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Alaska

Do you know that if you moved Alaska inside the rest of the United States, it would take up a good portion of the continent? Alaska is the largest state in the United States. Five regions make up Alaska. Each region makes a unique contribution to the state’s ecology and wildlife.

Denali National Park is in Alaska. It is home to Mt. McKinley, the highest peak in North America. Many parts of Alaska lend themselves to the enjoyment of Alaska’s wildlife through fishing, hiking, and exploring.

The Northern Lights are another attraction in Alaska. Scientists call this phenomenon aurora borealis. This is when the sky lights up with a beautiful colorful glow. You can see reds, blues, pinks, and purples. During some months in some places in Alaska, the Northern Lights can be seen up to ten times a month. This is just one of the exciting things to see in Alaska.
Grizzly bears live in the northwestern United States and Alaska. These huge creatures can grow to more than 1,000 pounds! They are usually a shade of brown in color. They have a big hump of muscle on their shoulders. The hump gives them strength in their paws to do things like dig dens. Grizzlies use dens to hibernate in and raise their cubs. Grizzlies are omnivores, which means they eat nuts, berries, and other animals, like elk and moose. Grizzlies often live for more than twenty years.

Grizzlies are threatened in the northwestern United States. This means they could be endangered one day. In some parts of Alaska, grizzlies are already endangered. The biggest threat to grizzlies is poaching, when people kill bears illegally. Many organizations work to save the bears and stop illegal hunting.
Tryouts

Story by Darnell Parker
Illustration by James Bravo
Hector and Mary were best friends who did everything together. They were neighbors. They walked to school together. They walked home together in the afternoon. They did homework together. They played together.

One spring Saturday morning, Hector knocked on Mary’s door. Mary was having pancakes for breakfast. “Mary,” Hector called. “Today’s a special day!”

“What do you mean, Hector?” Mary asked.

“Today they have tryouts for the baseball team. I can’t wait. Let’s go!” Hector said.

Mary said, “But I’ve never played baseball. I don’t think I’d be very good at it.”

“Sure you would,” Hector replied. “Don’t worry. I’m sure you’ll do fine. Look. I even brought an extra mitt for you to use.”

“Okay, Hector,” Mary answered. She washed her plate and put it away. “Mother, I’m going to go play baseball with Hector!” she called.

“Have a good time,” her mother called from the parlor.
Mary walked outside. “Let’s go!” Hector said.

They walked down the street. As they walked, they tossed Hector’s baseball back and forth. Mary was surprised. She had never thrown a baseball before, but she was good at it.

She seemed to have a knack for it.

“Well, Mary, you’re good at this,” Hector said. “I think we’ll both be on the baseball team this year. That will be fun!”

Mary was excited, too, for she had never been on a baseball team. In fact, she had never been on any team. She looked forward to it. Hector and Mary kept throwing the ball as they walked. Back and forth. Back and forth. The sun was shining. It was a pretty morning. Hector and Mary smiled as they played. They were having a good time, like friends often do.
Hector and Mary arrived at the park. There were many kids there, of all ages. Some had fancy gloves. Some had fancy mitts. Some had fancy shoes and hats. But everyone was there to try out for the baseball team. The coaches were going to have several teams, for different ages. Mary and Hector would try out for the youngest team. They used a bright red pen to write their names on the sign-up sheet. Hector wrote, “Hector Gonzalez, age 8.” Mary signed her name, “Mary Patterson, age 9.”

Hector and Mary sat and waited for their turns to try out. They watched some of the other kids throw, catch, and hit the ball. Some of the kids were really great. Other kids needed a little more practice. Hector smiled because he knew he would make the team. Mary wondered if she would play well enough to make the team. But she was happy just to be outside in the sun. “I’m having a good time, Hector,” Mary said.

“I am too,” Hector replied.
They waited a short while. Then the baseball coach called out, “Mary Patterson!” It was Mary’s turn to try out. She was nervous. “Do you think I’ll do well, Hector?” Mary whispered as she stood up from the bench.

“I’m sure you’ll do a great job. I believe in you,” Hector said. This made Mary feel better.

The coach called over to her. “Mary, grab a bat. Try to hit the ball that I pitch to you.” Mary picked up a shiny bat. It felt cool in her hands. She thought about baseball players. She had seen them on television. She had watched them today. So she knew how to stand and hold the bat.

Mary heard Hector yell from the bench, “Go Mary!” Mary stood holding the bat. She was ready to swing. The coach threw the ball toward her. She waited. Then she swung. She missed the ball the first time.

“It’s okay, Mary,” the coach called. He was on the pitcher’s mound. He asked her to throw him the ball. She threw it back. “Nice toss!” he called.
“You can do it, Mary!” Hector shouted. “Pay attention to the ball. Don’t think about other things.” Mary was happy that her friend was helping.

The coach threw the ball again. Mary swung the bat. This time, she hit the ball. The ball soared over the coach’s head. It landed in the grass. “Way to go, Mary!” Hector called. Mary was proud of herself. She had done a good job.

The coach called Mary over. Mary walked to him. “Now it’s time to practice catching the ball,” the coach said. “I'll hit the ball to you.” Mary stood in the
The coach picked up the bat. He tossed the ball into the air. He swung the bat. The ball sailed toward Mary. Mary opened her mitt. She caught the ball! “Good job, Mary!” the coach yelled. “Now, throw the ball back to me. Throw as hard as you can!”

Mary threw the ball as hard as she could. The coach caught the ball. “That’s another good throw!” he called. Mary was very pleased with herself. She had hit the ball. She had caught the ball. She had thrown the ball. She was a good baseball player.

From the bench, Hector shouted, “I’m proud of you, Mary!”

“Thanks, Hector!” Mary shouted back.

The coach called Mary over once again. “Mary,” he said, “I think you’re a great ball player. There’s room for you on the team. Congratulations!”

Mary clapped her hands. She was very excited. She couldn’t wait to tell Hector. She ran over to him. “Hector! I made the team!” she exclaimed.

“I knew you would, Mary. Way to go.”

“Thanks. You’re a great friend.”
Mary was done. Now it was Hector’s turn. “Hector Gonzalez!” called the coach. “It’s your turn!”

All of a sudden, Hector felt nervous. He didn’t know why. He knew he was a good baseball player. But still, he was nervous. The coach called for him to pick up the baseball bat. Hector picked it up. The coach then threw the ball toward Hector. Hector swung at the ball, but he missed.

“You can do it, Hector!” Mary called from the bench. “I know you can.”

The coach asked Hector to try again. Hector tossed the ball back to the coach. Then the coach threw the ball toward Hector again. Hector missed again. He tried over and over. He could not hit the ball.

The coach walked over. “Let’s see if you can catch the ball,” he said. Hector and the coach traded places. The coach tossed the ball into the air. Then he hit it with the bat. The ball sailed toward Hector. Hector extended his arm to catch the ball. The ball sailed past him and landed in the grass. The coach said, “Let’s try again.”
Hector threw the ball back to the coach. They tried it two more times. Hector could not catch the ball.

Hector was very sad. He had tears in his eyes. The coach walked over to him. “I know I can play,” Hector whispered. “I know I can.” The coach had an idea.

“Listen, Hector. There will be more tryouts next week. Why don’t you practice some more. Then come back next Saturday.” Hector wiped his eyes. “Okay, I will practice.” Hector walked over to the bench. He told Mary he had to practice.
“I know you can do it.” Mary said. She patted him on the shoulder. “I'll help you practice. I think you were just nervous. Don’t worry.”

“I don’t understand,” Hector said. “I’m a great player. But I’m glad you’ll help me. I’ll practice this week. Next Saturday will be different.”

Although Hector was sad, he knew he could make the team. He and Mary walked back to Mary’s house. “Let’s start practicing. Let’s start right now!” she exclaimed.

Hector didn’t feel like practicing. “I don’t want to practice right now, Mary,” Hector said. “I feel like being alone.”

Mary said, “I understand. We’ll start practicing tomorrow. It’ll be fun!”

“Goodbye, Mary,” Hector said. “I’m going home now.” Mary watched Hector walk down the street. He hung his head. Mary wasn’t worried, though. She knew they would practice. Everything would be okay. She was sure.
The next day was Sunday. Mary had chores to do in the morning. She had to help her father with the laundry. She had to help her mother wash the car. Mary liked helping people. She did her chores as fast as she could. When she was done, she ran over to Hector’s house. Hector was finishing a late breakfast. He was eating pancakes.

“Hey, Hector!” Mary called from the open doorway. “Are you ready to practice?”

Hector replied, “I sure am. I feel much better today. I’m ready.” Hector washed his plate. He told his mother he was going outside to play.

“Have a good time,” she called from the front room.

Hector grabbed his two mitts, his baseball, and his bat, and he went outside. Mary was waiting. “What would you like to practice first?” Mary asked.

“Let’s practice hitting the ball,” Hector answered. He and Mary walked over to the park. It was the same park where the tryouts were the day before. Mary held the ball. She stood about twenty feet from Hector. Hector held the bat.
“Are you ready?” Mary called.

“I sure am!” Hector shouted back.

Mary softly pitched the ball toward Hector. Hector watched the ball approach. As it came near him, Hector swung the bat. He swung as hard as he could. He felt the bat and the ball connect. BANG! The ball sailed over Mary’s head and landed far away in the green grass.

“That was excellent!” Mary shouted. She ran to get the ball. She and Hector kept practicing. They practiced hitting. They practiced throwing and catching. They were in the park all afternoon.

Around suppertime, they decided to go home. Hector felt much better. He was growing confident again. Mary asked, “We have school tomorrow. Do you want to come back to the park after school?”

“Yes, I do.” Hector replied.
The next day, Hector and Mary practiced after school. They practiced until suppertime. It was warm enough, so they even practiced after supper. They did the same thing the following day. In fact, they came back every day that week. By Friday afternoon, Hector felt really good. He knew that he would play well at the next day’s tryouts.

Mary said, “I’ll meet you at your house tomorrow morning. We’ll go to the tryouts together.”

“That sounds great,” Hector said.

The next morning, the sun was shining. It was another beautiful spring day. After breakfast and chores, Mary walked to Hector’s house. Hector was outside on the porch. He had his ball, mitt, and bat in his hands. “I’m ready, Mary!” Hector exclaimed. “I owe it all to you! Thanks for helping me!”

“You’re my friend, Hector,” Mary answered. “Let’s go to tryouts. Remember, I’ll be right there. I’ll be rooting for you.”
Hector and Mary were the first kids at the tryouts. Hector wrote, “Hector Gonzalez, age 8” at the top of the list. He waited for the coach to call his name. When the coach called him, he quickly jumped up and ran over to the coach.

“I’m back again, Coach.” Hector exclaimed. “This time, I’m ready.”

“Okay, then let’s get started,” the coach said. “Try hitting this ball when I throw it to you.” The coach tossed the ball through the air.

Mary was anxious. She wondered if Hector would be nervous again. She wondered if Hector would do well. She thought he would. But she wasn’t sure.

As the ball reached Hector, he swung the bat as hard as he could. The sound of the bat striking the ball sounded wonderful. The ball smacked off the bat. It sailed through the air. Up and up it went. Neither Hector nor Mary had ever seen a ball hit that hard. The ball traveled far past the coach. Mary jumped up
from the bench and shouted. “Way to go, Hector! Way to go!”

The coach started clapping. “I think I’ve seen enough. There will be a spot for you on the team. I look forward to coaching you. Way to go!”

Hector looked over at Mary. Mary smiled back. She gave him a thumbs-up. Hector smiled too and said, “I already have a great coach.”
Walter’s Week

Story by Sam R. McColl
Illustration by James Bravo
Sometimes I have great weeks. Weeks when everything goes just perfectly. When things are going well, my older brother Jonathan says they’re going “smashingly.” Which is weird, because smashing things doesn’t seem to be so great. Smashingly must be one of those words you learn in college. Anyhow, sometimes I have good weeks. Weeks when things go more or less okay. I might get a couple of good grades, but maybe not fantastic grades. And, sometimes I have not-so-good weeks. For example, I might stub my toe or get stung by a bee.

But SOMETIMEs, and thankfully not very often, I have TERRIBLE weeks. Weeks when just about nothing seems to go right. And let me tell you, I’m sure glad it’s Thursday, because this has been just about the MOST TERRIBLE week I’ve ever had. I’m glad it’s almost over. Except for a few moments, that is. I think I, Walter William Wilson, am just going to have to tell you all about it.
Monday started out pretty well. Mom and Dad made bacon and eggs for breakfast. Dad had to work the afternoon shift at the factory. So that meant that he was around when we all had breakfast. Sometimes he works the really early shift and gets up at the crack of dawn. On those mornings, he’s gone before I even get up. But Monday, he had breakfast with us. My little sister, Susanna, was quietly sitting in her chair. She wasn’t even making those annoying sounds she often makes. It looked like the week was starting out on the right foot. But boy was I wrong!

You see, I was having such a good time at breakfast. My dad and I were talking about the local baseball team. They had won the night before. Breakfast was as tasty as ever. I had a second helping of eggs, which I don’t normally do. I even had a second glass of orange juice. Sometimes, orange juice makes my mouth hurt in the morning. Because I was having such a good time, I didn’t realize how late it had become. I looked at the clock, and it said 8 o’clock! The bus usually picks me up at 7:45! I was late.

Sure enough, when I ran outside, the bus was long gone. Tommy, Maria, and Tia weren’t at the bus stop. They must have left in the bus already. So, I had to run back inside and ask Mom to drive me to school.
I was about a half hour late for school. Mrs. Crabtree wasn’t too happy about that. As I crept into the classroom, she stopped her lecture. “Mr. Wilson, kindly tell the class why you are so tardy,” she demanded.

“I missed the bus,” I said quietly.

“I think you had better catch it next time, Mr. Wilson,” Mrs. Crabtree said sternly.

“Yes, ma’am,” I said.

So it was only 8:30 in the morning and things were already taking a turn for the worse. I sat down in my chair. Tia, who sits next to me, was giggling as I sat down.

“You be quiet, Tia!” I whispered.

The class was going over the math homework from the weekend. Mine was in my Super Rangers backpack.
I reached in to grab it. It must have been caught on something, because when I pulled it out…

RRRRIIPPPPPPPPPPP!

The paper was torn in half. I had to tape it up, and I knew Mrs. Crabtree hates torn homework. Fortunately, there was tape in my desk. But as I used the tape, I cut my thumb on the sharp edge that cuts the tape. I had to ask Mrs. Crabtree for a bandage. She sent me to the Nurse’s office.

Things were not going well. As the day went on, things grew worse and worse. I spilled ketchup on my shirt at lunch. I banged my knee on the wall playing kickball in gym class. Then, I found out I did poorly in science class. By the end of the day, you can bet I was ready to go home. I just wanted to crawl back into bed, watch some cartoons, and call it a day.

Which is exactly what I did.
So I got a lot of sleep on Monday night. You might even say I got too much sleep. I must have slept wrong. When I awoke on Tuesday morning, I had a terrible pain in my neck. My neck was so stiff and sore that I couldn’t rotate my head. My first thought was this: if this is how my day’s going to start, I don’t even want to get out of bed.

But I could hear my mom calling from downstairs. “Walter! Come down and have your breakfast.” With my aching neck, I climbed out of bed and trudged down the steps.

“Walter, you still have your jammies on,” my mom said. I hate it when she calls them “jammies.”

“They’re pajamas, Mom,” I replied grumpily. “I’ll change after breakfast. My neck is sore.”

“Oh, poor sweetheart,” my mother whispered. “Would you like an ice pack for your sore neck?”

“Sure,” I muttered.

I began eating my cold cereal as my mom prepared the ice pack. I didn’t know how cold it would be. When I felt the cold ice on my neck, I jumped. And just my luck, I banged my knee against the table.

“Rats!” I howled. So, now I had a sore knee and a hurt neck. Things weren’t going well. I decided to just
finish my breakfast and go upstairs to get ready for school. The sooner I started my day, the sooner it would be over.

A few minutes later, I limped out to the bus stop on my sore knee. When the bus came, it hurt to climb the steps. When I boarded the bus, there was nowhere to sit! Well, nowhere except next to Tommy Dorsey. “Doogie Dorsey,” we call him, although I don’t know why. He’s not my favorite person. I sat down next to him and tried to ignore him all the way to school. Sometimes I’m not the nicest person around, and I was in no mood to be nice right then. I think Doogie Dorsey could tell. He paid no attention to me either.

My knee and neck hurt all day long. It was hard to concentrate. I was pretty unhappy. I couldn’t even enjoy the interesting project we had in science class, because I was in so much pain.

All day, I just tried to remember that my favorite program, Super Rangers, would be on television that night. That kept me going. I couldn’t wait to see the Rangers on television, battling bad guys and saving the world.

Super Rangers is always on at 7:30. I ate dinner with my parents really quickly and helped my dad wash the dishes so I’d be ready for the Super Rangers. At 7:25,
I eagerly sat down and clicked on the television. Do you know what? The program wasn’t on! There was some special news program on instead! So, after a terrible day, I had to go to bed without even being able to see my Super Rangers! Could things get any worse?

Wednesday

Fortunately, I got enough sleep on Tuesday night that my neck didn’t hurt on Wednesday morning. My knee had actually begun to feel better too. When I awoke on Wednesday morning, I hoped for a better day than Monday or Tuesday.

Like every other morning, I had breakfast before school. This time, waffles. I like waffles. And I made it to the bus stop on time, so I wasn’t late to school. I also didn’t have to sit next to Doogie Dorsey. I sat next to my good friend Darnell Parker. It looked like it might be a good day.

When we arrived at school, Mrs. Crabtree surprised us. “Today, class, we’re going on a field trip!” Everyone in class started cheering.

Hurray, a field trip!

The class lined up by last name. So, I, Walter William Wilson, was second to last. Only Teresa Young was behind me. That’s how it always happens.
Anyway, the field trip was to the zoo. I love the zoo. I like seeing all the animals, especially the tigers. Sometimes I like to imagine that I’m a big strong tiger. But not very often.

So, we boarded the bus and started off. On the bus, Mrs. Crabtree asked us to raise our hands and say what our favorite animals were. Once again, because my last name is Wilson, I had to wait until the end. Do you know what? Doogie Dorsey, who went fourth, said that his favorite animal is the tiger! He had to know that MY favorite animal is the tiger. So, I had to pick another animal. All the good animals were taken. Do you know what’s worse? By the end of next week, we each have to prepare a report on the animal we picked. I picked the koala. It was one of the few animals left by the time it was my turn.

When we got to the zoo, Mrs. Crabtree and the zookeeper took us around. The animals were neat. We learned a little bit about each one. But there were a few problems. First, the tigers weren’t in their cage. They were at the animal doctor. They were getting their checkups, I guess. So I didn’t get to see the tigers. That was a disappointment. Also, the zoo in my town doesn’t
even have koalas. So I couldn’t learn anything that would help me with my report. I guess I have a lot of research to do.

About halfway through the trip, it started raining. There was lightning and thunder too. So we started running back to the bus. Then I slipped in a puddle. I dropped my Super Rangers backpack in the muddy water! My favorite backpack was now all stained. I thought to myself, “It’s Monday and Tuesday all over again.” Plus, slipping in the puddle made my sore knee hurt again. I just wanted to go home.

When the school day was over, I rode the bus home. As I sat on the bus, the only thing I had to look forward to was working on my report. I don’t even like koalas. I spent the afternoon doing research on my brother’s computer. Then I had dinner. I watched some television after dinner. Then I went to bed. As I lay in bed, I thought about the next day. I just knew it had to be better than today, yesterday, or Monday. I guess you could say I try to look on the bright side of things.
All Wednesday night, it rained. There was lightning and thunder too. The storm kept me awake for a lot of the night. So, I was tired and grumpy when I finally woke up Thursday morning.

I trudged downstairs for breakfast. Mom was in a hurry, so she hadn’t had time to make breakfast. I had cold cereal for breakfast. I saw that my older brother had drunk all of the orange juice. I had to have grapefruit juice with my cereal instead. I don’t like grapefruit juice. It makes my mouth pucker. But I drank it, because I needed my vitamin C. Vitamin C is important. It helps keep you healthy.

Before I was ready to go to school, I tried to clean the mud off of my Super Rangers backpack. I didn’t want to carry around a muddy backpack all day. I tried using soap and water. That just smeared the mud around even worse. I had no choice. I had to carry around a muddy backpack all day, after all.

With my muddy backpack in hand, I went to school. Of course, I wore my backpack over my shoulders on the way. So the back of my shirt was muddy all day, as well. On the bus, Doogie Dorsey laughed at my muddy shirt. I gave him a dirty look that made him change his tune right quick.
By the time I got to school, I was in a bad mood. I could barely pay attention to Mrs. Crabtree. I think she was talking about math all morning, but I’m not sure. I just sat there with a scowl on my face. It had not been one of my favorite weeks, and I was ready for it to be over. Of course, I knew I had the rest of Thursday and all of Friday to get through.

Do you remember that science project I mentioned a couple of days ago? Well, we got our grades back. I didn’t do very well. I usually do really well in science. Sometimes, I like to imagine being a scientist when I grow up. I would make special rockets and spaceships for the Super Rangers. Wouldn’t that be awesome?

So I get upset whenever I don’t do really well on a science project. I’m sure that Dr. Prime, who builds the spaceships for the Super Rangers, never got a B in science class. I was disappointed in myself. My older brother always tells me that I’ll do better next time, and sometimes I do, but it still hurts. And do you know what else still hurts? My knee, from when I banged it on the table.

When the school day was finally over, I went home and started writing about what a terrible week I’d had.
I wrote about hurting my neck and hurting my knee. I wrote about missing the school bus and sitting next to Doogie Dorsey. I wrote about missing the tigers. I wrote about the koalas. I wrote about missing the Super Rangers on television. I wrote about getting my Super Rangers backpack all dirty. I even wrote about grapefruit juice. Then, I thought about what I might have to write about on Friday. When it was time for dinner, I went downstairs. Dad had to work late at the factory, so he couldn’t have dinner with us. After dinner, I didn’t even watch television. I just went upstairs and went to bed.
Wow. Sometimes I have terrible weeks. Weeks when nothing seems to go right. I might hurt my neck or my knee, or miss the school bus, or have to sit next to Doogie Dorsey. I might miss the tigers on a silly field trip to the zoo. And sometimes I have okay weeks. I might get a couple of good grades and a couple of bad grades. I might miss my favorite television show.

But SOMETIMES, I have GREAT weeks. Weeks when everything goes almost perfectly. When things go smashingly, as my older brother Jonathan says. Well, let me tell you something. This week didn’t start out like it was going to be a good week, let alone a great week. But it sure ended up that way. I think that I, Walter William Wilson, am going to have to tell you all about it.

I woke up Friday morning. My dad was home from the factory, so he made pancakes for everyone. That was nice. I didn’t miss the bus, and I didn’t have to sit next to Doogie Dorsey. My mother had cleaned my backpack, so I went to school happy.
You can’t imagine what happened when I got to school. On the way, I had no idea I was in for the surprise of my life. When we got to school, Mrs. Crabtree told us we had a surprise assembly. An assembly is where all the students meet in the gym. So we lined up by last name and marched down the hallway to the gym. We sat as a class, like we always do.

Mrs. Johnson, the principal, spoke in front of the school. She said we had a very special guest. Do you know who it was? It was Marissa Jenkins. Marissa Jenkins plays Dr. Beverly Wallis, the animal-expert doctor on the Super Rangers! A real live Super Ranger was at our school! I was so excited, and I cheered as loud as anyone else when she came to the front.
Things got even better. Since Marissa plays an animal expert, she was at our school to show us some interesting animals. You’ll never guess which animal she wanted to show us first. The koala! She brought a furry little creature out of a cage and showed everyone. She told us all about where koalas live. They live in Australia. She told us what they eat. They eat the leaves and other parts of a certain tree.

Now, here’s where things got really great. Marissa, or Dr. Wallis, mentioned that there was a student in our school who was doing a report on koalas. Before I knew it, a Super Ranger invited me up to meet her and see the koala! I got to meet a Super Ranger, one of my heroes! She told me that I was smart to pick such an interesting animal for my report.

Can you believe that such a terrible week ended so well? I sure couldn’t, at first. But now I can. Sometimes, when things don’t seem to go so well, they’re going better than you think. I guess I can say that this was one of the best weeks of my life. Go figure.
Eyesight: You’ve Got to See This!

By Min Ha Li   Illustration by James Bravo
You can watch beautiful sunsets. You can see the rain coming down against your windowpane on slow spring days. You can watch sporting events on your television. You can even catch sight of a couple of squirrels playing in the park on a sunny afternoon.

Most people don’t realize how important their eyes are, but without our eyes, we couldn’t do any of these things. Eyesight is one of our most important senses. Think of all the interesting things you see from when you open your eyes in the morning until you close them at night!

But how does it work, exactly? What makes it possible to see things? Read on to find out more about sight, your eyes, and how they work.
People haven’t always thought about eyesight the way we do. In fact, some people in ancient times had very interesting ideas about how sight worked. Take people in ancient Greece, for example. They believed that the objects that people saw existed just because people could see. Imagine this: you are in ancient Greece, walking down a city street. You spy a toga (a Greek robe) on a line. Somebody has washed it and hung it to dry. You look at the toga and see its nice colors and beautiful designs. Now you close your eyes—the toga is no longer there. You believe that because you can’t see it, it must not be there. Your seeing it made it exist. Interesting!
Of course, we don’t really believe what the people in ancient Greece did. Imagine this. You’re watching somebody play catch with her dog. Then you close your eyes. Of course, you can’t see the two playing anymore. But you still know that they are there. You can hear them. You also know that when you open your eyes again, they’ll still be there. Our ideas about eyesight have changed a lot over the centuries.

But now it’s time to investigate our eyes and explore the different parts of the eye and how they work. You’ve got to see this!
The eye, just like every other part of the body, has many parts. The most important parts, and the ones we’ll pay attention to, are the iris, the pupil, the cornea, the lens, the optic nerve, and the sclera (sk-LAIR-uh).

The cornea is a sheer covering on the outer part of the eye. The pupil is the black part right in the center of the eye. The iris is the colored part that surrounds the pupil. Some irises are blue, some are brown, and some are hazel. When you tell somebody what color your eyes are, you’re talking about your irises.

The lens sits right behind the iris and the pupil, and behind the lens lies the optic nerve, which connects the eye to the brain. The sclera is the white part that surrounds the pupil and the iris. The retina makes up the rest of the eye behind all of these things. Those are the parts of the eye. Now let’s explore what they do!
Here’s how it works. When you look at an object, no matter what it is, light rays bounce off the object and hit the cornea. The cornea and the lens then work together to make sure that the light rays hit the retina. The lens makes sure that the light rays aren’t blurry.

Now, an image of the object is on the retina. Remember that this all happens very quickly. But here’s an interesting thing. The light rays on the retina make the object appear upside down! So the retina has to change the light rays into electrical charges that the brain can understand. You wouldn’t want to see everything upside down!
The retina changes the light rays into electrical charges that the brain can understand. The retina then transmits these electrical charges to the brain along the optic nerve. When the brain receives these electrical charges, it turns them around so the object appears right side up. That’s why we don’t see everything upside down. Now that the brain has received these charges and turned them right side up, you’re seeing correctly!

But what about the iris and the pupil? They work to control how much light gets into the eye. When it’s dark out, the iris opens up to allow more light in. This makes your black pupils appear much larger. When it’s lighter outside, the eye doesn’t need as much light to see objects, so the iris becomes tighter. This makes the pupil appear smaller.
But sometimes, the parts of the eye don’t work correctly. Sometimes, the parts are shaped incorrectly. That’s why some people don’t see as well as others. The three most common problems people have with their sight are nearsightedness, farsightedness, and astigmatism (uh-STIG-muh-tiz-um). A person who is nearsighted cannot see far away objects clearly. A farsighted person cannot see objects close up. A person with astigmatism sees everything blurry.

Fortunately, people can wear corrective lenses that try to fix these problems. Some people wear eyeglasses, and some others wear contact lenses. Most people begin to have problems with their eyes as they grow older. It’s no big deal.

Benjamin Franklin was both nearsighted and farsighted. He didn’t like having two pairs of glasses to see things, so he cut the lenses of his glasses in half and put them together to make bifocals. People still use his invention today!
Another common eye problem is color blindness. This doesn’t mean a person sees the world in black and white! A color-blind person might have trouble telling some colors apart, such as reds, greens, and browns. This isn’t a serious problem, though it could cause you to wear a mismatched outfit to school!

Some people suffer more serious eye problems. They might be born blind or become blind after a serious illness or accident. That means they cannot see well or at all. A blind person may be able to see lights and shadows, but cannot see what is making them. People who are legally blind might use canes or service animals to see for them.

In recent years, science has developed even more to correct people’s eyesight. Some people with poor eyesight have chosen to undergo laser surgery.
This is a new process that uses lasers to change the misshapen parts of the eye. Some people believe that it is a quick and easy way to correct your vision. Others, however, are unsure of the procedure’s safety.

At any rate, as science progresses, there will probably be more and more ways to correct poor vision. If you think about it, ways to correct vision have changed a lot over time! Can you imagine when there were no such things as eyeglasses? Back then, people who had poor vision just had poor vision. There was no way to change that. But the inventions of eyeglasses, then contact lenses, and now laser surgery have changed all that.
Your eyesight is important, and you should do everything you can to protect your eyes and your vision. There are a number of ways to do this. Whenever you are playing contact sports, you should wear protective glasses to protect your eyes from harm. Don’t watch too much television. Watching too much television, or playing video games for too long, can cause strain on your eyes. Be sure to shade your eyes (with sunglasses or a hat) whenever you’re out in the bright sun. Also, never EVER look directly at the sun. That can cause serious damage to your eyes. Finally, if you’re someone who already wears eyeglasses, make sure you wear them just the way your eye doctor says.

There is much to see in the world. If you take care of your eyes, you can help ensure that your vision remains as strong as it can.
Animals in Trouble: Endangered Species and How to Help Them

By Tanya Jackson
Illustration by James Bravo
Can you imagine a world without wild animals? That would be pretty sad. What if you could not see them in the forest? What if you could not see them in the hills, or even at zoos? What would that be like?

Some species, or types, of wild animals, are in serious danger of vanishing. We call that being *endangered*. What does endangered mean? It means in danger of dying out, or becoming extinct. If we do not take steps to make sure this does not happen to these creatures, they could be gone from the earth forever.

Some endangered animals live in the United States. Panthers, wolves, and some birds are endangered. There are animals all over the world that are in trouble. Rhinoceroses and pandas are endangered. In this book we are going to learn about some of these animals. We are going to learn about ways that animals become endangered. We are also going to learn about ways to help endangered animals. You will learn that there are things you can do to help!

Words to Know

**extinct (adj):** Gone forever, vanished.
In Florida you will find some amazing wild cats. They are Florida panthers. They are the only cougar found east of the Mississippi. Panthers are huge, beautiful animals. They are light brown. They can grow to be more than six feet long. They can weigh more than 100 pounds. That is a big cat!

The panthers are very strong and fast too. They can run almost thirty miles an hour in short spurts. If they are standing still, they can jump forward twenty feet. They can also jump eight feet in the air! They really are amazing.

But Florida panthers are in trouble. Panthers need a lot of space. People are taking up that space. Florida panthers used to live all over the southeastern United States. After European settlers arrived in Florida in the early 1500s, the panther’s range became smaller. People are building farms. They are building towns. They are building malls. The panthers are running out of places to live. They live in a small section of southwestern Florida. The Florida panthers may perish. They need our help.

Learn more!
The state of Florida has a website where you can learn about panthers. The web address is www.panther.state.fl.us.
**Save the Panthers!**

Only fifty to seventy mature panthers live in Florida now. That is not many full-grown panthers at all. But the state of Florida is trying to save them. Florida is trying to save land for the panthers. Florida has made it illegal, or against the law, to build in certain places. But that might not be enough. Florida has also asked people with big farms to keep their land safe for panthers. They have asked farmers not to have traps on their farms that could hurt wild panthers.

Scientists study the panthers. They need to know how much land panthers need to stay happy and healthy. They are learning more and more about panthers all the time. Teaching people about panthers also helps people learn not to fear panthers. Children in Florida are helping. In 1982, the children of Florida took a vote. They decided that the panther should be the official animal of Florida. That shows how much people care about these creatures. Hopefully, all the efforts to help panthers will cause their numbers in Florida to grow.
Imagine hiking in the desert. You are on a long, hot hike. You stop for a drink of water. You look around. Up in the sky, you see a flock of big, black birds. You pull out your binoculars to take a closer look. The big, black birds are four feet long. Their wingspan is almost ten feet!

What kind of birds are they?

They might be California condors. California condors are scavengers. Scavengers eat animals that are dead. Condors scan the ground for rotting animals. Because condors eat dead animals, some people call them nature’s cleanup crew.

Condors are strange-looking birds. They are known for their bald crowns. Condors have no feathers on their heads. Instead, they have red or pink skin. Because of this, some people think condors are really ugly. But, as nature’s cleanup crew, they have an important function. They get rid of dead, rotting animals.
Condors in Trouble!

California condors once lived up and down the west coast. But now they, like the Florida panther, are one of the most endangered species in the United States. In the early 1980s, there were as few as nine California condors. The condors were in grave danger. Condors were dying from lead poisoning. They ate pieces of lead bullets when they ate animals shot by hunters. People also shot condors.

Scientists knew they had to take some serious steps. Do you know what they did? They captured every California condor they could. By 1987, there were no condors in the wild. Each one was safely cared for by people. The scientists then encouraged the condors to breed. Slowly more condors hatched. In the 1990s scientists began releasing these condors into the wild.

The number of condors has grown. Some say there are probably now 200 condors in the wild. Scientists are working to figure out ways to keep condors safe so their numbers can grow even more.

Learn More
You can learn more about California condors online at www.defenders.org/wildlife/birds/calcondor.html.
Gray wolves are another animal in trouble. Gray wolves once roamed freely in Canada and the United States. Now they are in trouble. They mainly live in Alaska, Idaho, and Wyoming.

Gray wolves are the ancestors of dogs. Some wolves are nearly three feet tall at their shoulders. They are many different colors. Some are black. Others are white. Some are gray. Some have mixed colors. They are heavy beasts too. Some can weigh well over 100 pounds. Imagine a dog that big!

Gray wolves travel in packs. That means they travel with other wolves. These packs have between four and ten wolves. There is usually one leader. The typical leader is a male. The rest of the pack is family. There is the leader’s mate. There are the leader’s pups. Sometimes you will find the leader’s brothers and sisters in the pack too.
Hunting the Gray Wolves

The gray wolves’ main enemy is humankind. Before Europeans settled in North America, there were hundreds of thousands of gray wolves. Native people in Canada and the United States respected the wolves. They honored the wolves. But this all changed as new people began to settle throughout Canada and the United States.

The settlers and the native people had different feelings about wolves. The settlers feared the wolves. They also misunderstood the wolves. They were afraid the wolves would kill all of their livestock, or farm animals. In fact, wolves hunt only the weakest animals. But the settlers did not know that. They hunted the gray wolves. Ranchers shot any gray wolf they saw. Sometimes the government paid hunters for dead wolves.

By the late 1960s, there were fewer than 100 gray wolves in the United States. Too many had been hunted. They were in serious danger.
Saving the Gray Wolves

Something had to be done. A new project began. It was a wolf recovery project. It was like the condor project. Scientists captured wolves living in Canada. They tagged the wolves. This means they put electric tags in their ears. That way the scientists could follow the wolves later.

Some of the wolves mated and had pups. Soon there were enough to release in the wild. They let the wolves go in Yellowstone National Park. People kept an eye on all the wolves. They made sure the wolves were safe.

Laws were also passed. It became against the law to kill wolves. Hunters were not allowed to kill them anymore. Slowly, the number of wolves has grown. There are now around 5,000 wolves in the United States. In fact, wolf reintroduction has been so successful, that certain wolf populations were removed from protection lists in 2009. Many people do not agree that this was the right decision because it means wolves can be hunted in certain areas. Some people think they will be over hunted again. Wolves still need protection.

Learn More
You can learn all about the wolf project. Log on to www.nps.gov/yell/naturescience/wolves.htm.
The bald eagle is a symbol of the United States. The bald eagle is also on the presidential seal, which is the symbol of the president of the United States. Wherever the president goes, there is a picture of a bald eagle nearby.

The bald eagle is a beautiful bird. It grows to be about three feet long. Its wings are almost six feet from tip to tip. The bald eagle is not really bald, though. It is brown but with a white head.

The bald eagle is called a bird of prey. That means it eats other animals. Other animals are its prey. The bald eagle’s diet is fish. It lives near the ocean, rivers, and lakes so it can hunt fish. When an eagle sees a fish, it swoops down and catches the fish in its talons. It has also been spotted stealing fish from other birds!

Did you know?
The bald eagle is a bird of prey. There are others. Falcons, hawks, and owls all are birds of prey.
Hurting the Bald Eagle

The bald eagle is endangered. Why? Bald eagles face the same problems other endangered animals face. People are the eagles’ #1 enemy.

Farmers used to use a poison called DDT to kill bugs on their farms. But there was a problem. The DDT washed into lakes and rivers. The DDT then poisoned the fish. Eagles that ate the poisoned fish died from the poison. If the eagles laid eggs before they died, the baby eagles were poisoned too.

Also, people built on land where the eagles lived. They cut down trees to make room. They needed room for malls. They needed room for farms and houses. Sometimes, the trees had eagles’ nests in them. Then the eagles had no place to live, so there were fewer and fewer eagles.
Saving the Bald Eagle

People knew they needed to save this national symbol. A number of steps were taken. First, using DDT was banned, which means no one was allowed to use it anymore. DDT was banned in the 1970s. People had to come up with other ways to kill bugs. To this day, you cannot buy DDT in the United States.

Second, places where bald eagles lived became protected. If a family of bald eagles lives in a forest, that place is preserved. You are not allowed to cut down trees there.

Third, it became illegal to hunt and shoot a bald eagle. Anyone who shoots a bald eagle is in a lot of trouble.

Have these steps helped? They have. Hundreds of years ago, there were more than 250,000 bald eagles in North America. In the 1960s, there were only 1,000. But by 1992, there were almost 7,000. The bald eagle is rebounding. As of 2010, bald-eagle populations are listed as recovered for most of the United States. As conservation efforts continue, we will hear more good news about eagles.

Did you know?
The bald eagle can live for almost thirty years!
There are endangered creatures in the oceans off the United States too. One of the largest endangered species in the world is the humpback whale. Some humpbacks live off the coasts of California and Alaska.

The humpback, like all other whales, is a mammal that lives in the water. It needs air to breathe. So every now and then, humpbacks must come to the surface for air. People flock to places where whales live. Whales breaking the surface of the sea are quite a sight. Above the surface, they fill their large lungs with air. Then they go below the surface again.

Humpbacks are also known for their beautiful songs. They communicate with each other underwater with these songs.

Nobody is sure what purpose the songs serve. Maybe the whales use them to tell other whales where they are. Maybe they use their songs to attract other whales. But almost everyone agrees that the whales’ songs are beautiful.

Check it out!
You can hear actual humpback whale songs online at www.oceanmammalinst.com/songs.html!
Save the Whales

For many years, people hunted whales. They wanted oil. The oil in whales' skin was used to power lamps. Whale skin also has fat called blubber. Blubber and other parts of whale skin were used for food and warmth. Many people hunted whales for their blubber and oil.

Sometimes ships at sea have accidents. When some ships crash, they spill oil. This oil is bad for whales, so accidents at sea hurt whales too.

Whales, especially humpbacks, were in awful danger. They began to die off. Something had to be done.

Steps were taken to save the whales. The United States passed a law. The law said no one was allowed to hunt whales. This would protect whales near United States’ coasts. Also, many people who wanted to save the whales came together. They formed groups. These groups worked to stop hunters.

Also, the government passed laws for safety so there would be fewer accidents. These steps have helped the number of whales to grow. Things are looking up for the whales.

Check it out!

At www.savethewhales.org you can do some fun online activities. You will learn about whales at the same time.
Perhaps the strongest and fiercest of the endangered animals is the mighty rhinoceros. The rhinoceros is a huge and powerful beast. The rhinoceros roams the plains of Africa and Asia. It can grow to be almost six feet tall, and it can weigh almost 3,000 pounds. But do not let its size fool you. Sometimes the rhinoceros can run up to forty miles per hour. That is fast!

The rhinoceros is best known for its horn. Every rhinoceros, unless something has happened to it, has a large horn at the front of its snout. The horn is strong and powerful. These horns can grow to be nearly two feet long.

The rhinoceros is also known for its skin. The rhinoceros has thick skin. Its skin might be brown. It might be gray. It might be almost black. It all depends on the type of rhinoceros. But all rhinoceroses are in trouble, and some are in very serious trouble.
The Rhinoceros in Trouble

There are five different types of rhinoceros. There is the Sumatran (soo-MAH-tran) rhinoceros. There is the Javan (JAH-vun) rhinoceros. There is the Indian rhinoceros. There are the white rhinoceros and the black rhinoceros. They all have horns, they all have thick skin, and they all are in trouble.

Like most endangered animals, the rhinoceros has one major enemy. That enemy is humankind. Hunting the rhinoceros is against the law. Hunting that is against the law is called poaching. Poachers have killed countless rhinoceroses.

No rhinoceros is in more trouble than the Javan rhinoceros. Experts think there may be only sixty in the entire world. No one seems to know how to stop people from poaching. Also, people have tried to capture and breed the rhinoceros. Unfortunately, rhinos do not breed well in captivity. There has been only one successful Sumatran rhino birth in 100 years in the United States. No one knows what to do. Let’s hope experts will soon figure something out.
In Asia, far across the world, lives the giant panda. Many agree that pandas are some of the most beautiful creatures on Earth.

Pandas are found only in China. They are giant black and white bears. Usually they have white faces, with black ears and eye patches. Full grown, they weigh about 200 pounds. Pandas are omnivores. This means they eat plants and meat. You will find pandas in places where there are only bamboo plants to eat. Do you know what else? Pandas cannot store enough fat from their bamboo diet, so they do not hibernate during the winter. They are the only bears that do not hibernate!

Pandas live in remote parts of China, usually high in the mountains. They live in forests that have thick bamboo stands, or groups of bamboo trees. As a result, it is difficult to see these beautiful creatures in the wild.

Did you know?
The strong, flat teeth in the back of your mouth are called molars. Pandas have the largest molars of any carnivore in the world!
Saving the Pandas

Pandas face the same dangers other endangered animals do. Their enemy is humankind. Pandas can live in only one part of China. But that part is too small. It is surrounded by people. There is not enough room for the pandas. Experts say there are only about 1,500 pandas in the wild.

People are beginning to help. China has opened several research centers for pandas. They study pandas to learn how to better protect them and their bamboo forests. The United States is beginning to help. Zoos here are adopting pandas from China. Zoos like to adopt pairs of pandas in the hope that they will breed. There are some famous pandas in the United States. Bai Yun and Gao Gao live at the San Diego Zoo. Mei Xiang and Tian Tian live at the National Zoo in Washington, D.C. It is always exciting when a panda is born in one of our zoos. We do not want pandas, or any other creatures, to disappear from the world.

Did you know?
Tai Shan and Mei Lan are two famous pandas born in the U.S. They were returned to China in 2010 to help conservation efforts.
What can you do to help animals? There are many things you can do to lend a hand. Learn about endangered animals near your home. Find out what needs to be done to save them.

You can write letters to the government. Tell the people in your state government how you feel. Tell them to support efforts to help animals. Tell them to vote against steps that would hurt animals. Adults can help you find addresses for these letters.

Recycling also helps. Trash buildup leads to pollution. Pollution hurts animals. Do not make a lot of trash. Keep the air and land clean.

You can also learn about endangered animals. Do a school project on them. Teach other kids about these animals. Animals everywhere need our help. We do not want to live in a world where animals are not safe. Let’s all do what we can.

Find out More
Learn about other animals in danger at www.fws.gov/endangered.