in the New World was ruled by England but was allowed to make some of its own laws. The New Plymouth colonists chopped down trees and built their houses quickly. The houses had just one room and a dirt floor. Colonists made the roof from coarse grass, called thatch. As years passed, people built bigger houses. Because the thatched roofs caught fire quickly, they switched to wooden roofs.

Getting Organized

5 For protection against Indian attacks, they built a tall fence around their village. At the top of a large hill, they placed six cannons. The colonists cleared trees to build streets. They also built a meetinghouse. On Sundays, the colonists held church services there. It also served as a place for town meetings and court hearings. In 1691, New Plymouth became part of the Massachusetts Bay Colony. By that time, there were 12 colonies on the East Coast.

Witch Hunts

6 Colonists wrote laws using what they knew from England's laws and the Bible. Among the most serious crimes were murder, speaking against the government, and witchcraft. People who practiced witchcraft believed that magical powers could control people and events. Witchcraft went against the beliefs of the Church. The last trials were in the village of Salem, Massachusetts, in 1692. Several village girls had begun acting strange. They said that other people had cast spells on them. The girls' stories spread quickly, and the townspeople feared that witches were taking over Salem. After several trials, judges sent 150 people to prison for believing in witchcraft. The judges also decided that 14 women and five men were truly witches. They all were hanged or killed in other ways. Years later, the judges apologized to the victims' families and set the prisoners free.

New Land, New Home

Excerpted from *The Dreadful, Smelly Colonies*, p.7-9

By Elizabeth Raum

New Land, New Home

1 In the 1600s, colonists came to America from Europe with the hopes of freedom and a new beginning. What they found instead was rough land, harsh weather, and dreadful living conditions. When colonists arrived in America, no warm, cozy homes were waiting for them. So they needed to find shelter—fast.

2 In the southern colonies, the first colonists lived in tents made of sailcloth. They complained bitterly of the bugs. Mosquitoes feasted on the new arrivals.

3 Other colonists built small wigwams. They tied poles together and covered them with bark and tree branches to keep out the winter's cold. A fire added light, heat, and blinding smoke. In winter, families huddled on the straw floor beneath furs and blankets.

4 Some settlers in Massachusetts, New York, and Pennsylvania dug cavelike homes. They lined dirt walls with sticks to prevent the home from collapsing. One wall contained a small door. Bugs skittered in through the tree-branch roof and dropped onto sleepers. Mice, rats, and snakes slithered through the sod.

5 The first wooden houses were only about 20 feet (6 meters) wide by 20 feet (6 meters) long. Shutters over the windows kept out the wind, but they also kept out the light. A fire burned constantly to provide light and heat. Everyone ate, worked, and slept in just one room. A lucky family might have a table and one or two chairs. Children stood while they ate their meals. They slept on the floor on mattresses stuffed with rags, cornhusks, or bits of leftover wool. Houses smelled of smoke, stew, and sweaty bodies.

Diseases and Death

March 24, 1621—Plymouth Colony

6 This month thirteen of our number died. During the last three months, half of those in our colony have perished. Most died from lack of housing. Some suffered from diseases like scurvy, brought on by the long ocean voyage. Of 100 persons, scarcely 50 remain. The living are barely able to bury the dead. There is no one to care for the ill. But spring is coming, and we hope that the deaths will cease and that the sick and lame will recover.

Tenement Stories

Excerpted from *Tenement Stories*, p. 4-5, 10-13

By Sean Price

Life in a New Land

1 People often move from one country to another. They are known as immigrants. In the 1800s, many immigrants came to the United States. Most of them had one thing in common. They wanted to start a new life in a new land.

2 Most immigrants lived in big cities. Many lived in New York City. Immigrants usually had little money. But they still needed places to live. So, they lived in tenements. Tenements are small, narrow apartment buildings.

3 Tenement life could be hard. The buildings might be crowded with too many people. But immigrant life could be exciting as well. The streets were always busy. There were many interesting people.

4 This book will show what life was like for immigrants living in tenements. Their experiences helped change life in the United States.

Tenement life

5 Tenement life was usually crowded. Each flat (apartment) in a tenement building usually had three to four rooms. The front rooms got sunlight and air. The back rooms were sometimes dark and stuffy.

6 Immigrants usually had big families. Even so, they often took in boarders. Boarders were people who paid rent to live there, too. Most flats were built for one family. But to save money, two families often lived in one flat. Many people often had to sleep in one bedroom.

7 People on the Lower East Side stayed outside a lot in warm weather. Adults talked on the stoop. A stoop is a stairway. It leads from the street to the front door.

Fire and heating

8 Fire was a constant worry for people living in tenements. Their apartment buildings were made mostly of brick on the outside. But inside, they were made of wood. This could burn easily.

9 People often used fire in flats (apartments). They burned candles for light. People also used lamps that burned kerosene (a fuel) or oil.

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10 Cooking stoves burned coal. Coal is a rock that burns well. The stove was often the only source of heat. In winter, parents put children’s beds near the stove. This helped keep them warm. But it was also dangerous.

11 In summer, tenements were too hot to stay inside. Some people slept on the roof or the fire escape. The fire escape was a small metal balcony outside a window. It had a ladder leading down to the street. This allowed people to escape during a fire.

A Day on the Trail

Excerpted from “A Day on the Trail” by Jerry Miller in *Toolkit Texts: Short Nonfiction for American History, Westward Expansion*, p. 91-95

Editor’s Note:

1 *The following article describes a typical day on the California Trail. Such a day might be June 20, 1852, and our typical pioneer group might include the Keegan family.*

2 The sun has not yet risen, but Mrs. Keegan is awake already and starting her breakfast fire. The other women in this wagon train of 15 families also are out of bed. The two men who had guarded the cattle, horses, sheep, mules, and oxen during the night are herding the animals back to camp. The animals must be guarded constantly to prevent them from stampeding, being stolen, or wandering off and getting lost.

3 By the time the sun comes up, the rest of the travelers also are awake. Breakfast consists of coffee, milk, bacon, and biscuits. After eating, it is time to clean up, milk the cows, repack the wagon, and harness the teams. The two men who will serve as today’s scout and hunter ride off on their horses.

4 Whips crack, mules bray, oxen low, and the day’s march begins. Mr. Keegan walks beside the family’s team of six oxen. Nine-year-old Joe Keegan and his 12-year-old sister, Meg, also walk. Mr. Keegan’s brother, Ezra, rides the family’s saddle horse as he herds the train’s cattle and sheep.

5 Mrs. Keegan rides in the wagon with three-year-old Helen. Except for mule drivers, only small children, sick people, or women caring for them ride in wagons. The 4-by-10 foot wagon beds already are piled high with enough food for a six-month trip, plus tools, furniture, cooking supplies, clothes, medicine, family heirlooms, and every other necessity. The Keegans’ wagon also contains a butter churn filled with cream from the morning milking. Each day, the wagon’s jolting churns the cream into butter.

6 The prairie is flat but rough, and riding in a wagon is uncomfortable. It is better to walk alongside the oxen. They move at a steady two miles an hour, making it easy to keep pace. Walkers can enjoy exploring the prairie dog villages or strange rock formations along the trail.

7 Today, the Keegans are thrilled by the sight of Chimney Rock rising high above the prairie. But they also pass several wooden crosses marking fresh graves. Seeing the graves brings chills to Mrs. Keegan. What if her husband dies on this trip? What if she,



like so many other mothers before her, has to leave a child in one of those lonely graves? There is no doctor on the trip, and no cure for deadly cholera.

8 After five hours spent covering 10 miles, it is time for the noon break. Lunch is the same as breakfast, except for some fresh greens Meg picked on the prairie. Suddenly, 12 Sioux Indians frighten everyone by riding into camp, demanding to be fed. The wagon train is crossing their land, and they intend to collect a toll—coffee, bacon, and bread. Mrs. Keegan and the other women hurry to feed the Indians while Joe and Meg stare in wonder. These strange men in blankets and animal skins are the first Native Americans they have seen.

9 Two hours after they stop, the people and animals begin their march again. It is hot and dusty. Everyone is tired. Joe, daydreaming about dinner, hopes there will be antelope or bison to eat instead of bacon. But that is not likely. The men do not have any experience hunting on the prairie. Besides, wild animals have started to avoid the heavily traveled trail. Maybe on Sunday's half-holiday from travel, his mother will put some beans on to cook during the preaching. Everyone likes beans, but they take a long time to cook and fuel is scarce.

10 After another eight miles, it is time to camp for the night. The wagons are set up in a circle, forming a temporary corral for the livestock. The horses are unhitched and unharnessed. Meg and Joe hurry to gather "buffalo chips." This dry manure is used as fuel because there is seldom any wood to be found on the prairie. The men feed and water the animals and check their hooves—if the wagon train is to reach California, its animals must be well cared for. The women walk to a nearby stream and wash themselves, the children, and some clothing and diapers.

11 Dinner is coffee, milk, pickles, fresh bread with butter—and bacon. After dinner, the leader of the train and tomorrow's scouts study their guidebooks and discuss possible camping spots and river crossings. Joe listens to stories at one campfire; Meg and her friends sing hymns at another. Finally, the bone-tired travelers enter their tents, and the night herders ride off to work. A wolf howls in the darkness.

12 Tomorrow will be much like today—a mixture of monotony, hard work...and new adventures.

What's for Dinner?

Excerpted from "What's for Dinner?" by Cyndy Hall in *Toolkit Texts: Short Nonfiction for American History, Westward Expansion*

Editor's Note:

- 1 *Has your family ever taken a long car trip? Did you eat at restaurants or shop along the way? What if you had to pack your car with ALL the food you needed for a cross-country trip?*
- 2 On the trail, pioneers could not stop in restaurants or grocery stores. There weren't any. The pioneers had to pack their wagons with everything they needed.
- 3 The pioneers chose their provisions (the food they brought with them) carefully. Flour was the most important item, because they ate bread every day. Salted meats such as bacon and beef jerky, beans, pickles, dried vegetables and fruits, hard coneshaped loaves of sugar, crackers, and coffee - all these were on the packing list.
- 4 Everybody carried a large supply of hardtack, or sea biscuits. Hardtack didn't taste very good, but it stayed fresh for a long time. Pioneers dipped their hardtack into coffee or milk to soften it up.
- 5 Milk was poured into a churn on the wagon each morning. As the churn bounced, the cream turned into butter.
- 6 Sometimes the pioneers shot antelope, buffalo, or small animals for fresh meat. In the summer, children picked berries for pies, or wild onions, dandelions, and watercress for stews. But usually they ate from their provisions.
- 7 What utensils did pioneers pack in the "cook's box"? Most boxes held a small stove, a kettle, tin cups, spoons, bread pans, a rolling pin, and a large iron frying pan called a spider (named for the little legs it sat on).
- 8 Breakfast was early. Often children ate warm johnnycakes (first called journey-cakes - can you guess why?) and bacon. Sometimes they had rusk (dried cornbread cereal), porridge, or mush.
- 9 Lunch? Cold leftovers (no time for fire), more bacon and bread, pickles, or thick layers of dried bean jelly spread onto crackers or hardtack.
- 10 Mothers cooked most evenings, so supper was hot and tasty. Some favorite foods were
 - hot flour bread dipped in bacon grease and fried

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- bread on a stick - dough baked on a stick that was stuck into the ground near the fire
 - bean soup
 - watchagot stew - dried vegetables, beans, and leftovers stirred together in a large kettle
- 11 Dessert? Pioneers loved fried fruit pies, sugar toast, and coffee cake. On special occasions, pioneers baked celebration pie (mashed beans, sugar, milk, and spices) or fried sugar doughnuts.
- 12 Next time you're on a trip and you dig into a burger and fries at a fast-food restaurant, think about what the pioneer children ate on the trail. Anybody ready for watchagot stew?

Searching for The Lost Palace of Cleopatra

Excerpted from “Searching for The Lost Palace of Cleopatra” By Elsa Marston

1 If you walked today along the modern, busy waterfront of Alexandria in Egypt, you would probably never guess the ancient secret lying below the water a few yards away. But French underwater archaeologist Franck Goddio had an idea that somewhere beneath the calm sea lay the long-vanished palace of Egypt’s famous queen Cleopatra—and he wanted to find it.

2 Born in 69 B.C., Cleopatra was the last of the Ptolemies, a family of Macedonian Greeks who had ruled Egypt for three centuries. The royal palace of the Ptolemies must have been a splendid sight. Ancient writers described its marble walls, emerald-studded doors, and “rafters hidden in thick gold.” Growing up in the palace, Cleopatra was pampered and well educated. Yet she must have lived in fear at times. In the struggle for power among the Ptolemies, several members of her family had been murdered. When she became queen, however, she lived this high life and made her palace the scene of fabulous parties and banquets. The royal buildings also served as military headquarters during troubled times, and it was there that Cleopatra spent her last hours.

3 In 365 A.D., an earthquake and tidal wave destroyed much of ancient Alexandria. Then the land sank gradually as the Mediterranean Sea rose, submerging the entire royal quarter.

4 Franck Goddio heard about Cleopatra’s vanished city in the early 1980s, while excavating a sunken ship near Alexandria. For a few years he continued his work on submerged wrecks. But the story of Cleopatra’s palace intrigued him, and he read everything he could find about the ancient city. By 1992, he was ready to start searching for the Ptolemies’ royal palace. He brought together an expert team of European and Egyptian archaeologists, divers, electronic technicians, historians, and artists.

5 The first job was to figure out just where to look. The harbor was huge—about the size of 500 football fields—with much of the bottom buried in thick silt. On a research vessel equipped with cutting edge technology, Goddio crisscrossed the harbor many times. Using the information he collected, computers produced a map of the harbor floor, including what looked like man-made structures.

6 For the next four years Goddio was busy obtaining financial support, as well as permission from the Egyptian government to carry out his project. It wasn’t until 1996 that divers could finally go down to see exactly what lay on the sea floor. Even in water only

about 20 feet deep, it was no easy job. The harbor was so polluted that divers had to wear special protective suits, and so murky they could see barely a few feet in front of them.

7 That first year, the divers made more than 3,500 dives, averaging 100 minutes each. They were looking for the remains of Antirrhodos, the sunken island where Cleopatra's royal palace is supposed to have stood. Finally, one of the divers rose to the surface with exciting news. He had found evidence of an ancient dock—remains of large pottery jars, called amphorae, that ships once used to transport olive oil, wine, and grain. Nearby, the divers saw large paving stones and many broken columns. The site appeared to be an area about 400 yards long, where important buildings must have stood. Goddio and his team felt sure they had located the palace island, the heart of the royal city.

8 To learn as much as possible about a discovery, archaeologists must make records right where they find each object—even under water. Therefore, the divers took precise measurements, made photographs, and drew sketches on special waterproof paper. Often they first had to carefully remove encrustations up to a foot thick—material deposited on stone by sea life and minerals in the water. Measurements of all architectural structures, such as roadways, dikes, and paved courts, went into an accurate plan of the royal quarter and its small harbors. Space-age technology using satellites, called the Global Positioning System, helped pinpoint the location of each find.

9 As they searched the harbor, divers found many precious objects, including four sphinxes about four to six feet long. These statues of lion bodies with human heads usually represented the reigning king. One was believed to portray Cleopatra's father, who had ruled before she did. What would become of these statues? Under the arrangements with the Egyptian government, Goddio's expedition had promised not to permanently disturb anything. Everything had to stay put, not only in Egypt but in the sea.

10 But researchers did have a chance to study the ancient stones. They raised some of the statues from the water and, after carefully cleaning them, made casts. Then the statues were returned to the sea. Possibly, sometime in the future, a glassed-in underwater museum will allow people to see the statues and structures in their original places.

11 By studying the statues, scholars working with Goddio's team are gaining further information about religious practices in Cleopatra's time, which combined Greek and Egyptian beliefs.

12 Another intriguing find in the royal quarter was a shipwreck about 100 feet long, possibly dating from the time of Cleopatra. The divers made detailed records of its well-preserved timbers and found artifacts such as bronze nails, hairpins, gold rings, amphorae,

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A Mini-Unit on Writing Compare and Contrast Essays

and even traces of food. A large hole in the ship's side suggests that it was rammed, perhaps by a warship. Why it sank so close to the royal palaces, however, remains a mystery.

13 And what about Cleopatra's palace? Thus far, there's little trace...just the large paved area where the palace probably stood. It appears that the royal palace may have been abandoned soon after the Roman takeover. Did the Romans want to destroy all reminders of the beautiful queen who had given them so much trouble?

14 We don't yet know the answer. But Goddio's team is continuing the search and gradually revealing the secrets below the waters of Alexandria harbor. We can now see traces of the great city where the Ptolemies ruled Egypt for 300 years...where Cleopatra enjoyed her spectacular life and met her dramatic death.

The Mystery of the Frozen Man

Excerpted from “The Mystery of the Frozen Man,” p. 7-13

by David Getz

1 From a distance, they thought it was a doll. But as the hikers moved closer, they realized it was a dead body rising out of a pool of melting ice.

2 On September 19, 1991, a German couple vacationing in the Ötztal Alps made a hideous discovery. Hiking down from a glacier-covered mountain peak near the border of Austria and Italy, the couple spotted the body of a man frozen in ice. He was lying facedown. The upper half of his body—the part the couple could see sticking out of the ice—was naked. His skin appeared brown and leathery. He was incredibly thin, as if his skin had dried and shrink-wrapped itself around his bones. Stunned, the hikers rushed to the nearest shelter to report the strange discovery.

3 A policeman arrived by helicopter the next day. Using a jackhammer to free the body from the hard ice, the policeman shattered part of its hip and tore into its buttock. Then the jackhammer ran out of power. The officer promised to return soon to resume his work. He left, taking with him an odd-looking ax found near the frozen victim. The ax had a small, tongue-shaped blade that was stuck into the end of an L-shaped branch and fastened with a strip of leather.

4 A few days later the body was finally freed from the ice and sent to Austria to be examined. Officials assumed that the unfortunate man was a hiker who’d died in an accident and been trapped in the glacier for many years. Several such bodies turn up every year as glaciers move and melt.

5 But a mysterious collection of objects had been found around the frozen man—not only the ax but also bits of fur and leather, scraps of woven grass, whittled sticks, a small dagger with a stone blade, and the remains of a crude leather shoe stuffed with grass. What were these things? Why would a hiker have such an odd ax and dagger and shoe? Rumors flew. Maybe the man didn’t die just a few years ago, but a few hundred years ago.

When Did the Iceman Live—and Die?

6 Konrad Spindler, an archaeologist, heard the rumors and asked to see the “Iceman” and his belongings. What he saw took his breath away. Spindler is an expert on how people lived in the Alps in prehistoric times, before written history. He knew immediately that he was looking at a man who had died not just hundreds but thousands

of years ago! Somehow, this prehistoric man had made it into the 20th century. More astonishingly, he had brought with him items of his day-to-day life.

7 “From that moment on, I saw that we would spend a lot of time studying this man and his equipment,” Spindler said. “This is one of the most remarkable archaeological discoveries of the century.”

8 Spindler could estimate how long ago the Iceman had died simply by looking at his belongings. But to get a more precise date, a tiny fragment from the Iceman’s hipbone was sent to England for carbon-14 dating. Using this method, scientists determined that Ötzi (nicknamed after the Ötztal Alps where he was found) had died about 5,300 years ago, toward the end of the Stone Age.

9 Once scientists knew when Ötzi had lived, they were eager to study him. But first they needed to make sure his body and belongings didn’t deteriorate.

Freezing the Past

10 Somehow, after he died, Ötzi’s body had dried out and become naturally mummified. Then, glacial ice preserved the mummified body for more than 5,000 years. To continue preserving the mummy, it would have to be kept in conditions that matched those of the glacier. So, today, Ötzi lies in a specially built freezer in the South Tyrol Museum of Archaeology in Bolzano, Italy. He is under the care of scientists who perform monthly checkups, examining his body for any indications of decay.

11 Ötzi’s belongings are also treated with the utmost care. First, the site where the body was found was carefully searched to make sure nothing had been missed. Scientists took samples of the surrounding snow and ice. They filtered the melting water to catch even tiny fragments of items. Among the things they found were hair, a fingernail, a bearskin hat, and a quiver full of broken and unfinished arrows.

12 These objects are just as valuable as Ötzi himself for telling about his life and times. Even microscopic grains of pollen and scraps of mosses can be important clues. By analyzing how many and what kinds of plant materials were found on Ötzi and his equipment, scientists were able to figure out that he lived south of the Alps in what is now northern Italy.

The Colonies Grow

Excerpted from *Colonists and Independence*, p. 10-11

By Sally Senzell Isaacs

Getting down to business

1 By 1700, 12 colonies stretched from present-day Maine to South Carolina. New settlers came from England, Ireland, Scotland, Sweden, the Netherlands, Germany, and France.

2 Colonial villages grew into busy towns. Houses sprang up along the streets. Each family grew vegetables and herbs in a garden by their house. They also had a piece of land away from the houses where they could grow corn, beans, and other crops. Families also kept their cows out on these lands. Some colonists opened shops to sell goods. The blacksmith made horseshoes and iron tools. The cooper made wooden barrels and buckets. The wheelwright made wooden wheels for the horse-drawn wagons. Many colonies had fur-trading posts. American Indians trapped beavers, and then they traded the furs to the colonists in exchange for cloth or tools.

American Indians Strike Back

3 The Colonists were proud to own their houses and their land. The Indians did not understand land ownership. They believed that land belonged to everyone, just like the sky and the sun. As colonists took over more and more land, the Indians became angrier. Sometimes tribes attacked colonial towns. Sometimes colonists attacked Indian villages.

Shipping out tobacco

4 Many Europeans headed for the colonies to get rich from tobacco. They had heard about the large farms, called plantations, in Virginia. The land was fertile and ideal for growing the tall tobacco plants. In 1640, Virginia shipped 670 tons (608 tonnes) of tobacco to England.

5 It took a lot of work to grow tobacco. A plantation owner, or planter, needed many workers to clear the land, plant seeds, collect the leaves, and press them into shipping barrels. Some of the workers were white indentured servants: The planters paid for their passage to America and gave them a place to live. In return, the servants worked for their masters for seven years. Many Virginia planters bought African slaves and made them work for no pay and with no hope of freedom. Ship captains sailed up the rivers to pick up tobacco and other crops at each plantation. Then they headed across the Atlantic Ocean to England. In return for these crops, the colonists received goods from England such as furniture, tools, and cloth.

Olive Money

Excerpted from “Olive Money” by Jackson Kuhl

1 Little did the citizens of Leptis Magna realize that 48 B.C. would prove a fateful year for their city. At the time, a civil war was dividing the Roman Republic. On one side was the Roman Senate, led by Pompey; on the other was Julius Caesar and his staunch supporters.

2 So it was in 48 that the Roman statesman Cato the Younger, after a disastrous defeat at Pharsalus in Greece, went to Leptis Magna. With him were soldiers loyal to Pompey. All were welcomed by the people there.

An ‘Oily’ Tax

3 But Caesar was not about to stop at Pharsalus. In his determination to topple those who opposed him, he swept through North Africa, conquering the remnants of those forces pledged to Pompey. He also imposed his rule on areas such as Leptis Magna that had supported his enemies. As punishment for this support, Leptis Magna had to pay Rome an annual tribute of 300,000 measures of olive oil—the equivalent of three million pounds.

4 Olive oil was vital to the Roman economy. Just as today, it was used as cooking oil and as a sauce and condiment. The ancients also used it as lighting fluid in lamps and as a part of the bathing process. At the time, soap did not exist in Rome. Olive oil production supported another industry as well: the manufacture of the ceramic amphorae that were used to hold the oil.

Where Dry is OK

5 The inhabitants of Leptis Magna specialized in olive agriculture. While wheat grew well along the fertile Mediterranean coast, it proved much more difficult to grow in the drier inland areas. The reason? Wheat requires at least 16 inches of rainfall every year, and olive trees need far less. As a result, farmers living beyond the town’s borders planted orchards of olive trees on land that could not support wheat. Often, they arranged the trees on terraces cut into the hillsides.

6 These farms centered around two-story villas. On the first floor were workshops and storerooms. Upstairs were the living quarters for the landowner and his family. Beyond the villa were ovens, bathhouses, and the workers’ homes. It was the duty of Roman legionnaires who patrolled the border farther south to keep the farms safe.



From the Tree to the Bathhouse

7 To harvest the olives, workers shook the trees, letting the olives fall to the ground, where they were picked up and placed in baskets. The olives were then placed in large presses. The enormous stone of the press then crushed baskets full of olives against a stone base, allowing the oil to seep out of the baskets and into a drain. The oil was funneled into amphorae for storage and transport to dockside warehouses in Leptis Magna. From there it was shipped to Rome and the rest of the empire. Because of the dry environment, there was little available firewood. Workers would dry the leftover pulp from the olives and burn it as fuel, especially in the hypocaust systems of the local bathhouses.

8 By one estimate, there was an olive press every mile in the vicinity of Leptis Magna—a city that produced five million gallons of olive oil every year.