# **Under the Big Top with Dad**

Sometimes the circus is called the big top. If you have been to the big top, you probably saw acrobats. Maybe you watched performers do tricks on a bike. Or maybe you saw someone walk up in the air along a high wire. Did you know that many big top performers are family members?

5

The Silvas are a circus family. Victor Silva is ten. He has been doing tricks under the big top since he was six. His father, mother, and brother are in the circus, too. They have been a circus family for a long time. Even his great, great, great grandfather was a circus performer!

10

Anton Silva is Victor's father. He is also Victor's teacher. Anton's plan is to teach his son everything he knows. Anton began teaching Victor when he was just a baby. He let little Victor play with a ball. He showed Victor how to balance the ball on his hand. He asked Victor to toss and catch it. Soon Victor got good at these skills. So Anton handed Victor two balls. Victor learned to juggle the balls. Now, Victor can juggle four balls. But that's not all! Victor juggles them while walking up high on a tightrope. For safety, there is a net below the tightrope.

15

Victor enjoys performing with his family. He gets to perform all over the world. Right now, Victor is practicing to do a juggling act with his father Anton. He loves being under the big top with his dad!

20

#### Kate's Test

Mrs. Lane stood in front of her third grade class. "It's time for lunch and recess," she said. "Remember, you have a language arts test when you come back to class. On the first part, you will divide words into syllables. Then I will ask you for one written paragraph about the theme of the story we read this week."

5

Kate slumped in her chair and groaned. "I totally forgot about the language arts test."

Kate's best friend Grace raised her eyebrows. "Did you study at all?" she asked.

10

"Not even a little bit," said Kate with a sigh. "I stayed up late reading. I could have been studying."

"I have a great idea," said Cole in an upbeat tone. "Sit with us at lunch. We'll help you study."

Grace chimed in, "We'll help you study at recess, too!"

"Thanks, guys. That's so nice of you!" said Kate.

15

So Kate, Grace, and Cole studied how to divide words into syllables as they ate. Then while the other kids played at recess, they talked about the story they read in class. Soon the recess bell rang. It was time for the test!

"I hope that was enough studying," said Kate with a worried look.

20

"You've got this!" said Cole.

"Yeah, I'm sure you can do it," said Grace.

"There's one thing I know for sure," said Kate. "I will never forget to study for a test again!"

10

15

20

### Is the Monster Real?

Loch Ness is a lake in Scotland. It lies in a valley called Great Glen. The lake was formed by ice about 10,000 years ago. It is long and deep, but not very wide. Many people visit Loch Ness. Scientists also study it. That is because Loch Ness has a mystery.

People have always told stories about Loch Ness. In 1933, a man and a woman were going for a ride by the lake. They said they saw a huge creature. A reporter wrote their story in a newspaper. He called the creature a "monster." People kept sharing the story. Soon the creature became known as the Loch Ness Monster.

But there is still a question. Is the monster real, or is it a prank? Many people claim to have seen it. They say it is black or brown and about the size of a whale. Others say it is like a sea monster with scales and a long tail. No one seems to know for sure. They say the monster slips away before they can prove it is real.

Scientists have looked for the Loch Ness Monster. As of today, no one has been able to find it. Some think it could be a kind of big eel or fish. But it is more likely that people are seeing a log or trash, which they mistake for a monster.

Will the Loch Ness Monster remain a mystery forever? Perhaps we shall never know.

10

15

20

### **Talent Show**

My friend Mia and I composed a song to play for our school's talent show. Our goal was to win a prize.

We were having a hard time practicing our song. I play the violin. It is a stringed instrument that is played with a bow. Mia plays the oboe. It is a hollow woodwind instrument. You play it by blowing into a mouthpiece. Instead of beautiful notes, Mia's oboe kept making awful bellowing sounds when she played. Then my elbow got sore from so much practicing. Usually I love playing music, but I was not having fun.

"What will we do? The talent show is tomorrow," I groaned.

"Perhaps we're taking the wrong approach," said Mia. "Let's try it more slowly this time."

So we began playing the song in a gentle, mellow way. Mia managed to hit the notes. My elbow started to feel better. Soon it was time for Mia to go home. I still wasn't sure we were ready.

I called my grandma and told her I was feeling nervous. I often talk to Grandma when I'm feeling low or unsure about something. She's great at coaching me through difficult feelings. She said, "You just have to try hard and believe in yourself, Joe."

So the next day as we walked onto the stage I told myself, "I know we can do this!" We played our whole song and hit every note. The crowd clapped. Mia and I stood to take a bow. Whether or not we won, we both felt happy that we had tried.

**Word Count: 260** 

**Grade 3** 

### **The Written Word**

We can't take the written word for granted. Writing didn't just show up out of the blue. It came about over thousands of years. Long ago, people used spoken language. They didn't care about writing things down.

That changed with the Sumerians around 3,200 BC. These people first invented writing because of trade. They needed to track trades over long distances. Some of the earliest types of writing were pictographs. These were symbols that stood for objects. For example, pictographs might show how much grain went to one place. Or they might show how many sheep were traded. The pictographs were pressed into wet clay. The clay was dried and kept as records.

Pictographs were fine for some tasks but not for others. It was hard to use signs for names or titles. People needed a way to record spoken language. So they made symbols to stand for sounds. With the written word, people could write about history. They could also create literature. Writers of the past wrote poems and tales. They wrote down the myths of their lands.

In one old library, a king collected more than 30,000 clay tablet books. The king had a wish. He wanted to save his people's history. He tried and succeeded. Many of those tablets exist today.

Over time, different groups of people formed their own kinds of written language. They designed their own alphabets. Writing began with reeds and clay tablets. Today, we write with computers. The written word has helped make the modern world what it is today.

5

10

15

20

10

15

20

### A Wild Walk

Today I went for a walk in the forest with my dad and our dog Mac. We thought it would be a peaceful, easy hike. Boy, were we in for a surprise!

It started out as a nice, sunny day. Mac was romping along ahead of us on the trail. He liked to stop and sniff things like bushes and logs.

"Mac's nose is much more sensitive than a human's," said Dad.

"He can smell where other animals have been, even if they left the area a long time ago."

"Wow! That's cool," I said. "Hey Mac, you have smelling superpowers!"

Unfortunately, Mac was not aware that some of the places he was poking his nose could be dangerous. He stuck his snout right into a hole where some yellow jackets had made their nest. Yellow jackets are stinging insects similar to bees.

"Yip!" Mac jumped back when a yellow jacket stung his nose.

"We'd better run! Get away from that nest," cried Dad.

The three of us sped up the trail. When we reached the top of the hill, we were out of breath. We stopped to rest.

That's when I felt a wet drop land on my hand. Then another on my leg, on my neck, and in my eye.

"Oh, no! Now it's starting to rain," I said. There was a flash of lightning far in the distance, then a boom of thunder.

"Time to head home," said Dad. "We'll have to go for a hike another day."

**Word Count: 251** 

**Grade 3** 

## **Passage to America**

Rosa scrambled up the gangplank with her mother. She glanced once behind her. The port city sprawled beyond the docks. Many miles beyond that was the village where Rosa and her mother had lived. Now, they were off to the United States. They were looking for a better life. In their home region, food was scarce. So they had scrimped and saved for passage over the sea.

5

Rosa swiped at the tears forming in her eyes. She was not sure if she would ever see her country again. But she didn't want streaming tears to blur her last view of her country, Spain. It was just one country in Europe from which people were immigrating to the United States.

10

That evening, Rosa stood at the rail. The ship sailed out of the harbor. She knew she would have to get used to living onboard with strangers. She knew she would have to squeeze into a single bunk with her mother. She knew they would have to eat scraps of bread and maybe some hard cheese.

15

But for now, Rosa wanted to enjoy a few moments alone. She saw the waves splash against the side of the ship. She felt the sea spray on her face. She saw the stars displayed in the dark night sky. Then the moon showed up. Rosa stretched out her arms, toward the United States, her new home.

20

10

15

### **Mount Rushmore**

Mount Rushmore qualifies as a great American symbol. The heads of four presidents are carved into the mountain—George Washington, Thomas Jefferson, Theodore Roosevelt, and Abraham Lincoln. They are legends in U.S. history.

The memorial is located in the Black Hills of South Dakota. Work began on October 4, 1927. But it took a long time to complete the project. Almost 400 men and women worked between 1927 and October 31, 1941.

It was not easy work. They faced many challenges. Workers had to deal with extreme weather. In the summer months, it was very hot. In the winter months, it was freezing cold and windy.

The weather was just one problem. In order to carve the stone face of the mountain, workers had to trudge up 700 steps to the top. Then they sat in chairs made up of boards and ropes. The chairs were lowered over the edge on cables. Once in position in front of the mountain, the workers could begin to carve.

Some of the equipment was basic. The workers used drills and chisels. They also wedged dynamite into the rock. This way, they could blast through the rock more quickly. During the project, workers removed around 450,000 tons of rock from the mountain.

Mount Rushmore was made almost a century ago. But it will stand for many years to come. It is a lasting part of America's heritage.

20

10

15

20

25

# **Visiting the Liberty Bell**

"I can't wait until we get there! How much longer, Dad?" exclaimed Kim. She wriggled in the back seat of the car.

"Hold on. We'll be there in twenty minutes," replied Dad with a laugh.

Kim had read about the Liberty Bell in social studies class. Ever since then, she had wanted to see it with her own eyes. This weekend, her family had finally planned the trip.

They had climbed into the car early this morning and were about to arrive in Philadelphia.

After Dad had parked the car, the family headed into Independence Hall. Kim gazed at the Liberty Bell with awe. She wanted to take photos of the bell. She looked at it from different angles and then picked the best spot for the shots. Kim raised her phone to take the first photo.

"Oh no!" Kim cried. "My battery is too low. I can't take a picture." She continued in a resigned voice, "I knew I should have charged my phone before the trip, but I just forgot. That was really dumb."

Dad held up his phone. "I'll save the day, Kim. You can use my phone to take as many pictures as you like."

"Thank you, Dad," said Kim. She gave him a hug to acknowledge his kindness. She took the first photo and checked it on Dad's phone. There was her thumb, big enough to block out the whole Liberty Bell. She quickly deleted the bad photo and took a deep breath. And then she took five beautiful photos of the Liberty Bell.

10

15

## **Choosing a Career**

How do people choose a career? Some people know what they want to be from the time they are very young. Others don't find the best career until later in life. Either way, it pays to think about your future and what you would like to do!

A person who chooses to be an athlete should be fit and strong. Playing a sport calls for quick reflexes. It also calls for hands and eyes working well together. Sports can be a challenge. Only the best athletes become champions and earn trophies.

For a person who likes to dance, there are several careers to check out. A dancer might do ballet, jazz, or ballroom dancing. There are jobs on stage, in the movies, at theme parks, and on cruise ships.

For a person who likes to speak, there are many career choices. An actor speaks on stage, in the movies, and on TV. A lawyer speaks in court. A professor teaches classes.

Working as an artist is another type of career. An artist may draw, paint, or take photographs. An artist may sculpt or make video art. For a creative person, an artist might be the right career.

Each person has a choice as to his or her career. When you match up your skills with the right career, it can lead to success!

10

15

20

# **The Play**

On the day Emma saw the poster for the drama club, she let out a shout. She turned to her friend June, and exclaimed, "Wow! I can be a real actor. Do you think I should try?"

June smiled at Emma. She knew that acting in a play would be a big deal for her friend. "Go for it!" June said.

When Emma went to the tryouts for the musical play, "Sing Around Town," the room was crowded. The club's advisor, Ms. Winston, announced that she would only select six actors. "But we'll need crew help, too."

Emma was set on earning an actor's role. But her tryout did not go well. She frowned when she told June about it later. "It's so upsetting," Emma wailed.

"You can still work on the play, though. You said Ms. Winston needed crew help. So at least you'd be involved," offered June.

Emma reluctantly agreed. She tried to get involved with the wardrobe team, but she kept mixing up the clothes for the actors. She tried to work on the sets, but her sense of direction failed her and she painted the wrong things in the wrong places.

One day after band practice, Emma went to the empty theater. She stood in the center of the stage. "Why can't I find even one job to do?" she moaned.

June slipped into the theater just in time to hear Emma's question. She noticed the trumpet case Emma was clutching. "It is a musical play. They need people who can play instruments, don't they?" June called out to Emma.

"That's it!" crowed Emma. "I'll play for the play!"

25

# **Bossy Lois**

Lois was a bossy kind of person. Whether it was cooking dinner, doing laundry, or walking the dog, Lois wanted to be in charge.

The problem was that when Lois was in charge, things often went wrong. That could be awkward. For example, once when Lois cooked dinner she made pasta with sauce and meatballs. But instead of making a bunch of small meatballs, Lois made one giant meatball. She served it on a giant plate.

Dad asked, "How can the whole family eat this giant meatball? It would have been better to have a bunch of small meatballs."

"No, this is the best way," said Lois. When Dad tried to cut the giant meatball, the plate slid across the tablecloth and onto the floor. That was the end of the meatball.

Once Lois was doing the laundry. She put the white and the red clothes in the washing machine together. Mom said, "You need to separate those clothes."

"No, this is the best way," said Lois. Because she hadn't divided the whites from the reds, everything came out pink. "I like pink," said Lois.

One day Lois was ready to walk Prince, their dog. She did not put his leash on. Dad said, "Prince needs his leash."

"No, this is the best way," said Lois. But as soon as she got out the door with Prince, he saw a cat. Prince ran off down the street. It took Lois an hour to find Prince.

Nothing with Lois was simple. Being bossy was her flaw, but her family loved her all the same.

10

5

15

20

25

10

15

20

#### The Exercise Doctor

Dr. Joy Washington is a doctor of sports medicine. What does that mean? It's her job to help active people stay healthy. She works with everyone from top athletes to kids who enjoy school sports.

Anyone who does any kind of exercise can get injured. Injured patients come to her office. Dr. Washington looks at their injuries. Then she asks questions. Once she has a good idea of what an injury is, she helps the patient solve his or her problem. Serious cases may need surgery. Others get physical therapy. Some may just need ointment to heal sore muscles.

Some patients have repeated injures. That means they keep getting the same injury over and over again. Dr. Washington works with these patients to help solve their problem. She tells them what they need to do to heal. She prescribes special exercises to help them get stronger. She advises them about what activities they can and cannot do. This helps her patients avoid getting injured again.

Some of Dr. Washington's patients are professional marathoners. A marathon is a race that is 26.2 miles long. These runners train by running 15 miles or more daily. This puts a lot of stress on their joints. Running incorrectly or wearing the wrong shoes could destroy their knees and ankles. Dr. Washington advises them on the best way to train. She helps prevent an injury from spoiling their chance of winning.

#### **A Rowed Race**

You've probably heard of a road race. You know, the kind your city might have where people run a race on the streets. But have you heard of a rowed race? Okay, I'm kidding. It's not really called that, but rowing a boat in a race is a real thing! It's a sport called crew. I know, because my older brother rows for his high school crew team.

5

Perhaps you're picturing little rowboats with fat oars, but that's not so with competitive rowing. The boats are sleek, narrow, and fast! They are pushed through the water by teams of eight rowers. Each rower uses one long oar. The result is that the boat seems to fly across the surface of the water!

10

My brother's team practices for two hours, four times a week. It's a lot of time, right? They practice so much because every team member must be strong. One weak teammate could cause them to lose a race.

15

Last week, my brother's team had a race. The boats positioned themselves at the starting line. Each boat had its own lane, which was shown by floating markers. Teams are not allowed to go out of their lane.

Bang! The starting blast fired, and the rowers were off. My brother's team had a strong start. By the middle of the race, they were neck-and-neck with another boat. It was so exciting! But in the end, another boat came up quickly from behind and won. My brother's team finished in third place.

20

My brother remained in good spirits. He said aloud, "Next time, we won't be beat!"

25

# **Little League Champs**

The Travistown Tigers became Little League regional champions this past Saturday. They won their final game in a showdown against the Harrisburg Hawks with a final score of 7-6.

"I've never seen anything like it. It was a one-in-a-million finish!" said Martha Nessbaum, proud grandmother of Tigers' pitcher, Casey Nessbaum.

5

When asked to describe the win, Tigers teammates had the following to say:

"At first I thought it'd be an easy win," said Casey Nessbaum. "I'd pitched two no-hit innings. We were ahead three to zero. But I couldn't keep it up. In the fourth inning I threw some pitches that should've been strikes. I walked two players. Then the Hawks hit a home run and we were tied three to three."

10

Second baseman Tyler Martin made the winning run. When asked about it he said, "We'd been neck and neck for the second half of the game. In the bottom of the ninth we were tied with two outs. There weren't any players on base. It was my turn to hit. Coach Martin was beside me in the dugout. He gave me some pointers. Then I ran out to home plate. The whole team was depending on me. Boy, was I nervous! Maybe that's why my first two swings were strikes. I knew if I 20 struck out, there was a chance we wouldn't win." Tyler Martin's next swing was the home run that brought the Tigers to victory.

15

Coach Eric Daly said, "I couldn't be happier. I'm so proud of all the players."

25

When asked if they'd return to win next year's championship, Tigers players said, "You bet we will!"

#### A Horse Tale

"Arianna, your birthday is coming up. Is there anything special you would like for a gift?" asked her mother.

"Oh Mom, you know what I want!" said Arianna impatiently.

Arianna's mother sighed, "You know we can't get you a horse because they are very expensive and we don't have room in our yard."

5

Arianna protested, "But, Mom, a horse is what I want more than anything else in the world!"

Arianna's mother just shook her head, unwilling to have yet another argument about horses.

10

Nevertheless, on the morning of her birthday, Arianna looked outside. She thought maybe there would be a horse in her yard. But there was nothing to see but grass and trees. Arianna mumbled to herself forlornly, "Of course there's no horse."

10

Arianna was glum at breakfast. Then her mother said with a smile, "Arianna, put on your jacket. I have a birthday surprise for you!"

15

They got in the car and drove to a farm. They went to a barn where they were greeted by a friendly man named Orson.

"Are you ready for your riding lessons?" he asked Arianna.

"Riding lessons!" exclaimed Arianna as she jumped for joy.

20

"I couldn't get you a horse, but you'll be able to come here every week and ride one," said her mother.

Orson opened a stall and introduced a beautiful horse to Arianna, "This is Glee," he said.

"She's so tall!" gasped Arianna, running her hand along Glee's soft mane. "Thank you so much, Mom!

25

10

# **Butterfly Garden**

Ms. Merchant's third grade class wanted to do a springtime class project. They brainstormed many ideas, and then they voted. The students decided that they wanted to grow a butterfly garden.

The kids researched the kinds of plants that would attract butterflies. They planted purple coneflower, lavender, milkweed, and snapdragons because they liked the name.

They also got some worms to put in the soil. Ms. Merchant explained that worms help to keep the soil healthy so that the plants grow well. The worms came in a box full of dirt. The kids liked watching them squirm as they worked their way into the soil.

Pretty soon, butterflies started to appear in the garden.

"They're so colorful!" exclaimed Jackson. "I really like the orange ones."

"Those are Monarch butterflies," explained Ms. Merchant. "They drink milkweed nectar. The other butterflies you see are enjoying the other flowers. If we are lucky, some of the butterflies will lay eggs on the leaves of these plants this summer. By next spring, if little caterpillars have developed inside the eggs, they will hatch. Each caterpillar will spend most of its time eating leaves. It will get bigger and fatter. When it is ready, it will attach to a leaf and form a hard shell around itself called a pupa. Inside the pupa, the caterpillar will develop into a butterfly. If you see a pupa in our garden, it is important not to disturb it. Eventually a butterfly will emerge out of it. Then we will have even more butterflies in our garden!"

The students couldn't wait to see how their hard work would turn out.

20

15

25

#### What Is Hibernation?

Hibernation is a fascinating subject. You may know that hibernation is something that happens to animals in places where winters are cold. Perhaps you have learned that some wild animals "go to sleep" until the time of year when the air warms again. That's not exactly true. Many people are not aware that there are some differences between hibernation and sleeping.

5

When you sleep, you mostly stop moving, but most of your body systems stay the same. A hibernating animal's body temperature drops. Its breathing slows a lot. Its heart rate nearly stops. The animal may appear dead or frozen. But it's not! The animal's metabolism—the process by which its cells make energy—has slowed down. This helps the animal survive during severe winter months when food is scarce.

10

There are different kinds of hibernation, too. Bats are true hibernators, or deep hibernators. Some may hibernate for six months. They take only about one breath per hour! Bears and deer mice are light hibernators. Their body temperature doesn't lower as much. They may wake and move around from time to time.

15

A signal from inside the animal's body tells it when to "wake up." This takes from a few hours to several days. If you were to meet an animal as it was waking up from hibernation, it would appear slow and sleepy. The animal may shiver. This raises its body temperature. Once the animal wakes, it's time to find food. It needs to prepare for the next winter!

20

## **Why Our Oceans Are Important**

Why should the ocean interest you? Maybe you have been to the beaches along Ocean Ave. Perhaps you went swimming in the ocean, built a sandcastle, or got a sunburn. The ocean is more than just a place to go and have some fun. All life on Earth depends on our oceans.

5

According to Mr. Allen, my science teacher, more than two thirds of Earth's surface is covered by oceans. The distance across the Pacific Ocean alone is about 9,600 miles! The oceans provide space for many of Earth's plants and animals to live. Over 17,000 species of saltwater animals live in the ocean.

10

You are probably familiar with ocean plants, such as seaweed, and animals, such as seals, sharks, and jellyfish. But did you also know that there is life in just one drop of ocean water? The ocean is home to billions of tiny life forms. They cannot be seen by the human eye. One of these life forms is called plankton. It helps to create much of the oxygen we breathe. It is also an important part of the food chain. Fish, whales, and other sea creatures eat plankton. The seafood humans get from the ocean depends on plankton, too. If the ocean gets too polluted, some of the plankton could die off. With less plankton, there could also be less oxygen and fewer ocean animals. That's a good reason to keep our oceans healthy!

20

15

10

15

### **Take Action!**

Do you think you can't help make your community a better place because you are a child? Nonsense! There are many ways children can help to improve the places they live. Take a look at the following steps you can take.

First, think of a cause you believe in. Is it helping stray animals? Is it making public parks and playgrounds nicer? Is it improving your school? Make sure it is a cause that is close to your heart. You'll do your best work when you really care about what you are doing.

Next, get some help from an adult. Why? An adult can help you plan and get the things you need. For instance, you might need some rakes and trash bags to clean up leaves at the park. You might need someone to take you there, too! An adult can also represent your ideas at a community meeting and help you get in touch with other helpful people.

Finally, get ready, get set, and take action! Natalie baked loaves of bread for a soup kitchen. Tyree organized a group of men, women, and children for a community cleanup day. Lila volunteers at an animal shelter every Saturday.

Do you like those ideas? What are some other ways you can help your community?

10

15

# **The Big Snow**

There were many factors that caused the storm in Minnesota that year. Some said it was the cold wind from the north that brought the snow, and others said it was the moist weather from the east. The truth is, it was both.

"Do you hear that wind?" said Alvin. "The newspaper said this storm might set a record! It could be the biggest in ten years!"

"Oh, you exaggerate. It'll probably be just a few snowflakes," said Alvin's sister Eliza. She went back to tending a pot over the sooty fire.

This put Alvin in a bad mood. Alvin was the youngest of five siblings, and he rarely felt like his brothers and sisters appreciated anything he did.

"Alvin is correct," said Papa. "Alvin, go to old Mr. Olson's before the snow really starts falling and help him get his cows secure in the barn."

Alvin ran down the lane to Mr. Olson's blue house where he found the old farmer struggling with a frozen latch on the barn door.

"I need to open this so I can get the cows in," Mr. Olson said.

Alvin knew what to do. He ran to the shed where Mr. Olson kept his tools. Standing on a footstool, he reached for the screwdriver on a high shelf. He brought it to Mr. Olson.

After some struggle with the screwdriver and latch, the crooked door finally opened. The cows mooed and stomped their hooves as if in thanks.

"I appreciate your help, Alvin," said Mr. Olson. He gave Alvin a present, a little carved wooden cow. Alvin ran home, feeling proud, just as the snow started to fall.

25

20

10

15

20

### **How to Build a Sandbox**

You can buy a premade sandbox, but why not construct one of your own? It's simple to do with help from an adult.

First, you'll need an outdoor spot for your sandbox. The ground should be is flat. Prepare the area by removing any rocks or branches. Then rake away any smaller debris, such as leaves and sticks.

Next, use a tape measure to decide the size of your sandbox. Premeasuring helps to assure that you won't dislike the final results. Lay the tape measure on the ground to decide what you want the length of each side of the sandbox to be. It's easiest to make your sandbox a square. So measure four equal sides. Then add up the sum of your four measurements. That's the total length of wood you will need for the sides of your sandbox.

An adult will need to take you shopping for your supplies. For the sides of your sandbox, get wooden boards between four and six inches wide. You can use prepainted boards or get some nontoxic paint to paint natural wood boards. It doesn't really make a difference. Also, get twelve to twenty large nails or screws and a plastic tarp. Last, you'll need to get a few bags of sand.

Back at home, have an adult help you. Assemble the sandbox by hammering the corners of the boards together at right angles. Place the completed frame in the spot you prepared. Line the bottom with the tarp and fill it with sand. Then enjoy your new sandbox!

### **Albert Einstein**

Albert Einstein is one of the best-known names in scientific history. He was a born in Germany in 1879. He achieved his greatness through his work in the field of physics.

From the time he was a child, Einstein wondered how the world worked. He first saw a compass at the age of five. He wanted to know what unseen force made the needle stay pointed in the same direction. This led to a lifetime of endless fascination with science.

Einstein would read and reread books on math and science on his own. Yet at school, he was sometimes unhappy. His teachers did not always understand him. He excelled at math and physics. He did not do as well in other subjects.

Einstein went to college in Switzerland. After graduation he got a job in a Swiss office. This job allowed him lots of free time. This was good for Einstein. It gave him time to do his own research.

In 1905, Einstein discovered something he called the Theory of Relativity. It helped to explain how things, such as energy and matter are related.

Einstein's work was new and complex. At first, people were unable to understand it. But over time, other scientists were able to prove his theory. Einstein became famous. In 1921 he was awarded the Nobel Prize.

Einstein continued his research until he died in 1955. He is best remembered for giving us a whole new way of looking at the universe. 10

5

15

20

Fluency 8.11

### **The Homework Robot**

Inventing new things was one of Ethan and Emma's favorite activities. Soon they would have a chance to show off one of their inventions at the International Science Fair. Kid inventors from cities and countries around the world would be there with their latest discoveries. There would be trophies for the first, second, and third place winners.

5

"This is our big chance to invent anything we want!" said Ethan. "Let's make a homework robot. Kids will love it!" said Emma.

Ethan agreed, and the kid inventors went to work. They went to different libraries to do their research, and they looked up robotics technology on the internet. Once they had worked out a plan, they got their supplies and went to work building the robot outside in their yard.

10

"Now it's time to test it out!" said Emma when they were finished.

She put her math homework into a slot in the front of the robot's body. Lights bleeped and blipped. At last it said, "Here is your completed homework, Emma." But the robot had answered the math problems with words, and not even number words!

15

"Let me try," said Ethan. He gave the robot his writing homework. Everything went wrong. This time the robot spit out numbers!

Ethan said, "Maybe a homework robot isn't a good idea after all. I mean, isn't that cheating?"

20

"I guess you're right," said Emma.

So they adjusted the robot so that it could help with chores instead of homework.

"That's a robot that families everywhere will love!" said Ethan. Emma smiled, "I hope the judges agree!"

25

10

15

20

# On the Egg Farm

You might have scrambled eggs for breakfast, hard-boiled eggs for lunch, or an egg omelet for dinner. Eggs are tasty and cooked in many different ways. You know that you can buy eggs from the store, but where do eggs come from before that?

Egg farmers, of course! An egg farmer raises chicks that become laying hens. Throughout the hens' lives, the egg famer has a lot of jobs. She must clean and repair the cages, or maintain open-air runs. She must give the hens nutritious food, usually feed made up mostly of corn, soybean meal, vitamins, and minerals.

The farmer also needs to provide clean water along with proper lighting and fresh air. If the hens get sick or injured, it's up to the famer to call in the vet. When the hens are healthy, they will be the producers of quality eggs.

Once the hens lay eggs, the farmer collects them by hand or with a machine. Then the farmer washes the eggs. She has a way to look carefully inside the eggs without breaking them. The process is called candling. This step helps the farmer grade the eggs based on quality.

The eggs are sorted by size and placed in cartons, ready for shipping. And then the eggs are off to the store. Most eggs reach the store just one or two days after being produced. Talk about fresh!

So you might say that at the root of the egg-producing system is a good egg farmer. Thanks to farmers, eaters of eggs can rejoice!

## **Saving Crops**

Farmers can't always count on good weather for growing their crops. Sometimes there is too much rain, or there is a drought. Sometimes temperatures are scorching or freezing. So what can farmers do when the weather is extreme?

One year, strawberry farmers in Florida were faced with very cold weather. Although there was no snow, temperatures were dipping into the twenties. To save their strawberry crops, farmers thought of a plan. They turned on sprinklers in their fields to spray the strawberry plants. In the frigid air, the water turned to ice, coating the strawberries with a protective layer. The icy treatment actually helped make the strawberries sweeter.

Once the temperatures went up, the ice melted. The strawberry crops were saved by some resourceful thinking. Now any time the temperatures go below freezing, farmers have a proven solution to save strawberry crops from damage.

Other crops, such as oranges and grapefruits, can be protected with water, too. But the water is used in a different way. Some farmers use microjets in their fruit groves. These underground sprinklers spray water on the ground around the fruit trees. The warm water and the cold air interact to create fog. This increases the temperature in the groves enough to keep the fruit from freezing.

In the case of the Florida strawberry farmers, nature brought tough weather conditions. But the farmers had the last laugh. They saved their strawberries with ice.

5

10

15

20

### **Club of Books**

Lucy, James, and Maya were all members of the Ogden School Club of Books, or OSCOB. Each month, a different member had a chance to select a book for the club to read. Then they met in a room by the school gym to discuss the books.

"Did you notice something unusual about Lucy's book choice?" asked James.

5

"I know Lucy was excited to share it and I know it's called *In the Kitchen*. But I haven't looked through it yet," Maya replied.

"Well, you'd better take a look. It's a cookbook!" James said.

"That's strange. We've read fiction books and science books, but never a book about cooking. I guess we'll all be hungry by the end!" Maya joked.

10

So every OSCOB member read *In the Kitchen*, and then they gathered on Friday afternoon. Everyone was seated in the meeting room, except for Lucy, late as usual.

15

Five minutes later, Lucy arrived carrying a huge cardboard box in her arms. "I'm sorry I'm late," she apologized as she raced into the room.

As Lucy wove her way to the front of the room, trying to avoid tripping over the members' legs, she lost her balance. Maya leaped from her chair and just managed to catch the box before it hit the ground.

20

Once Lucy had retrieved the box and opened it, the club members gasped. Inside was a collection of fancy cookies. Lucy explained, "I used my favorite recipes from *In the Kitchen* to make these cookies. I hope you enjoy them."

The OSCOB members concluded that *In the Kitchen* was the best book they had read yet.

25

## What Happens at an Auction?

An auction is a sale at which things are sold to the highest bidder, or the person who offers to pay the most. All kinds of items may be sold at an auction—paintings, sculpture, jewelry, furniture.

What happens at an auction? A buyer registers for a bidder card. That means the person may bid, or offer a price, on items for sale. A person can't bid without a card.

5

The auction house displays all the items for sale. This gives people a chance to look things over and check out their condition. People can decide on which items they would like to bid.

10

The auctioneer is the person who runs the auction. In some ways, an auctioneer is like a storyteller. It's the auctioneer's job to know about each item for sale. He will provide background information about it.

15

One item is brought out at a time to the main table. After describing the item, the auctioneer starts the bidding by asking for a reasonable price. An interested buyer holds up a bidding card to indicate she will pay that price. It is the auctioneer's job to get the best price for the item. So he will ask if any buyers are willing to pay more.

20

The auctioneer speaks at a rapid pace, pushing up the price. This tradition of fast speaking is known as the "auction chant." It keeps buyers on the edge of their seats. Buyers may keep bidding until no one in the audience is willing to pay more. The auctioneer declares "Sold!" to the highest bidder. Then the auctioneer gets ready for the next item and the auction goes on.

10

15

## The Adventures of Paul Bunyan

Many years ago, Paul Bunyan was born in Maine. He was an enormous baby and continued to grow and grow. As a young fellow, Paul was so hungry that he gobbled up fifty eggs and ten sacks of buttered beans every day.

Growing up in the woods with his mother and father, Paul helped his father cut down trees. Paul possessed the strength of twelve men and could chop down a hundred trees with a single stroke of his large, sharp axe.

When Paul grew older, he left Maine and journeyed west to look for work in other forests. He settled in a logging camp in Minnesota.

In the summer, giant mosquitoes created a problem at the camp. Paul had an idea for getting rid of them—bring in giant bees to destroy the mosquitoes. But the bees ended up marrying the mosquitoes, and soon produced young insects. Now the problem was even worse and the men were at their wits' end. Those insects could sting from both ends!

The insects loved sweets, though, and one day they attacked a ship delivering sugar to the camp. The mosquitoes and bees ate so much sugar they were unable move, and that problem was solved.

When winter came, another problem happened in camp. The weather became so bitterly cold during a blizzard that the men grew long, long beards for warmth. When the men spoke, their words suddenly froze in mid-air. Everything they said remained frozen all winter long, and did not melt until spring.

Eventually, Paul moved on from the logging camp. There are some who say he still lives in the woods.

25

20

10

15

20

# **The Missing Journal**

Ellie unpacked her backpack in her room at home. She had a mountain of homework to complete this afternoon. But wait, where was her journal? Ellie rummaged through all her books and notebooks and papers. Oh no! No journal.

Was it possible she had lost her journal, the place where she wrote her most personal thoughts? The idea of someone browsing through her journal caused Ellie to shudder with fear.

"Take a deep breath," Ellie told herself, "and think about when you last saw the journal." She remembered she had written in the journal at lunchtime in the cafeteria, but what happened after that?

After school, Ellie had strolled over to the town library. She thought anxiously, "Perhaps I left my journal at the library. I know I took it out of my backpack when I was removing the novel for English class."

Suddenly it struck Ellie that she had better return to the library quickly and make an intensive search. It would be terrible if one of her classmates discovered her journal and read it!

Within a half hour, Ellie was back at the library, attempting to remember which table she had studied at earlier. When she saw the right one, she hurried over, but her journal was nowhere in sight.

"I'll probably never see my journal again," Ellie whispered softly, sinking to her knees. She glanced at the floor under the table and noticed a shine of silver. It was the spiral notebook in which she kept her journal!

Ellie grabbed the book and hugged it tightly to her. "Disaster avoided!" she exclaimed, knowing she had to take better care of her journal.

10

15

20

#### **Train Ride**

Have you ever traveled by train? Trains are most frequently used to connect cities. In many parts of the world, train travel is a common way to get from place to place.

Visitors to Europe can get a rail pass. A rail pass allows you to travel to many countries. Each country has something different to offer. Because there are so many rail lines in Europe, there are many choices of places to go. Trains travel between most major European cities. You could follow one route that begins in Paris, France, and then continues through the Netherlands, Germany, the Czech Republic, Austria, Germany, and Spain. That's seven countries in one trip! Just keep in mind that you need an up-to-date train schedule. This will help to assure that you catch your trains on time.

In Japan, people can ride high-speed bullet trains. These trains are so named because they are extremely fast. Some can reach between 150 and 185 miles per hour. These electric trains can hold as many as 1,000 passengers.

In general, train travel is less common in the United States. This is partly because there is greater distance between U.S. cities than in many other parts of the word. However, U.S. travelers can still enjoy travel by train. Long-distance trains allow passengers to explore the country. There are sleeping cars for overnight trips. Outdoor cars and sightseeing cars with glass windows give passengers a view of the landscape.

## **Surprise!**

Madelyn woke up from a restful sleep and jumped out of bed before her alarm clock rang. She was excited because it was a very special day—her birthday! She got dressed and ran down to the kitchen.

Her dad passed her in the hall and said, "Hey, kiddo, I bet it feels great to finally be ten years old."

5

In the kitchen her mother greeted her calmly, "Good morning and happy birthday. Sit down and I'll get you your breakfast."

Madelyn felt a little disappointed that her parents didn't seem more excited about her birthday. She felt a little bit better when her mother brought strawberry pancakes to the table.

10

"Yum, strawberry pancakes are my favorite!" she exclaimed.

At school, some of her friends wished her a happy birthday, but most seemed oddly quiet about it. She sat through class and watched the clock.

"What's wrong?" asked her friend Isabella.

15

"Nothing much," grumbled Madelyn, who didn't feel like explaining that she wanted other people to be more excited about her birthday.

Madelyn's mother picked her up from school and took her to run some errands, which seemed to take an awfully long time. When they got home Madelyn asked, "Why are all these cars in the driveway?"

"You'll see!" said her mother with a curious expression on her face.

20

When Madelyn opened the door, she was greeted by a room full of her friends and family holding a big Happy Birthday sign.

"Surprise!" Everyone shouted with excitement.

"I can't believe it!" cried Madelyn.

"This is why we were all acting so funny," said Isabella. "We didn't 25 want to ruin the surprise!"

## **An Amazing Idea**

One day Connor called his friend Aidan and said, "I have an *amazing* idea. My father has some old metal and wooden scraps. He said we can use the materials to build a fort in the corner of our yard. If we plan it, he'll help us to construct it using his tools."

So Connor and Aidan began planning. First they looked at the building supplies that Connor's father had laid out for them. There were some boards, metal hinges, an old window, and various other wooden scraps. Then they drew a diagram that depicted what they wanted the fort to look like.

Aidan said, "Let's make the walls and roof with the wood."

10

15

20

5

Connor continued, "Yes, and I believe that old window is big enough that we could use it as a door. We just need to attach the hinges so that it can swing open and shut."

Once they had everything all planned out, they went outside to take a measurement of the spot where they wanted to build the fort. Then Connor's father came to inspect their plans and give some advice. He said, "I think you won't have enough wood to build this last wall because you've planned to make the fort so large. Let's make it a little bit smaller."

So they decreased the size of their plans—and then they began construction! Connor's father helped them use tools like the hammer, saw, and drill. Once the building was finished, they used a scrap of old carpet to cover the floor.

With the fort complete, the boys didn't wait one moment to start playing in it!

## **The Pony Express**

Back in 1860, delivering the mail was not easy. The route from Missouri to California was 2,000 miles. Mail could either be taken over land by stagecoach or by ship across the sea. The stagecoach trip took 25 days, while the ship voyage took several months. People were looking for a speedier system.

5

The creation of the Pony Express changed things. This company used relay teams of riders and horses. The Pony Express could deliver mail in just ten days.

The company set up nearly two hundred relief stations along the route. A rider and horse would take off from the first station. Because of the rapid speed, the rider needed to switch horses about every ten miles. The rider himself would travel up to one hundred miles before a new rider took his place.

10

The teams rode day and night in all weather, with no exceptions. The mail had to go through. Despite the tough conditions, one relay team finished the route in record time. They made the trip in seven days and 17 hours.

15

The Pony Express began operating in April 1860, but in 18 months it was gone. The company never made money, losing as much as \$200,000. The telegraph was another reason the Pony Express failed. Once it became possible to send messages instantly through telegraphs, the slow mail system was doomed. The Pony Express shut down in October 1861.

20

# The Magic of Fireworks

Dina sat on a hill with her family and watched the superb fireworks display. She gazed in awe as each new formation flashed in the night sky. Some fireworks looked like shooting stars. Some looked like spinning wheels or blooming flowers. The fireworks seemed magical. But Dina remembered how her uncle had described the way fireworks really work.

5

Uncle Russ had explained that each firework is packed with gunpowder. It takes someone properly trained to set off fireworks. That person lights a fuse at the base of the firework. That starts a chain reaction. It sets off a charge that ignites the gunpowder in the base. The explosion of the gunpowder launches the firework high into the sky.

10

As the firework rises in the air, the fuse at its base is still burning. When the firework reaches the right height, the fuse burns up inside the firework. The firework can have one or more shells. Each shell contains small bits of metal, such as iron or steel fillings, or salts.

15

The fuse ignites the gunpowder inside the shell. That causes it to explode. Bright sparkles and assorted colors emerge into different patterns. A shell might even contain explosives that crackle or whistles that explode.

20

Dina was glad that Uncle Russ had given her with a technical report. But tonight she was happy to think of the fireworks bursting overhead as a magical event.

10

15

20

#### At the Border

Once long ago, a resourceful smuggler arrived at the border with a donkey. The donkey carried a heavy burden of straw on its back. The customs official at the border was suspicious. He pulled apart the man's bundles until straw was scattered everywhere, but he didn't uncover one valuable thing after his extensive search. The official was certain that the man was smuggling something, but he had no proof. He was powerless to stop the man and his donkey from crossing the border. So it happened each day for ten years that the man went to the border with a donkey. And each time, the customs official was careful to search through the straw bundles on the donkey's back. Yet he was unable to find anything of value. "This is hopeless!" the official would squawk. "I distrust you

when you say you are not smuggling, yet I can find nothing! Go, cross the border now!"

And the man would drive his donkey across the border yet one more day.

Many years passed, and the customs official retired. One day, he happened to notice that same smuggler in a marketplace. The official immediately approached the man, grasping his arm.

The official explained, "You know that you caused me endless frustration at the border. Please, I beg you, tell me what you were smuggling. I cannot present you with a bill after all these years, but I would like to know for my own information."

The man agreed to be truthful. He said, "Donkeys."

25