LINDA HOYT

ANTHOLOGY OF MAGAZINE ARTICLES AND STUDENT WRITING

CONVENTIONS and Craft

GRADE 2

SCHOLASTIC

Dedication

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STUDENT WRITING

For digital versions of these magazine articles and student-written pieces, go to scholastic.com/CCresources.

When Plants Attack!

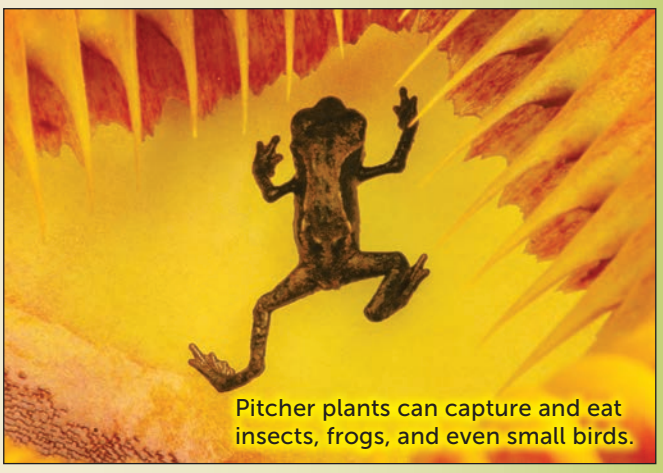
Meet plotting plants that trap flies, frogs, and spiders.

by Judith Jango-Cohen

A hungry fly lands on a sweet-smelling plant. Suddenly, its legs become stuck to a leaf. There's no way to escape. The unlucky insect has fallen into the clutches of a carnivorous (KAHR-nih-vor-us) plant. These plants attract, trap, and kill insects, spiders, and even frogs for food. What makes some plants crave meat?

Venus flytrap

A Venus flytrap's leaf can snap shut in a tenth of a second.



Pitcher plants can capture and eat insects, frogs, and even small birds.

Like all plants, carnivorous plants make their own food through a process called photosynthesis. Seizing the sun's energy, they combine water and carbon dioxide to make sugar. But plants need more than just sugar to survive. They also soak up nutrients from the soil in which they grow.

The soil that carnivorous plants live in does not have a lot of nutrients. So, to stay healthy, these plants devour the nutrient-rich bodies of small animals. Read on to learn how the crafty plants catch their victims.

KILLER COILS

A sundew's slender leaves bristle with bright red stalks. To lure hungry flies, each stalk holds a drop of nectar—a favorite food of insects. But flies, beware! The sweet fluid is laced with a sticky substance.

When an insect lands on the leaves, it becomes stuck. The plant can't eat its trapped victim whole. So the sundew releases special juices used for digestion. These digestive liquids break down the insect's body. Then, the plant absorbs its snack.

TIGHT SQUEEZE

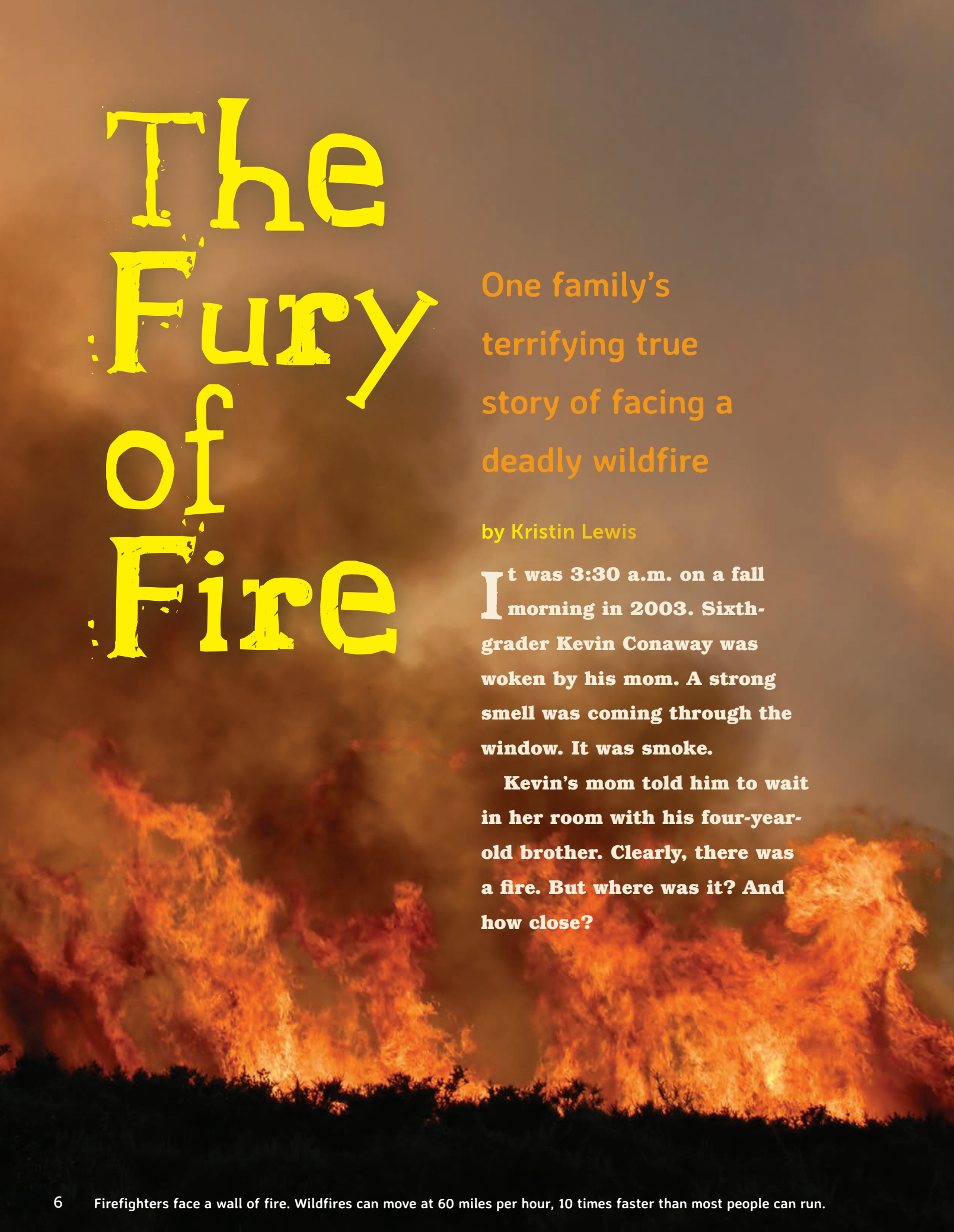
Venus flytraps rely on surprise to snap up snacks. The plant's clam-shaped leaves have tiny hairs inside them. If an animal lands on the leaf and touches these hairs—bam!—the leaf snaps shut on the prowler. As the animal squirms around seeking escape, the hinged leaf squeezes even tighter. Then, digestive juices flow into the trap.

Sometimes falling tree leaves or raindrops will trick the plant into snapping shut. But the Venus flytrap isn't fooled for long. If its "food" doesn't move, the plant's leaf reopens. It likes its lunch alive.

DEAD END

Pitcher plants have a slick way of trapping prey. The rims of their deep, cup-shaped leaves are covered with slippery nectar. If a hungry insect wanders too close to the edge of the cup, it can slip. It falls into the pitcher and plunges into a pool of liquid at the bottom. The walls of the plant are slippery, so the insect can't escape. Soon, the intruder drowns. Digestive fluids in the pool of liquid break down the insect's soft body parts. Lunch!

If a sticky sundew catches an insect, the plant curls its leaf over its victim.



The Fury of Fire

One family's terrifying true story of facing a deadly wildfire

by Kristin Lewis

It was 3:30 a.m. on a fall morning in 2003. Sixth-grader Kevin Conaway was woken by his mom. A strong smell was coming through the window. It was smoke.

Kevin's mom told him to wait in her room with his four-year-old brother. Clearly, there was a fire. But where was it? And how close?

Firefighters face a wall of fire. Wildfires can move at 60 miles per hour, 10 times faster than most people can run.

Kevin's parents went outside their house in Valley Center, California. They saw a line of cars, all headed the same way. Everyone was fleeing.

The roar of the fire could be heard in the distance. The air was thick with smoke. Yet there were no alarms, no flashing lights, no firefighters to help.

The family was about to be caught up in the deadliest series of wildfires in the history of California. And they were on their own to rescue themselves.

Blistering Skin

Wildfires are very dangerous. They start in the wilderness, helped by dry plants and wind. Wildfires can move at speeds of up to 60 miles per hour, 10 times faster than most people can run. They burn as hot as 2,600 degrees Fahrenheit.

The front edge of a wildfire is an invisible wave of heat. This heat can blister skin, crumble eyelashes, and turn hair to ash in one second. After four seconds, clothing catches fire. And this is all before the actual flames arrive.

In California, wildfires are so common in the fall that people call it "fire season." Every year, fire crews put out hundreds of fires before the flames can reach areas where people live. But the fire that woke Kevin's family was different.

No Warning

In fall 2003, San Diego County's weather had been very dry. Many trees had died. They were like giant matchsticks. It wouldn't take much to start a fire.

On October 25 that year, a man was lost in a forest near San Diego. He lit a fire, hoping to signal for help. Nearby plants quickly caught fire. Within hours, the flames had burned up 5,000 acres of land.

Because it was fire season, state fire agencies

14 different wildfires were raging across California. It took more than 14,000 firefighters to put out the fires. The flames destroyed 3,710 homes. They killed at least 22 people.

were ready with firefighting crews and equipment. But then things got worse than they expected.

An arsonist started another fire 25 miles north. This fire was heading straight for Kevin's town. There was no warning system to alert the people sleeping in the town. And with crews already busy, only a few firefighters could get there.

Escaping the Fire

The Conaways decided to leave at once. Kevin grabbed his guitar, his schoolbooks, some clothes, and himself. He put their dogs and cats into travel crates. His mom grabbed water and food.

The family drove up and down their street, honking to wake anyone who might still be asleep. Then they joined the line of cars driving away as fast as they could.

The Long Wait

The Conaways went to stay with friends. They waited for news and worried. Was their house still standing? Were their friends and neighbors safe?

The Conaways felt sad. Their town was a disaster zone. Debris littered the streets. Kevin's middle school became a shelter for families who had lost their homes.

A home burned down by a forest fire

Families rest at a shelter

By then, 14 different wildfires were raging across California. It took more than 14,000 firefighters to put out the fires. The flames destroyed 3,710 homes. They killed at least 22 people.

Going Home

A few days later, it was safe to go home. As the Conaways drove onto their street, Kevin saw a blackened hillside. But their house was OK. Firefighters had arrived in time. It was a huge relief. "That will always stay with me," Kevin says.

Still, the Conaways felt sad. Their town was a disaster zone. Debris littered the streets. Kevin's middle school became a shelter for families who had lost their homes.

Nine years later, these memories are still with Kevin. But so are the positive memories. His family worked with their neighbors. They cleaned up the town. They gave out clothing and supplies.

Even more important, the town created its own alert system in case of another disaster. When more wildfires started in 2007, the system worked. Everyone got out safely.

Hope on Wheels

In war-torn Afghanistan, skateboarding is giving kids hope for the future

by Laura Modigliani

Kids in Afghanistan have spent their whole lives in a war zone. They've grown up hearing bomb blasts and gunfire. They're used to seeing U.S. soldiers patrolling the streets to try to keep the peace. In many parts of the central Asian country, it's not safe to play outside.

The capital city of Kabul (kah-bull) may be the last place you'd expect to find kids skateboarding. But at a unique school called Skateistan, kids are learning the same skating tricks that you might do. More important, they're free to just be kids and forget about the difficulties of everyday life.

The idea for Skateistan started with an Australian man named Oliver Percovich. In 2007, he moved to Kabul and brought along his skateboard. He noticed that curious kids would follow as he skated around the city.

It turned out that they had never seen a skateboard before. Percovich saw the joy in their faces as he let them take his board for a spin. That inspired him to open the country's first skate park and skateboarding school.

These Afghan girls wear head scarves called hijabs (hee-JABZ) while they practice skating.

An Afghan boy skates next to his horse cart in Kabul.

Most schools in Afghanistan don't have playgrounds. Many Afghan boys never get the chance to play organized sports. It's even worse for girls, who usually don't get to take part in sports at all. At Skateistan, everyone gets to ride.

"Skating is my favorite sport now because no [one] has seen it here," says 12-year-old Durkhanai Stanekzai (Duhr-kahn-eye Stah-nek-zay). "Sometimes I skate outside, and people say, 'Look at her! What is she doing?' They think it's good."

Wheels of Change

Not long ago, life in Afghanistan was very different. In 1996, a group called the Taliban took power and imposed many strict laws. It banned music, TV, and movies. It took away many basic rights, especially from women and girls. Women weren't allowed to work outside the home or even show their faces in public. Girls were forbidden to attend school.

Things changed soon after the September 11, 2001 attacks on the United States. The leaders of Al Qaeda (ahl kay-dah), the terrorist group that planned the attacks, were hiding out in Afghanistan. But the Taliban refused to hand them over. The United States responded by invading Afghanistan in October 2001. The U.S. removed the Taliban from power and helped set up a new government.

Since then, life has improved for many Afghans. Girls are allowed to go to school, and they can act and dress more freely. But a lot of people there don't condone giving girls more opportunities. Many Afghan girls have been beaten simply for going to school or playing sports.

Kids skate at the grand opening of Skateistan's first skate park.

Percovich has worked to let girls know they are welcome at his school. "Girls have told us it's the only place they feel safe," he says.

Today, nearly half of the school's 350 students are girls.

Boarding School

There's more to Skateistan than boards and ramps. The school offers classes in English, computers, art, theater, and filmmaking. It also brings together kids who would never mix otherwise. That includes wealthy kids and kids who are forced to beg in the streets to help support their families. "I love everyone [in the school] because in this country, we really need unity," says 13-year-old Mohammed Suliman.

Percovich says Skateistan is helping kids build self-confidence and other skills that will prepare them for the future. "In the short term," he says, "we put smiles on their faces."

When Women Ruled Baseball

As a young girl growing up in Alabama, Delores Brumfield White never liked to play with dolls. "I'd rather be outside playing baseball," says White, who's now 80. Back then, she never dreamed she would grow up to play on a professional baseball team.

Then, in 1943, the All-American Girls Professional Baseball League was born. For the first time, women across the country had the chance to play baseball in the big leagues.

A Big Hit

Chicago Cubs owner Philip Wrigley created the girls' league. He wanted to keep people going to baseball games during World War II. Many stars of the men's leagues were fighting in the war. Wrigley feared that attendance would drop at their games.

At first, people went to the women's games out of curiosity. They didn't think women could actually play the nation's most popular sport. Some fans teased them. But once they saw how good the women were, fans were hooked. Within a few years, about 1 million fans nationwide were showing up to see the games.

White joined the league in 1947. She played for seven seasons—all while wearing a skirt. That was the league uniform! "It was not fun to slide in a skirt," says White.

Sports History

The league came to an end in 1954. One reason is that after the war ended, many fans went back to watching the men's games. But the league showed that professional sports weren't just for men. Today, hundreds of women in the United States compete in professional sports such as basketball, tennis, and soccer.

"It makes me really proud to know that I had a part in making it easier for women to be involved in sports," says White.

Star ballplayer Sophie Kurys stole more than 1,000 bases between 1943 and 1952.

GOING PRO

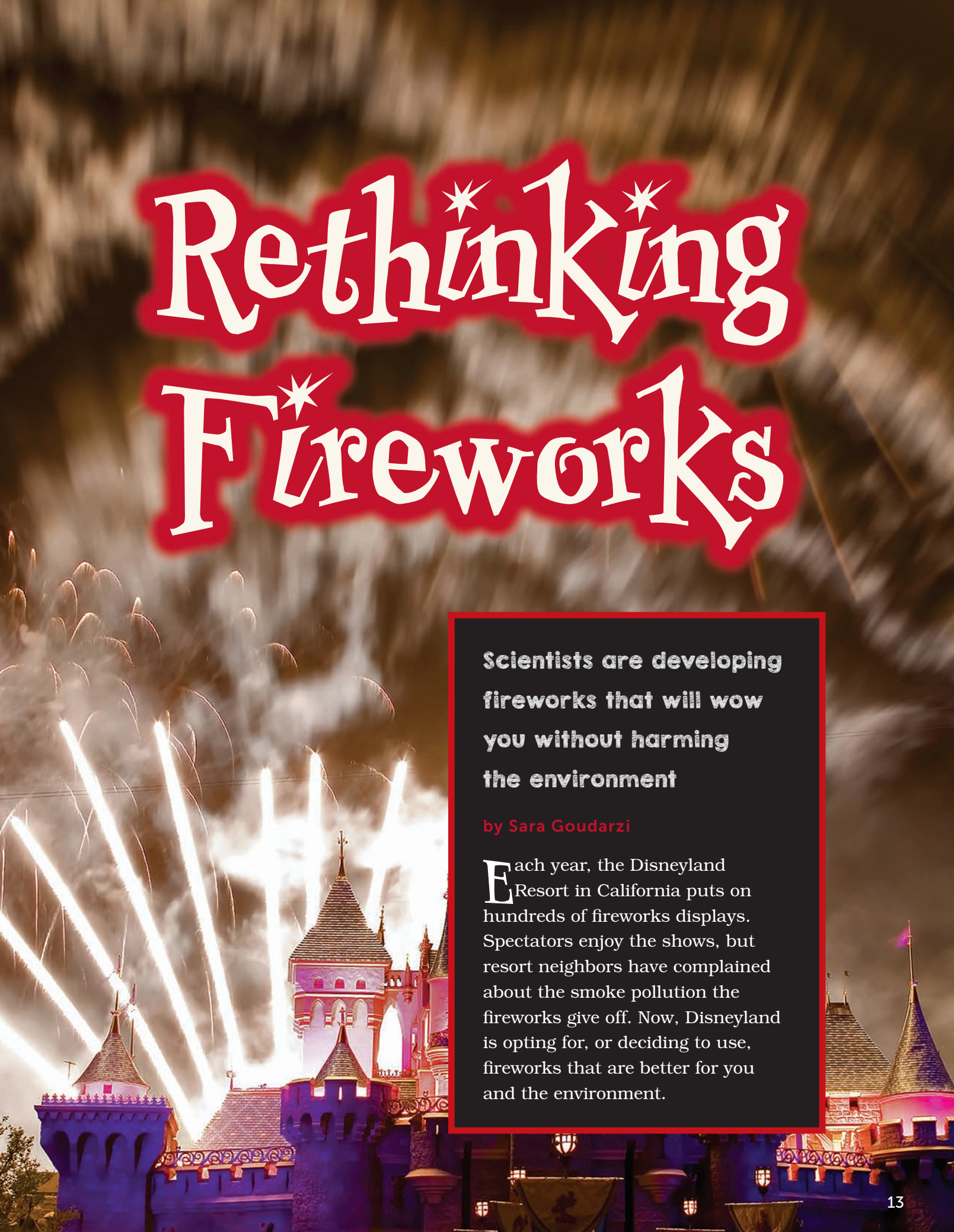
Women can now play in a professional league.

WOMEN'S NATIONAL BASKETBALL ASSOCIATION (WNBA)
Year formed: 1996
Number of Teams: 12

NATIONAL WOMEN'S SOCCER LEAGUE
Year formed: 2012
Number of Teams: 10

NATIONAL PRO FASTPITCH
Year formed: 1997
Number of Teams: 6

Rethinking Fireworks



Scientists are developing fireworks that will wow you without harming the environment

by Sara Goudarzi

Each year, the Disneyland Resort in California puts on hundreds of fireworks displays. Spectators enjoy the shows, but resort neighbors have complained about the smoke pollution the fireworks give off. Now, Disneyland is opting for, or deciding to use, fireworks that are better for you and the environment.

All About Fireworks

Fireworks consist of an enclosure, or *shell*, containing an explosive mixture called *black powder* and marble-sized pellets called *stars*. Both the black powder and the stars contain *fuel*, or a substance that produces energy, and an *oxidizer*, or material that supplies oxygen needed to burn the fuel.

Shells that shoot skyward also contain black powder underneath for launching. Black powder is made of charcoal and sulfur (the fuel) and potassium nitrate (the oxidizer). When a flame sets off the black powder underneath, a large volume, or amount, of hot gases pushes the shell into the air, and the show begins.

Metal salts inside the stars produce the colors you see. "For example, salt composed of the element barium gives you green," says David Chavez, a chemist at Los Alamos National Laboratory in New Mexico, who worked on improving the Disneyland fireworks. "To add red, you use strontium salt, and to add blue, use copper salts."

Environmental Hazards

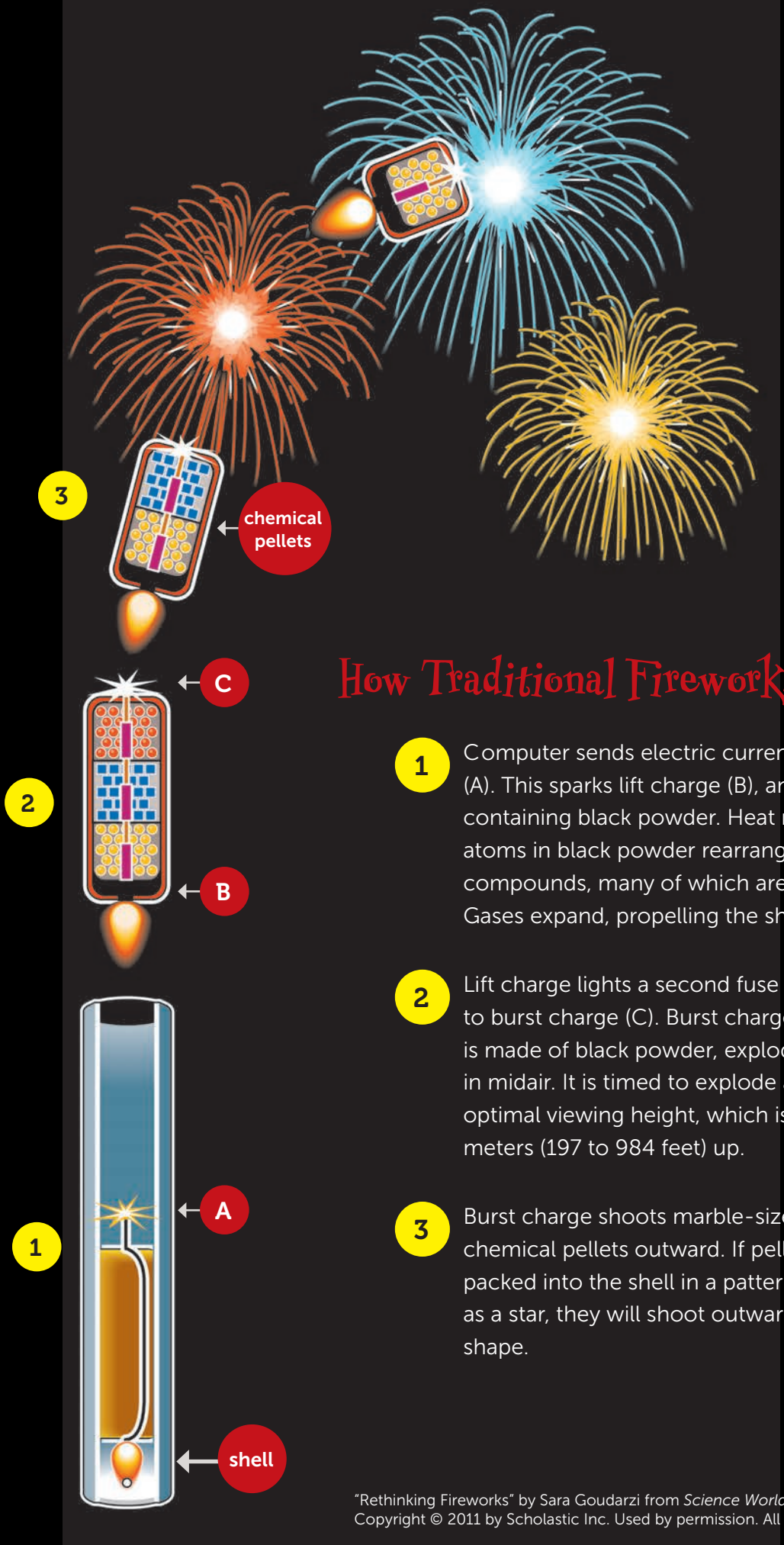
So what's it like being a Disneyland neighbor? If you're outside during a show, you'll smell burning sulfur—which resembles the odor of rotten eggs. And the smoke you'll be breathing in could be harmful. "The chemicals in fireworks do not produce highly toxic smoke clouds, but they can be irritating—particularly to people with health issues such as asthma," says John Conkling, a chemist at Washington College in Maryland.

Also, the stars contain an oxidizer, called *perchlorate*, that could settle onto the ground and get into drinking water. "Perchlorate has been shown to cause thyroid problems in humans," says Chavez.

Eco-Friendly Fireworks

The explosion of the black powder used to launch shells caused the smoke from the Disneyland fireworks. Scientists eliminated this problem by using compressed gas to push the fireworks up. To ignite the system, they developed a microchip technology that creates a spark once the fireworks are airborne. "It's a combination of two different techniques to help reduce the smoke," says Chavez, who is also working on new chemistry technology to create more eco-friendly fuel and coloring agents in fireworks. There's also an effort to replace perchlorate with a safer oxidizer.

Until all fireworks "go green," here's how to stay safe. "If the smoke is drifting into your area, move to a new, low-smoke location," says Conkling. "Hold your breath if the smoke will be of short duration, and wait for the air to clear."



How Traditional Fireworks Set Off

1. Computer sends electric current to fuse (A). This sparks lift charge (B), an explosive containing black powder. Heat makes atoms in black powder rearrange into new compounds, many of which are gases. Gases expand, propelling the shell.

2. Lift charge lights a second fuse that leads to burst charge (C). Burst charge, which is made of black powder, explodes shell in midair. It is timed to explode at the optimal viewing height, which is 60 to 300 meters (197 to 984 feet) up.

3. Burst charge shoots marble-sized chemical pellets outward. If pellets are packed into the shell in a pattern, such as a star, they will shoot outward in that shape.

Dangerous Ground

by Zoë Kashner

It was a wet winter. A school bus turned a corner when—wham!—a wheel dropped several feet down into the road. The bus suddenly tipped to the side. The kids screamed. The bus had hit a sinkhole!

This sinkhole opened up in Levittown, New York, on February 2, 2011. It stopped the bus in its tracks. A tow truck had to pull the bus out.

Thankfully, the children weren't hurt. But sinkholes can cause amazing amounts of damage, and even death.

WHAT IS A SINKHOLE?

Sinkholes are created when a hole forms beneath the ground. Roads and buildings can hide sinkholes. As the hole is forming, the cement keeps it covered up.

Then one day, a car, bus, or truck drives over the weakened road. Its weight cracks the cement, and the ground opens into a sinkhole. If it's big enough, a whole car might plop in!

Sinkholes form only in places where a special kind of rock exists underground. Over time, this rock can be dissolved by water because it has tiny holes in it. Limestone and volcanic rock are two examples. These kinds of rocks are found in at least 35 percent of the United States.

SPECTACULAR SINKHOLES

A sinkhole can be just a few feet wide. Or it can be hundreds of feet across.

Last year, a huge sinkhole showed the world just how scary sinkholes can be. It happened in Guatemala on May 30, 2010, soon after a hurricane hit the nation. The storm's rains caused a huge sinkhole to open overnight. It swallowed up a three-story factory!

Luckily, the factory workers were at home during the disaster. But one man remained missing afterward. When the sinkhole was measured, it was found to be a whopping 30 stories deep.

WATCH WHERE YOU BUILD

In the United States, sinkholes most often form in Alabama, Florida, Kentucky, Missouri, Pennsylvania, Tennessee, and Texas.

Florida is one of the most common places to find sinkholes. *Action* magazine spoke with Harley Means, a geologist with the Florida Geological Survey. Means's expertise is sinkholes, and people often call him looking for help.

"If you look at a map of Orlando, Disney World's home, you'll see lots of circular lakes surrounding the city," Means says. "Those lakes were formed by sinkholes." So Disney World has to be careful about where it places rides and buildings. You wouldn't want to end up on a ride crashing to the bottom of a sinkhole!

Means says that when someone builds in Florida, checking for sinkholes is a must. It's a scientist's job to use radar that can "see" beneath the earth. If they find any holes under the soil, they don't build on that spot.

A giant sinkhole in Guatemala City

A DANGEROUS PROBLEM

Sinkholes aren't just a danger to roadways or buildings. "Think of a nuclear power plant," Means says. "You certainly don't want that to be built on a possible sinkhole."

It is also dangerous to build a landfill over a possible sinkhole. If the chemicals used at landfills leaked out, they could poison rivers, streams, and soil.

Sinkholes have been forming more and more frequently, says Means. Heavy rain and snow can make sinkholes collapse. A wet winter may cause some amazing sinkholes near you. So watch where you step!

THESE ROBOTS HAVE CLASS

New classroom robots get top grades from schools

by Karen Kellaher

Imagine staying home from school and sending a robot in your place. A student in Knox City, Texas, has done just that. His robot—and others like it—are starting to change the way classrooms work.

Long-Distance Learning ::

Lyndon Baty, 15, has a kidney disease and a weak immune system. That means it's easy for him to catch illnesses from other people. Last fall, doctors told Lyndon to stay home from school.

Kids who are in the hospital can participate in class using a Nao robot. The kids in the hospital use a computer to control the eyes of the robot and see the classroom.

Lyndon studied at home, but he missed being in class and seeing his classmates.

"I had no friends around to talk to," Lyndon says. "It was a little boring."

Then Lyndon's school came up with a high-tech solution. It bought a four-foot-tall robot on wheels called VGo (vee-go). Now VGo goes to class while Lyndon works at home on his laptop computer. VGo has cameras and microphones that send video and sound to Lyndon's laptop. This allows Lyndon to see and hear what's going on in class.

The class can see and hear Lyndon, too. His laptop sends his picture and voice to the robot. That lets Lyndon answer the teacher's questions or chat with his friends between classes.

One of Lyndon's favorite things about VGo is that he controls the robot's movements. He can move VGo to get a better look at the blackboard. A special computer program even allows Lyndon to steer VGo from class to class.

"I feel like I'm really there," says Lyndon.

High-Tech Help ::

VGo is a telepresence robot, one of the hottest trends in the robot industry. These robots let people feel like they're in a place when they can't be there in person.

"This type of robot isn't meant to do things for you. It's meant to *represent* you," explains Ned Semonite. He is an officer at VGo Communications, the company that makes Lyndon's robot.

Unlike the robots you see in movies or on TV, telepresence robots don't act and think on their own. A human being needs to control what they do. But that person can be on the other side of town—or even in another country.

Devon Carrow attends Winchester Elementary School from home with the help of his VGo.

Some of the first telepresence robots were used in business. They made it possible for people to attend meetings even if they were far away. Now these robots are moving into classrooms. VGo is one of two kinds of robots currently going to school. The other, called the R. Bot 100, helps a sick student in Russia.

Teacher Tech ::

Telepresence robots are also standing in for teachers. In South Korea, all kids must learn English in school. But the nation doesn't have enough English teachers. To solve the problem, the government has put robots in 21 schools. The robots are controlled by English-speaking teachers in the Philippines, about 1,600 miles away.

Through the robots, the teachers read stories in English to students and teach them vocabulary. The teachers can hear whether the students are saying English words correctly.

South Korean officials say the robots have been a big success. They plan to add robots to more classrooms in the future.

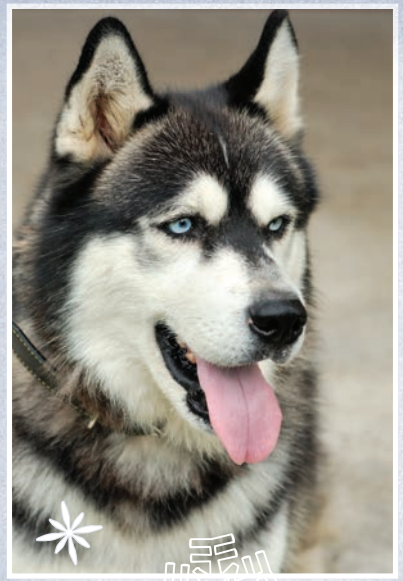
Experts say robots will play an even bigger role in classrooms of the future. "Robots are already putting a new twist on going to class," says Semonite. "Who knows what tomorrow could bring?"

High-Tech Trends

Robots aren't the only cool new tools in schools.

Old Technology	*New* Technology
 Blackboards	 Interactive whiteboards
 Print textbooks	 Digital textbooks
 Paper, pencils, books	 Individual handheld computers

ONE COOL RUN



by Glenn Greenberg

The Seavey family of Alaska has worked with sled dogs for the past 45 years. Now, the family is getting ready for the big Iditarod (eye-DIT-ah-rod) Trail Sled Dog Race, which begins in March. *Iditarod* means "a far, distant place"—a good name for this race. It's more than 1,150 miles long and takes about two weeks to complete. Yes, TWO WEEKS!

Family Business

"In this family, you have to be a dog person," says 11-year-old Conway Seavey. "But I like cats, too." Conway's grandfather Dan helped start the annual, or yearly, Iditarod race in 1973. In 2008, Conway's father, Mitch, took part in the race for the 15th time. He even won on his 12th try!

"I help my dad train the dogs," says Conway. "I go out with the dogs for practice runs with my dad. I also give the dogs their vitamins and help my mom cook the food for the rest stops."

Conway and his older brothers—Daniel, Tyrell, and Dallas—all help their dad prepare for the race.

"It's a family tradition (custom handed down from one generation to the next)," says Daniel, 25. "Our parents made it something we could ALL take part in and be good at. We all enjoy being a part of it. The dogs love it, too. They're born for it."

Snow Way Out

Conway says he plans to race in the Iditarod himself when he's old enough.

"I'll probably enter the Junior Iditarod when I'm 14 and the regular Iditarod when I'm 18. In this family, you have to work your way up and graduate!"

Safe for the Race

The Seaveys take steps to make sure their dogs are safe during every race.

During races, the dogs wear booties to protect their paws from ice and rocks.

A harness is placed on each of the dogs. The harnesses connect the dogs to the sled and are padded to keep the dogs comfortable.

AN OCEAN OF TRASH

Tons of deadly plastic junk are swirling around in the Pacific.

by Scholastic Action

A plastic bag can look like a tasty jellyfish to sea turtles.

The biggest garbage dump on Earth can't be found on land. In fact, it is miles away from the California shore.

Far out in the ocean is the Great Pacific Garbage Patch. Experts think that it holds about 3½ million tons of trash. Most of the garbage is made of plastic.

All that floating trash is ugly. It's also dangerous. Animals get tangled in the junk. They can also choke if they eat it. Scientists say that plastic garbage kills about 1 million birds each year. An additional 100,000 ocean animals, like dolphins and turtles, also die.

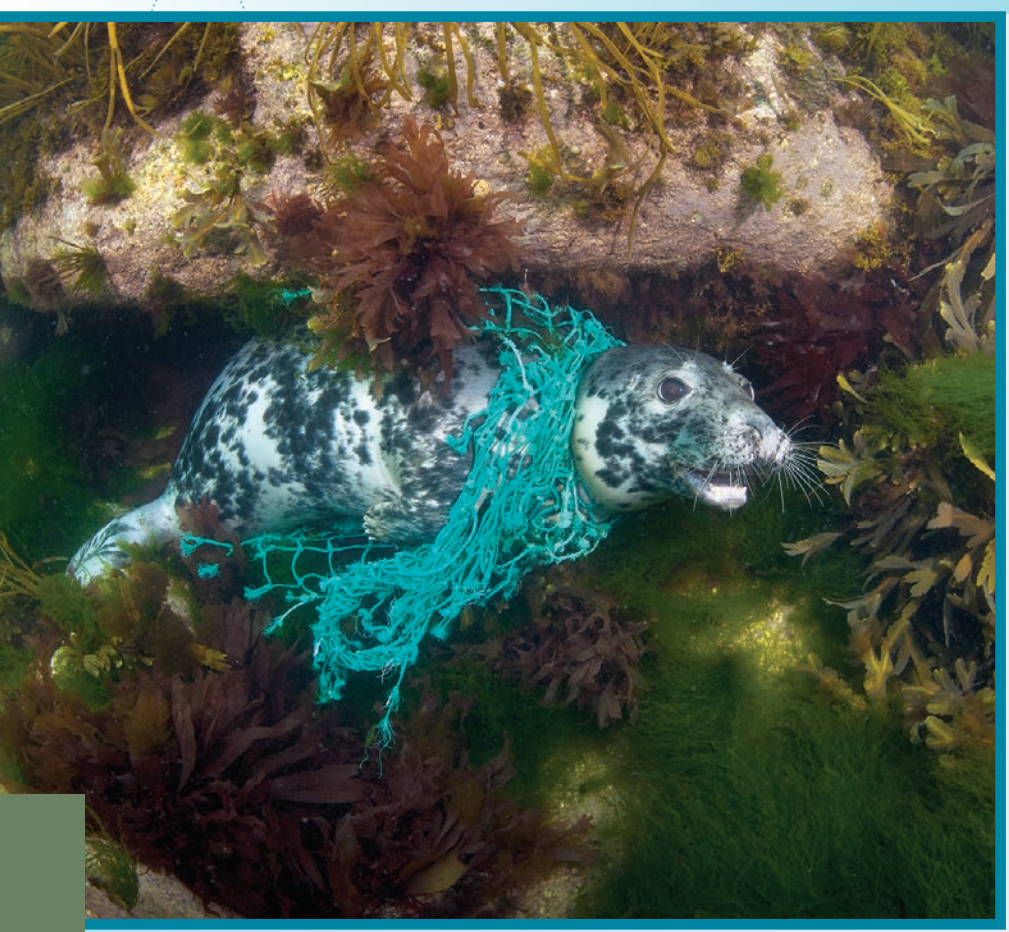
Old fishing nets like this one can be found in the garbage patch. But most of the trash is plastic.

A Plastic Whirlpool

The water out in the middle of the ocean moves around in a slow circle. This traps the trash and pushes it together. The trash is always moving with the currents, so the size of the garbage patch changes. But scientists say it is about twice as big as Texas.

The garbage patch is not solid. You can't walk on it. Much of the trash is made up of tiny pieces of floating plastic. One expert describes it as "plastic soup."

The plastic pieces come from bigger objects that break apart in the water. They come from bags, bottles, and many other items. "You see bottle caps, toothbrushes, and fast-food forks," says Myra Finkelstein. She is a biologist who studies birds near the garbage patch.



A female Grey seal is tangled in a discarded fishing net.

Cleaning up beaches is important. But people can also help by buying fewer plastic items and recycling plastic after they use it.

The bad news is that plastic doesn't biodegrade. That means that the plastic can drift in the ocean for hundreds of years.

Dumped in the Sea

Ships sometimes dump trash. Broken fishing lines and nets can be found in the garbage patch. But most of the trash comes from land.

When people throw litter on beaches, that garbage can wash into the ocean. Litter on the street can end up in the garbage patch, too. When it rains, storm drains overflow. Garbage floats away into rivers and out to sea.

Some of that trash ends up in the Great Pacific Garbage Patch. Some of it floats to different places. There are four other garbage patches in oceans around the world.

Poisons in the Patch

Many types of plastic contain dangerous chemicals. Plastic can also absorb chemicals from pollution in the water, such as an oil spill. When animals eat the plastic, some of the chemicals go into their bodies.

Scientists are studying fish around the patch to find out just how toxic the plastic is for them. "We found a fish the size of a finger with 84 small pieces of plastic in its stomach," says one scientist.

Getting Clean

Cleaning up the Great Pacific Garbage Patch won't be easy. Because much of the plastic is tiny, it is hard to get it all out of the water without harming marine animals.

Scientists are looking for ways to remove all that trash from the garbage patch. In the meantime, they say the most important thing is to stop more garbage from washing into the ocean.

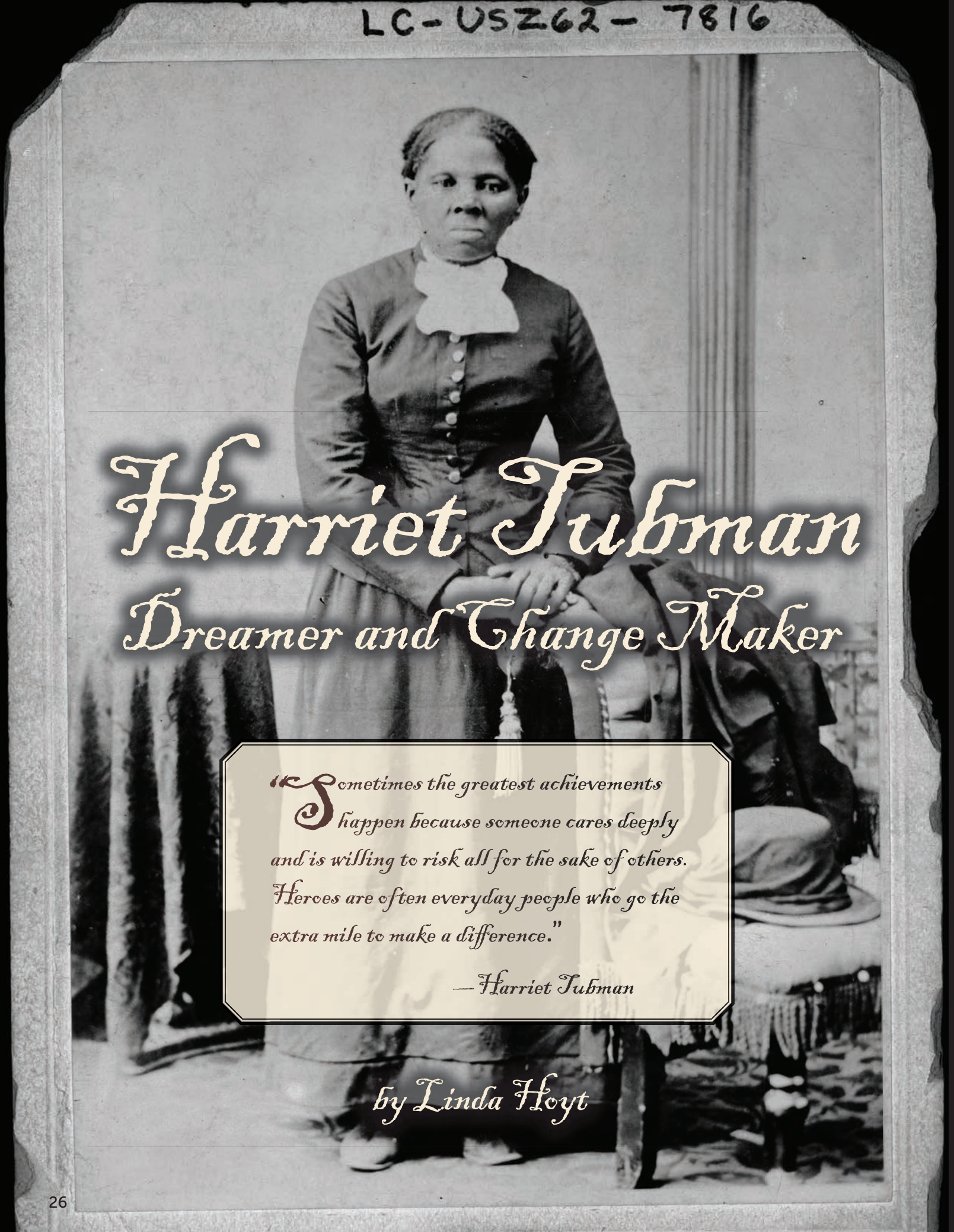
Zach Gold, 16, helps by cleaning up beaches and rivers where he lives. He is from the city of Santa Monica, California.

Zach loves to surf. But he hates to see all the trash that reaches the ocean. "It would be nice to catch a wave and not have a plastic bag stick to my arm," he says.

Cleaning up beaches is important. But people can also help by buying fewer plastic items and recycling plastic after they use it.

Zach says that plastic water bottles and plastic shopping bags are a problem. "These items are getting used for an hour at most," he says, "and they can end up in the environment for hundreds of years."

Zach believes that everyone should stop using plastic bottles and plastic bags. If we all make little changes like this, it can make a big difference.



Harriet Tubman

Dreamer and Change Maker

"Sometimes the greatest achievements happen because someone cares deeply and is willing to risk all for the sake of others. Heroes are often everyday people who go the extra mile to make a difference."

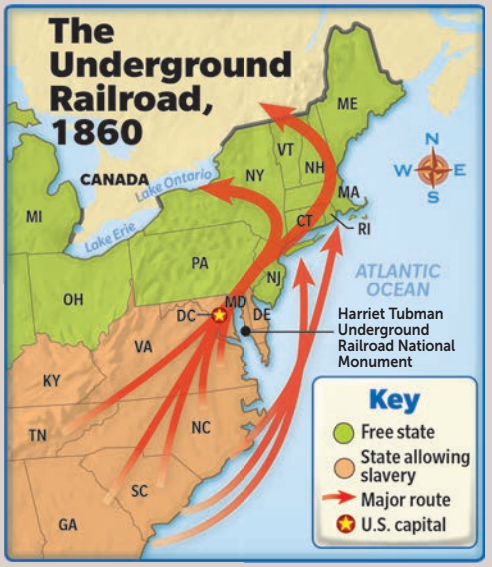
—Harriet Tubman

by Linda Hoyt

With her head low and her heart pounding madly in her chest, Harriet Tubman slipped from tree to tree—sheltered by the deep shadows of night. Shifting slowly, she edged closer and closer to the slave cabins on the plantation where her parents and niece were held as slaves. "Whooo. Whooo," she called through the horn created by her shaking fingers. And, thankfully, she heard the returning call, "Whooo. Whooo."

Harriet slipped quietly back into the safety of the trees and brush, but she knew that she and her family could be caught by the slave masters at any moment. And being caught meant being tortured and returned to slavery.

Creeping like faint shadows, three blanket-covered shapes appeared just behind her. Her family had managed to slip away, and they were ready to begin their journey on the Underground Railroad. Hardship and danger lay along their path as they moved in secret from house to house, sheltered by caring souls who believed in every human's right to freedom. Sometimes they hid in root cellars during the day, or they pretended to belong to the family sheltering them. But at night, they were on the move, following the North Star and dreaming of the new life they would have when they reached freedom.



Harriet Tubman was born a slave in Maryland before bravely escaping north to Philadelphia. She later returned to Maryland to save her family, beginning her courageous journey to save many other slaves through the Underground Railroad.

Putting Herself at Risk

As a former slave, Harriet had originally escaped to freedom with the help of the kind souls who made up the Underground Railroad. Unlike a real railroad, there weren't train tracks and railroad cars, but rather a network of caring people who didn't believe that it was right to keep slaves as property. These caring people wanted slaves to be free, to have the right to read, to be paid, or to live where they wished. Escaping slaves and the members of the Underground Railroad were all at tremendous risk, so they were careful to avoid being caught.

Harriet loved her freedom, but she worried about her family. With unbelievable courage, she decided to risk a return to the plantation to guide her family to freedom. Then, Harriet

Harriet Tubman with slaves she helped during the Civil War.

continued to make trips south to free additional slaves. Using the cover of darkness on the coldest nights of winter, Harriet Tubman led nearly 70 people to freedom. She took some of the fleeing slaves as far as Canada to ensure their safety, and she helped many more find work.

First Female Military Leader

Harriet Tubman is well known for risking her life as a "conductor" on the Underground Railroad. But this incredibly brave woman also served as a spy for the Union Army during the Civil War. At incredible risk to herself, she first spied on the Confederate Army by pretending to be a slave. Then, she recruited teams of former slaves to spy on the Confederate troops and report their locations to the Union. Her knowledge of the land and her dedication earned the respect of Union Army leaders.

So, they asked her to join them in creating a plan to win a battle in South Carolina. Because of her knowledge and courage, Harriet was selected to become the first woman in American history to lead a military expedition.

An American Hero

Running away to save herself was brave. But deliberately running toward danger to help others made Harriet Tubman a true American hero. It is exciting to know that in April of 2016, it was announced that Harriet Tubman's courage will be honored by placing her image on the United States 20-dollar bill.

I Am Tiger

by Amad

I am tiger.

I hid to get my preay.

I tiptoe veay, slowly.

I get closr.

And then I sprint.

I pounts on my preay.

I am tiger.

The Bat: A Fascinating Mammal

By Martina

Bats look like mice with wings. They look like birds, too, but they are not. They are achually mammals that give birth to live babys and nurture them with milk. It is important to note that bats are the only mammal that can fly.

The wing of a bat has a very intresting structure. It has no feathers but is covered with skin like a human arm. The skin is so thin that a strong light allows you to almost see through the wing, making its skeletel system highly visable. The skeletal system of the wing is much like the human arm and hand. The "fingers" open to support the wing, streching the skin out to capture and control flight. The equivelant of a human thumb is like a little claw at the top of the wing. If you hold up your hand with your thumb pointed to the cieling, you can see how a bat wing looks like a human hand.

People have many strange ideas about bats. Bats do not atack people. They do not get stuck in people's hair. In fact, most bats can be helpful to us, because they eat pests such as mesquitos and help to pollenate plants.

Benjamin Franklin's Kite, 1752

By Terrance

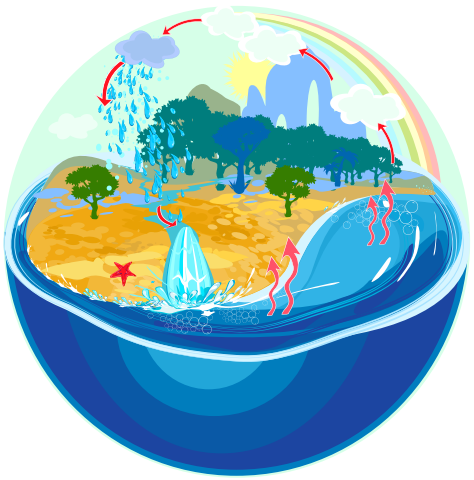
Have you ever watched lightning during a storm? Have you ever wondered about its power? Have you ever wanted to know more about it? There is an old story that suggests Benjamin Franklin did.

Ben suspected that lightning was an electrical current, and he wanted to see if he was right. One way to test his idea would be to see if the lightning would pass through metal. He decided to use a metal key and looked for a way to get the key up near the lightning.

He tied the key to the kite string and then flew his kite in the path of a thunderstorm. When lightning struck the key, it created a visible spark of electricity.

It is important to note that this picture shows Franklin holding the kite, but that would have been fatal. He actually tied the kite to a tree so the electrical current ran from the key into the tree and did not harm anyone.

Ben understood that lightning was very powerful, and he also knew that it was dangerous. That's why he also figured out a way to protect people, buildings, and ships from lightning by creating the lightning rod.



The Water Cycle

by Kailyn

The sun called to the water
Telling it to rise.
Becoming invisible, the gas rose.

"I'm cold," said the gas.
Soon liquid droplets huddled in a cloud—
A moisture-filled cotton ball.

"We're too full," said the cloud turning gray.
The rejected drops pounded on Earth with their friends
Liquid marbles falling from a bin
Refreshing the earth.