

# Young Heroes: Rachel Beckwith

volume 5  
issue 1



In the summer of 2011, Rachel Beckwith had just finished third grade. She was looking forward to riding her bike and playing games like jump rope with her friends. Rachel also liked dancing.

Then she heard someone say that there were children in Africa who did not have clean water to drink. The person was from an organization called

charitywater.org, a charity that builds wells for towns in Africa. The wells provide people with clean water. Without wells, people often have to walk many miles to find water, then carry it home in buckets. Often, the water is not clean.

Instead of presents for her ninth birthday, Rachel asked her family and friends to donate \$9 for clean water in Africa to charitywater.org. If she could raise \$300, 15 people could get clean drinking water.

By the time her birthday came, Rachel had raised \$220. That meant that 11 people could get clean water.

She told her mom that she would try harder the next year to raise more money for the charity.

A month later, Rachel was critically injured in a car accident. On July 23, 2011, she was taken off life support. She died soon after.

When the news about Rachel's story and her birthday wish spread, people all around the world began to donate money in her name. Some gave \$9, some \$19, some more. A month later, 30,000 people had given more than \$1.2 million. Because of Rachel Beckwith, 60,000 people in more than 100 villages now have clean water to drink.

In her honor, one village put up a sign that reads, "Rachel's great dream, kindness, and vision of a better world will live with and among us forever." Clearly, one person, even a child, can make a difference.



©2011 by Nestlé in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/deed.en>



For more information about TextProject and *FYI for Kids*, visit [textproject.org](http://textproject.org) v.1.0 © 2013 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).

# Counting Endangered Animals

volume 5  
issue 2



Counting animals in the wild is a hard job. To get a hint of how hard it is, try to count all of the birds in a park near you. The difficulty of counting doesn't stop

the International Union for Conservation of Nature and Natural Resources, though. This group publishes a list of the world's endangered animal and plant species.

People from all over the world work with the union to track and count endangered species. Counting endangered animals is hard because some animals are so rare that even scientists hardly ever see them. Other animals live in such large areas that finding them is almost impossible without modern technology. Here are two ways scientists count endangered animals.

Florida panthers are an endangered species. While these big cats once roamed the southeastern United States, only thirty to fifty panthers are left in the wild. Scientists use dogs to sniff them out. After netting a panther, scientists put a radio collar around its neck.

Airplanes with special antennas then pick up signals from the collar. Because the signal from each collar is different, scientists can track specific panthers. The signal also tells whether the panther is resting or moving.

Humpback whales are another endangered species. Scientists locate humpback whales by using underwater microphones, which pick up the whales' songs. Photographs of whales' tails then help scientists identify individual whales. Like human fingerprints, each humpback's tail has different marks. Tail photographs help scientists identify, count, and track whales as they swim through the oceans of the world.

There are many reasons to count animals, but the most important is to make sure a species doesn't die out. Keeping animals healthy can help people, too. Scientists still don't know if a species might be a source of an important medicine or how species help one another stay healthy. Plus, protecting species might help protect the planet.



For more information about TextProject and *FYI for Kids*, visit [textproject.org](http://textproject.org) v.1.0 © 2013 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).

©2010 by Michelle Friswell. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/deed.en>

# The Tides

The ocean is always moving. Waves are created by soft breezes and by huge storms. The Sun and Moon pull on the ocean, making the water level rise and fall.



The water's rising and falling is called the ocean's tide. Ocean tides usually rise and fall twice a day.

When the water level rises, we say the tide is coming in. With each wave, water flows farther up onto the beach. Soon, the water covers the intertidal zone. The intertidal zone is the area that lies between high tide and low tide. *Intertidal* means "between the tides."

As the tide comes in, sand and seaweed wash onto the shore. So do shells and pieces of wood. No one can stop the tide, or even slow it down. The tide is too powerful.

After the tide rises for about six hours, it begins to fall. Then we say that the tide is going out. Water flows away from the beach. The intertidal zone is uncovered. Sand and seaweed float out to sea.

Some water stays behind when the tide goes out, though. It forms pools between rocks on shore. Many plants and animals live in these tide pools. Starfish, mussels, crabs, and snails live there. Sometimes small fish get trapped there as the tide goes out.

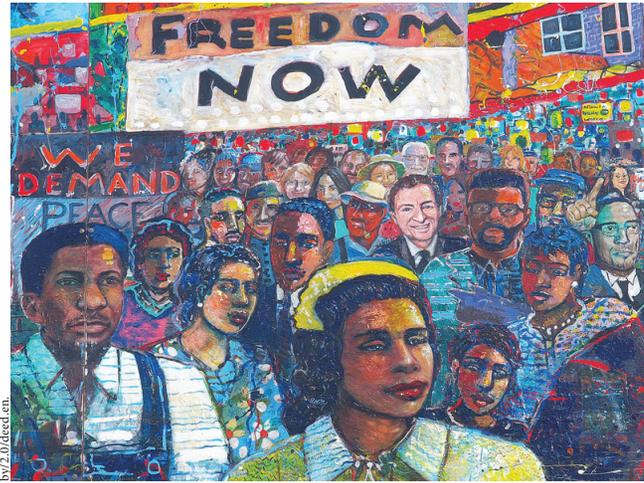
You might find a tide pool when you visit an ocean beach. Stay still and watch closely. You might see sea animals, including starfish, mussels, crabs, and snails. You might see birds hunting in the pools. You might also see animals eating the seaweed and the algae, which is a kind of small plant that grows on rocks. But do be careful. Algae and seaweed make rocks slippery.

The ocean tides have been rising and falling for billions of years. All day and all night, in gentle breezes and huge ocean storms, the tide keeps coming in, then going out, covering and uncovering the beach.



# Coretta Scott King

In the fight for equal rights for all people, Coretta Scott King was a hero. Coretta grew up in a small town in Alabama. There, she saw people discriminate



against her family because they were African American.

Coretta wanted to help end that discrimination, so she joined a local civil rights group. While she was at college studying music, a friend introduced her to Martin Luther King, Jr. They soon found that they shared a strong interest in civil rights.

After they were married, Coretta looked for ways to combine her background in music with Martin's work in civil rights. For example, while her husband gave speeches, Coretta held Freedom Concerts to raise money for and interest in civil rights. Sometimes, Coretta and Martin were able to attend protest marches and give speeches at the same event.

Coretta and Martin wanted to show people that discrimination and social injustice existed in America.

They insisted that the best way to bring equal rights to all Americans was through nonviolent acts. They spoke against violence, saying that peaceful means were the best way to achieve their goal. They marched, spoke, and sang about civil rights.

After Martin Luther King Jr. was assassinated, Coretta continued their work. To honor her late husband, Coretta founded the Martin Luther King, Jr. Center for Nonviolent Social Change. This center now teaches more than one million visitors each year about nonviolence and about the civil rights movement. Coretta also made sure that Martin's work is remembered at least once a year by working to make Martin Luther King Jr.'s birthday a national holiday.

Over the years, Coretta met with civil rights leaders all around the world and worked with them to bring peace to their countries. Her goal was the same as her husband's: to make sure that all people can live in safety and in freedom.



Image of Dr. and Mrs. Martin Luther King, Jr. This image was released into public domain by the New York World-Telegram & Sun.



# Monster Stories



© 2009 by unukono in Flickr. Some rights reserved <http://creativecommons.org/licenses/by/2.0/deed.en>.

Stories about “monsters” are told around the world. Some are said to look human. Some are said to look like apes. Some are said to look like dinosaurs. What’s similar about these stories is that there’s no proof these creatures really exist.

In the northwestern United States, people tell stories about a creature called Bigfoot. This ape-like creature is said to

be between six and ten feet tall, to weigh more than 500 pounds, and to be covered in fur. Scientists have found that someone who was playing a trick had molded Bigfoot’s huge footprints from clay. Another person had dressed in an ape costume and roared to frighten people.

People who live in the Amazon rain forest of Brazil tell stories about a monster that roars like thunder, looks like a bear, and has a strong smell. Called a mapinguary, the creature is said to leave a trail of beetles behind it and to be seven feet tall. Scientists who scanned the area think the mapinguary could be a giant sloth.

A lake in northern Scotland is said to be the home of the Loch Ness Monster, called Nessie. This monster is said to be a large dinosaur-like creature with a long neck and a small head. Scientists have dragged nets across the lake, scanned it with high-tech equipment, and even used a submarine. However, no creature has ever been found. The photos of Nessie could show a tree branch, an otter, or something else.

What should you do if someone says there’s a monster? Think about whether the person might be trying to trick you. Also, ask the person to show you proof. It can be fun to tell stories about such creatures, but no monsters have ever been found.



© 2008 by BeneathOurFeet in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-sa/2.0/deed.en>.



# What's Your Name?

©2008 by Lucélia Ribeiro. Some rights reserved <http://creativecommons.org/licenses/by-sa/2.0/deed.en>



When you get a pet, the first thing you might do is give it a name. The name should be one you'll remember. It might also describe the pet. For example, if you

get a brown puppy, you might call her Honey.

When a new product is invented, people need to give it a name, too. The name helps others remember it—and buy it. Sometimes people make up new words for a new invention. Sometimes they use older words and combine them in new ways.

Lots of electronic products are invented every year, so new computer words are invented all the time. The Internet is an example. The word *Internet* was invented in the 1980s to describe the system that links computer networks around the world. Originally, it was called the *internetwork*.

The *World Wide Web* (the *Web*) is a huge collection of documents that you can access through the Internet. You use a Web browser to find texts and images. *Browser*

is a good name for this software application because you use it to browse, or look around, on the Web. You navigate between pages using hyperlinks, or links that join Web pages.

Two words were invented to describe Internet journals: *blog* and *vlog*. *Blog* is a shortened form of *web log*. *Vlog* is a shortened form of *video log*. Blogs contain words and sometimes pictures, while vlogs contain videos.

Another new computer word is *e-mail*, which is a shortened form of *electronic mail*. You get your e-mail in a *mailbox*. While *mailbox* isn't a new word, it's a new use of an older word.

Before e-mail, mailboxes were simply boxes where people deposited paper letters to be delivered by letter carriers.

The next time you see a new invention, look carefully at its name. Do you see any words or word parts you know? By looking for familiar words, you can often guess what an invention does.



©2010 by TM Weddle in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-sa/2.0/deed.en>



For more information about TextProject and *FYI for Kids*, visit [textproject.org](http://textproject.org) v.1.0 © 2013 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).

# The Art of Recycling

Recycling is not new. Many civilizations have reused objects. However, recycling is more important today because there is more pollution and fewer natural



©2013 by This is Awkward in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/deed.en>

resources. Your family might recycle cans and bottles. Some people use these recycled material to make art!

Artists use old tires, pieces of metal, and cloth. Almost anything can be recycled into art. These materials might come from yard sales or swap meets. In addition, businesses might give used materials to artists.

Recycled art often says something about our world. For example, artists in New York City made a sculpture that looked like a giant white cloud. The sculpture, called “Head in the Clouds,” was more than 40 feet long and 15 feet high! People walked into the cloud sculpture and danced to live music. The artists used more than 53,000 recycled water bottles to make the cloud. That’s the number of water bottles that are thrown into the trash every hour in New York City! The artists wanted to show

how many water bottles ended up in the garbage.

Many art projects are shown at outdoor art and music festivals. Many cities even have festivals specifically for recycled art.

Museums also exhibit recycled art. A museum in Texas allowed visitors to add to the art on display. The project was called the “Recycle Reef.” The background looked like an ocean reef, and people added to the “reef” with the recycled materials provided. They even recycled the exhibit after the show ended.

Not all recycled art is big, though. Jewelry designers often make bracelets and necklaces from used objects.

Some make beads from the paper in old books. Others make bracelets from braided strips of potato chip bags. Some knit purses from plastic grocery bags.

Have you made something using paper towel tubes or water bottles? If so, you’ve made recycled art. What else can you reuse to design something new?



©2010 by shazam791 in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/deed.en>



# Guitars: The Kings of Rock

©2012 Rubbertoe (Robert Batima) in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/deed.en>



The guitarist stands in the spotlight, hands moving across the strings so fast they look like a blur. The crowd screams for more. In rock music, the guitar is king.

Guitar heroes like this performer usually play electric guitars. As the name suggests, electric guitars make their sounds with electricity. They use parts called pick-ups, which are placed under the strings. Pick-ups pick

up the vibrations from the strings and turn them into electrical signals. Then they send the signals to speakers.

Acoustic guitars work differently. In acoustic guitars, the sound gets louder when it bounces around inside the instrument. The wood deepens the sound. Like other string instruments, guitars make music when their strings vibrate.

Both acoustic and electric guitars have a long neck that usually holds between six and 12 strings. Small metal bars called frets are laid across the neck. The guitarist changes notes by pressing down on the strings

near the frets. The thickest and longest strings make the lowest sounds. That's because they vibrate more slowly. The thinnest and shortest strings make the highest sounds. That's because they vibrate more quickly.

Guitarists often use a pick. Picks are small pieces of material that are used to strum or pick the strings. Strumming makes many strings sound together, while picking makes individual strings sound. Some guitar players use their fingernails to strum or pick the strings, while others use wood, metal, or even coins!

Guitars are featured in music played around the world. It is one of the oldest instruments, with instruments somewhat like today's guitar appearing about 5,000 years ago. Guitars were probably created in Spain in the 1500s.

Electric guitars became popular 1950s when rock music became popular. Since then, many rock musicians have used electric guitars to play long guitar solos. Their sounds fill an arena as the crowd screams for more.



For more information about TextProject and *FYI for Kids*, visit [textproject.org](http://textproject.org) v.1.0 © 2013 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).

©2009 by Alec Couros. Some rights reserved <http://creativecommons.org/licenses/by-nc-sa/2.0/deed.en>

# An Island is Born

When you put your feet on the ground, it feels solid and still. However, it is not. In fact, the earth changes all the time. Geologists are scientists who study how the earth changes.

Earthquakes are one way the earth changes. In September, 2013, a large earthquake struck Pakistan. It destroyed homes and caused injuries and even deaths. However, the destruction

also created something new: an island! Hours after the earthquake, an island, which was named the Gwadar mound, formed off the coast of Pakistan.

Scientists don't think it will last long. That's because islands like this, which are made of mud and sand, often appear and disappear after earthquakes. They form when the sea floor rises, and they disappear when it settles down. Ocean waves also quickly erode them away.

To explain why these islands form and disappear, geologists look at plate tectonics. Tectonic plates are massive pieces of rock underneath Earth's surface. All of

the land and water on Earth lie on top of tectonic plates. Heat currents created by the melted rock inside of Earth cause the plates to move. Earthquakes and volcanoes can occur when tectonic plates move.

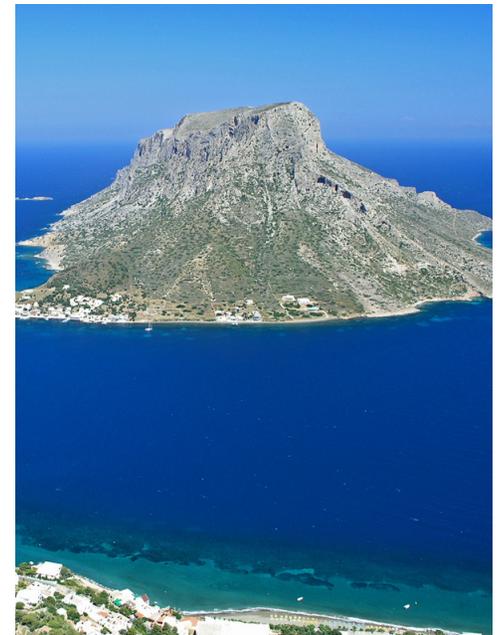
As they move, tectonic plates push against each other and trap energy. Trapped energy can be released in earthquakes or when volcanoes erupt. Volcanoes form when one tectonic plate gets pushed under another plate. The sinking plate melts, creating the lava that erupts from volcanoes.

The Gwadar mound is a mud volcano. Trapped gasses under Earth's crust cause mud volcanoes to form as tectonic plates move. Heat causes the gasses to explode, and the soil and rocks to melt. Mud volcanoes are really boiling earth.

The Gwadar mound is the fourth island created by mud volcanoes since 1945. Like the others, it will probably not last long. However, the Gwadar mound shows us how our amazing Earth changes.



©2008 by Nick Taylor in Flickr. Some rights reserved <http://creativecommons.org/licenses/by/2.0/>



©2004 by Visit Greece in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-sa/2.0/>



# Chess: A Game of Kings and Queens

volume 5  
issue 10



©2012 by Elvert Barnes in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-sa/2.0/>

“Checkmate,” says the winning player when her opponent’s king can’t make another move. She has won the chess game.

Many board games have been played for a long time. Chess is one of these games. Although no one knows who first played the game, historians believe it was invented in India in the 6th or 7th century AD. It found its way to Persia (present-day Iran) some

time later. There it seems to have gotten the name chess. Historians think the word chess is from the word shah, which means “king” in the Persian language.

A chess board looks like a checkerboard, with two different colors of alternating squares. Each player starts with 16 pieces: one king, one queen, two bishops, two knights, two rooks, and eight pawns. Each piece moves in different ways. Some can move several squares in one turn.

Chess is a strategy game, almost like a small battleground. Players carefully plan every move. They

try to position their pieces so that their opponent can’t capture them. If that’s not possible, they try to let their opponent capture a less-important piece. The goal of the game is to trap the opponent’s king. This is checkmate, which ends the game.

World chess competitions are organized in many different countries. The first international chess tournament took place in London in 1851. Today, people can also play against computers. It is especially hard to win against a computer because computers are programmed to analyze the results of every possible move. That means they almost always make the right move.

People of all ages play chess. The World Chess Federation, the organization responsible for organizing chess competitions, even organizes chess programs in schools around the world.

They also train teachers how to teach chess to students. They say that chess teaches patience and thinking skills. It’s also fun.



©2011 by Allen County (IN) Public Library in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/>



For more information about TextProject and *FYI for Kids*, visit [textproject.org](http://textproject.org) v.1.0 © 2013 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).

# Hula: Dance That Tells a Story

©2011 by Waikiki Natatorium in Flickr. Some rights reserved <http://creativecommons.org/licenses/by/2.0/>



Dancers sway gracefully, their grass skirts seeming to wave in the breeze. Their hands make soft flowing motions. This is hula dancing. In Hawaii, hula has been used

for hundreds of years to tell stories and to pay respect to gods, goddesses, and nature. Hula was created long before the Hawaiian people created a system of writing. Instead they communicated through dance and song.

Although there are many stories about how hula was invented, some believe that Pele, Hawaii's goddess of fire and volcanoes, wanted her sisters to dance for her. According to the story, only her sister Hi'iaka danced for the goddess. This sister is said to have been the first person to perform hula.

Over the years, both Hawaiians and visitors changed the dances. In the early 1800s, long before Hawaii became part of the United States, missionaries traveled there. The missionaries did not approve of hula. Although they tried to persuade the Hawaiian people to

stop dancing, the missionaries could not erase hula from the Hawaiian culture. In addition, Hawaiians began to sail around the world and bring back ideas from other cultures. They added these ideas to hula to create new dances to tell a traditional story.

There are two types of hula. Hula kahiko uses the same traditional movements and instruments as did the ancient Hawaiians. When dancers perform hula kahiko, they dance to chanting and traditional musical instruments, such as rattles and drums. In contrast, hula 'auana is considered modern hula. Modern hula is danced to modern Hawaiian music, which often features the ukulele, an instrument that looks like a small guitar. Dancers wear skirts made from leaves and bracelets and anklets made from flowers.

Today, visitors to Hawaii often go to see hula performances.

The gentle, waving movements of the dancers remind them of soft winds blowing through the islands' palm trees.



©2010 by BYU-Hawaii in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/>



For more information about TextProject and *FYI for Kids*, visit [textproject.org](http://textproject.org) v.1.0 © 2014 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).

# Young Inventors: Caine Monroy

Caine Monroy needed something to do. So 9-year-old Caine created arcade games with cardboard boxes at his dad's used-car parts shop in Los Angeles, California.

Nirvan Mullick was Caine's first customer. Nirvan was so excited by Caine's creativity and imagination that he asked Caine's father if he could make a movie about the arcade. Nirvan invited

the city of Los Angeles to play Caine's games. Hundreds of people came, which surprised Caine.

Soon people of all ages began creating games with cardboard and other materials. So many people were excited by Caine's invention that he and Nirvan created the Imagination Foundation, an organization that encourages and funds creativity in kids. The Imagination Foundation is doing this in several ways.

Caine's Arcade for Schools is a program that works with teachers and schools to bring hands-on learning to classrooms. Teachers use the film to encourage students

to use their imagination to create something. This program also allows teachers to talk with each other about what has worked with their students.

Another program, Imagination Chapters, creates spaces around the world for creative learning. The Imagination Foundation gives money to help pay for meeting places, activities, and supplies.

Finally, The Annual Cardboard Challenge is open to kids of all ages. Held in October each year, schools, families, and other groups around the world host a Challenge event. Each group builds creations with cardboard and other materials. Then everyone gets together to share the projects. In October 2013, 76,936 people participated. Kids from 43 countries built cardboard creations.

Caine Monroy has encouraged millions of people around the world to use their imagination to invent something. Using his imagination helped him change the world.



©2012 by Mike Hedge in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc-nd/2.0/>



©2012 by Leslie Kalohi in Flickr. Some rights reserved <http://creativecommons.org/licenses/by-nc/2.0/>



# Lasers: The Power of Light



©2013 by Fabio Bruna in Flickr. Some rights reserved. <https://creativecommons.org/licenses/by-sa/2.0/>

What do you think of when you think of lasers? You might think of characters in movies fighting. Today, though, lasers are everywhere. They point in classrooms, scan barcodes in stores, and cut during surgery. Laser beams are a form of light. But how are they different from sunlight?

Sunlight is made up of all the colors of the rainbow, but we usually see the colors mixed

into white light. However, each color is a separate piece of light that has its own wavelength. A wavelength is a measure of how quickly light moves. You can see all of the colors in sunlight if you use a prism. Light bends when it goes through the prism and splits the wavelengths of color apart.

Unlike sunlight, lasers emit only one wavelength. Also unlike sunlight, the wavelengths from a laser line up and move in the same direction. That's why a laser's beam is narrow and focused.

Lasers have different strengths. Low-power lasers are

used in toys, barcode scanners, and pointers. They are not considered to be hazardous, but you should not look directly at them. High-power lasers are hazardous to the eyes and skin. They are used in surgery and for cutting metals.

The lasers you see most often read barcodes, CDs, and DVDs. The laser in a barcode scanner sends a picture of the bars to a computer that "reads" the bars and the spaces between them. Each bar and space contains information written in code. A computer then changes the code back into words and pictures. Likewise, lasers read the code on a CD or DVD. Then a computer changes that code into your favorite song or movie.

Today, lasers send phone calls and TV signals through threads of glass called optical fibers. They also measure distances and make 3-D pictures. Lasers will likely have many more uses, but because they can be hazardous, they must be treated with care.



©2008 by Nick Wheeler in Flickr. Some rights reserved. <https://creativecommons.org/licenses/by-nc-sa/2.0/>



# New Animal Species



©2008 by pseudohalix in Flickr. Some rights reserved. <https://creativecommons.org/licenses/by-nc-sa/2.0/>

We share the earth with millions of animal species. Some are huge, like elephants. Some are so small you can only see them with a microscope, like organisms that live in the ocean. However, although the earth has thousands of animal species, many are endangered. Scientists are trying to save endangered animals, but surprisingly, they are also finding new species.

In a South American rainforest, 60 new species of animals were found in 2012. Scientists say the reason so many new kinds of animals were found there is that this rainforest was almost untouched by humans.

Six new species of frogs were discovered at this time. This is particularly important because frogs around the world are becoming extinct. Scientists named one new frog the cocoa frog because of the color of its skin. The cocoa frog lives in the tall trees in this rainforest.

New kinds of animals are also being found in the oceans. A new shark was discovered in the Atlantic

Ocean, off the coast of South Carolina. The new shark, called the Carolina hammerhead, looks like a hammerhead shark, but it has fewer bones. A new kind of small ocean creature was also discovered in underwater caves in the Pacific Ocean, off the coast near California. The creature looks like a see-through shrimp, and it is only 3.3 millimeters long.

In Turkey, a country in the Middle East, scientists have found a new species of wood scorpion. Scorpions are poisonous animals that usually live in dry environments. The new scorpion, though, lives in humid environments and hides under rocks and in garden walls. It is small and mostly harmless to humans.

When so many animal species are in danger of becoming extinct, finding new ones is exciting. However, scientists continue to try to save endangered

animals. Many animals—both known and unknown—may contribute to the earth in ways science doesn't even understand yet.



©2014 by Oskar Ferm in Flickr. Some rights reserved. <https://creativecommons.org/licenses/by-nc-sa/2.0/>



# Public Spaces



©2009 by Chris Barker in Flickr. Some rights reserved <https://creativecommons.org/licenses/by-nc-nd/2.0/>

You and your friends race across the park to the swings. You pass people playing basketball, skateboarding, and jogging. You walk home on the sidewalk, and you visit the library on the way.

What do these places have in common? In addition to being fun, they're all public spaces. Public spaces are areas that are open to everyone: that's what public means.

If you go to a public school, a skateboarding park, or a hiking trail, you visit public spaces.

While public spaces are open to everyone, it takes a lot of time and money to keep them clean and growing. Towns, counties, states, and the federal government work together to clean and rebuild public spaces. Governments also redesign public spaces to create new attractions, such as new jogging trails and playgrounds. These tasks provide jobs for thousands of people.

Money collected through taxes allows governments to maintain public spaces. All workers pay taxes to

federal, state, and local governments. You pay taxes, too, when you buy some things.

Tax money is used to build and repair roads, schools, and libraries. It is used to fund police and fire departments and national parks. It is also used to rebuild beaches, hiking trails, and other public spaces that are damaged by hurricanes, tornadoes, and other storms. Your taxes help keep public spaces clean and safe.

Although you don't have to pay to visit most public spaces, some spaces charge admission fees. Admission fees help pay the expenses of redesigning and maintaining the land and buildings in public spaces. Many people also donate their money and time to organizations that fund public spaces. Their donations help to keep these areas open to everyone.

Millions of Americans visit public spaces every day. They like to go to many different places to meet friends or to explore. They also like to see that their taxes keep their country beautiful and open to everyone.



©2011 by Jeff Turner in Flickr. Some rights reserved <https://creativecommons.org/licenses/by/2.0/>



# Knitting: From Sheep to Scarf



©2008 by Jennifer Adams in Flickr. Some rights reserved <https://creativecommons.org/licenses/by-nc-nd/2.0/>

“I’m cold, Mom!”  
“Put on your hat and scarf.” Suddenly, you’re warm as toast, thanks to your mom’s knitting.

Knitters make things people use every day. They also make works of art. Different yarns create different looks and textures. Texture is the way an object feels. Some yarns are made from the wool of sheep, goats, or llamas. Their wool is cut in spring, when the

animals no longer need heavy coats. Some yarns are even made from hair shed by dogs and cats.

Animal hair is collected, then spun into long strands. These strands are called yarn. People use knitting needles to loop and connect the yarn to create fabric.

People knit for many reasons. Some create a sweater or mittens to keep someone warm. Some create a new fashion. Some also create useful objects, such as pot holders.

Some people donate their knitted items to charities, or groups that help others. Knitters often make hats and

sweaters for charities. One organization, called Emily’s Hats for Hope, accepts knitted hats and other warm clothing made by people all over the country. These items are then distributed to people who need them.

Kids knit for charity, too. Fourth-grade children in a school in Teaneck, New Jersey, donated hats they made to babies born in local hospitals. “It’s amazing to start with ‘strings and sticks’ and end up with something,” said their teacher, Mrs. Gallagher.

Another group, the Mother Bear Project, makes knitted bears and sends them to children around the world.

If you want to learn to knit, ask a teacher or family member to help you find a knitting class or teacher. There are lots of knitting videos, too, but have an adult help you find the right one.

Knitting is a great way to make gifts and to help others. It can also be a great way to experiment with colors and designs. In addition, knitting is fun.



©2012 by Dennis Wilkinson in Flickr. Some rights reserved <https://creativecommons.org/licenses/by-nc-sa/2.0/>







## The Tides

Write all these words in the right places to complete this puzzle, which tells some things you learned about tides. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



coming	going	hunt	low	ocean
pools	pull	rises	six	starfish

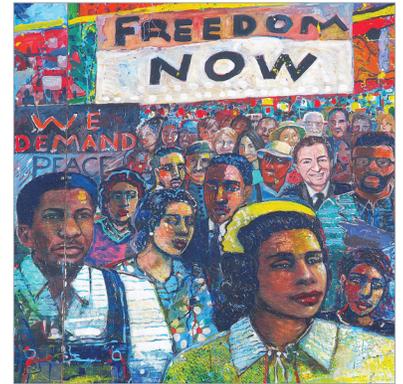
The \_\_\_\_\_ is always moving. Waves roll in, and the water level \_\_\_\_\_ and falls. When the water level rises, we say the tide is \_\_\_\_\_ in. Then, after about \_\_\_\_\_ hours, the water level starts to fall. When the water level falls, we say the tide is \_\_\_\_\_ out.

High and low tides are caused by the Sun and the Moon, which \_\_\_\_\_ on the ocean. There are two high tides and two \_\_\_\_\_ tides every day. When the tide goes out, some water stays on the beach and forms \_\_\_\_\_. Animals, including \_\_\_\_\_, mussels, and crabs, live in these tide pools. Birds \_\_\_\_\_ for food in these pools, and plants grow there.

Name \_\_\_\_\_

## Coretta Scott King

Write all these words in the right places to complete this puzzle, which tells some things you learned about Coretta Scott King. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



Alabama	assassinated	college	discrimination	holiday
married	Nonviolent	sang	speeches	world

Coretta Scott King grew up in a small town in the state of \_\_\_\_\_.

While she was studying in \_\_\_\_\_, she met Martin Luther King, Jr.

After they were \_\_\_\_\_, they worked together in the

Civil Rights movement. They went to protest marches and made \_\_\_\_\_

about civil rights. They marched, spoke, and \_\_\_\_\_ against

violence to try to attain their goals. One of these goals was to end \_\_\_\_\_

and social injustice.

After Martin Luther King, Jr. was \_\_\_\_\_, or killed,

Coretta continued their work. She founded the Martin Luther King, Jr. Center for

\_\_\_\_\_ Social Change. She met with civil rights

leaders all around the \_\_\_\_\_.

She also helped make her husband's birthday a national \_\_\_\_\_.

### Comprehension Response Activities

#### FYI for Kids — Level 5



For more information about TextProject and FYI for Kids, visit [textproject.org](http://textproject.org)  
v.1.0 © 2014 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).  
©2012 by Jim Bowen. Some rights reserved <http://creativecommons.org/licenses/by/2.0/deed.en>.





## What's Your Name?

Write all these words in the right places to complete this puzzle, which tells some things you learned about names and new words. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



browse	e-mail	electronic	Internet	blogs
library	mail	parents	surfing	web

Many of the names for things we use today did not exist when your \_\_\_\_\_ were kids. Your parents got their \_\_\_\_\_ from a mailbox or a post office. In contrast, a lot of the mail people receive today is in the form of \_\_\_\_\_.

Many new words are needed as computer products are created. E-mail, which is one of these words, was created from the words \_\_\_\_\_ and mail. Another is the word \_\_\_\_\_, which was invented in the 1980s to describe the system that links computers around the world.

Some older words also were used in different ways. For example, a \_\_\_\_\_ was once just something that was spun by a spider. Also, \_\_\_\_\_ just meant riding big waves!

When you \_\_\_\_\_ in a book store or \_\_\_\_\_, you look for a good book to read. Today, you can also browse on a computer, looking for books or Internet journals, such as \_\_\_\_\_. New words help you name all kinds of new things in the world.

### Comprehension Response Activities

#### FYI for Kids — Level 5



For more information about TextProject and FYI for Kids, visit [textproject.org](http://textproject.org)  
 v.1.0 © 2014 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).  
 ©2008 by Lucélia Ribeiro. Some rights reserved <http://creativecommons.org/licenses/by-sa/2.0/deed.en>



## The Art of Recycling

Write all these words in the right places to complete this puzzle, which tells some things you learned about making art from recycled materials. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



artists	bracelets	chip	jewelry	garbage
reuse	materials	purses	recycled	bottles

Today, art is made from many kinds of \_\_\_\_\_.

\_\_\_\_\_ use paint and clay to create art, but they also use \_\_\_\_\_ materials.

Sometimes, artists say something about our world when they use recycled materials. A giant white cloud in New York City, for example, was made from 53,000 water \_\_\_\_\_. The artists used these objects to show how many water bottles end up in the \_\_\_\_\_.

\_\_\_\_\_ designers also make necklaces and \_\_\_\_\_ from recycled materials. Bracelets can be made from braided potato \_\_\_\_\_ bags.

\_\_\_\_\_ can be knitted from plastic grocery bags. What kinds of recycled materials could you \_\_\_\_\_ to create art?

### Comprehension Response Activities

#### FYI for Kids — Level 5



## Guitars: The Kings of Rock

Write all these words in the right places to complete this puzzle, which tells some things you learned about guitars. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



electric	electricity	highest	longest	neck
acoustic	pressing	sounds	speakers	string

Did you know that there are two kinds of guitars? \_\_\_\_\_

guitars don't need to be plugged in. They make \_\_\_\_\_

when their \_\_\_\_\_ vibrate. The strings in

\_\_\_\_\_ guitars also vibrate, but pick-ups under the

strings send signals from these vibrations to \_\_\_\_\_. The

speakers make the sounds of the strings louder. As their name says, electric guitars

need \_\_\_\_\_ to make sounds.

There are many similarities between acoustic and electric guitars. Both have

a long \_\_\_\_\_ that holds the strings. Guitarists change

notes by \_\_\_\_\_ down on the strings. The thickest and

\_\_\_\_\_ strings make the lowest sounds. The thinnest and

shortest strings make the \_\_\_\_\_ sounds. Guitars are

popular in many types of music today.

### Comprehension Response Activities

#### FYI for Kids — Level 5



For more information about TextProject and FYI for Kids, visit [textproject.org](http://textproject.org)  
 v.1.0 © 2014 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).  
 ©2009 by Alec Couros. Some rights reserved <http://creativecommons.org/licenses/by-nc-sa/2.0/deed.en>



Name \_\_\_\_\_

## An Island is Born

Write all these words in the right places to complete this puzzle, which tells some things you learned about how earthquakes and volcanoes change the earth. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



Earth	earthquakes	islands	large	melt
mud	Pakistan	plates	push	rocks

The ground looks solid and still, but sometimes it moves. Huge \_\_\_\_\_ lie just beneath the earth's surface. These rocks are called tectonic \_\_\_\_\_. As they move, they \_\_\_\_\_ against each other. This pushing can cause the types of movements seen in \_\_\_\_\_ and volcanoes.

Small earthquakes don't usually cause much damage, but \_\_\_\_\_ earthquakes can destroy homes and kill people. Large earthquakes can also create \_\_\_\_\_ in the ocean. The Gwadar mound, which is an island that was created when a huge earthquake struck off the coast of \_\_\_\_\_, is actually a \_\_\_\_\_ volcano. Mud volcanoes explode when the soil and rocks in them get hot enough to \_\_\_\_\_. Islands created by earthquakes can appear and disappear quickly, showing us how our \_\_\_\_\_ changes.





## Hula: Dance That Tells a Story

Write all these words in the right places to complete this puzzle, which tells some things you learned about hula dancing and Hawaii. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



dancers	drums	flowers	grass	Hawaii
imagine	story	ukuleles	world	written

Around the \_\_\_\_\_, dance takes many different forms. In the state of \_\_\_\_\_, people do a dance called hula. Hula \_\_\_\_\_ wear skirts made of \_\_\_\_\_ and leaves. Their bracelets and anklets are made from \_\_\_\_\_. While dancers perform, musicians play instruments, including rattles, \_\_\_\_\_, and \_\_\_\_\_. Ukuleles look like small guitars.

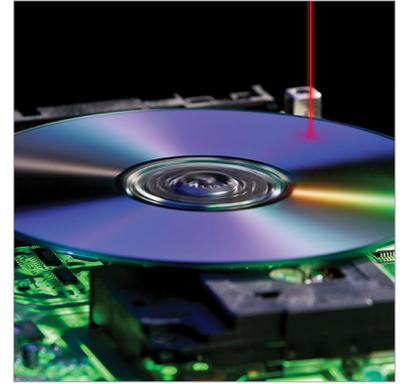
Many visitors to Hawaii don't know that hula dances tell a \_\_\_\_\_. Long ago, before there was a \_\_\_\_\_ language, the Hawaiian people created hula dances to tell about things that happened and about their travels around the world. As you watch the movements of hula dancers, try to \_\_\_\_\_ the story they are telling.



## Lasers: The Power of Light

Write all these words in the right places to complete this puzzle, which tells some things you learned about lasers. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.

colors	DVDs	1960s	inventions	light
low-power	metal	one	scanners	wavelength



Lasers are fairly new \_\_\_\_\_. They were invented as late as the \_\_\_\_\_, only a little more than 50 years ago. Lasers are used in the \_\_\_\_\_ that read barcodes in stores. Lasers also read the codes on the CDs and \_\_\_\_\_ that play music and show movies.

Lasers have different strengths. The lasers in toys and barcode scanners are \_\_\_\_\_ lasers. In contrast, high-power lasers are used in surgery and can cut \_\_\_\_\_.

Laser beams are a form of \_\_\_\_\_, but they are different from sunlight. Sunlight is made up of all the \_\_\_\_\_ of the rainbow. Each color has a separate \_\_\_\_\_. Wavelengths measure how quickly light moves. Unlike sunlight, lasers have only \_\_\_\_\_ wavelength. Because they can be used in so many ways, many people think lasers are one of the top ten inventions of the 20th century!

### Comprehension Response Activities

#### FYI for Kids — Level 5



For more information about TextProject and FYI for Kids, visit [textproject.org](http://textproject.org)  
 v.1.0 © 2014 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).  
 ©2008 by Nick Wheeler in Flickr. Some rights reserved. <https://creativecommons.org/licenses/by-nc-sa/2.0/>







Name \_\_\_\_\_

## Knitting: From Sheep to Scarf

Write all these words in the right places to complete this puzzle, which tells some things you learned about knitting. You can reread the article before you begin, but don't look back at it while you are working. After you've completed the puzzle, read it to someone.



bears	create	clothes	gifts	goats
hair	hats	hospitals	experiment	yarn

Before \_\_\_\_\_ were made in factories, people knitted their own clothes. They knitted sweaters, scarves, and \_\_\_\_\_ to keep themselves warm.

When you knit, you use needles and \_\_\_\_\_. Some yarn is made from the wool of sheep, \_\_\_\_\_, or llamas. Other yarn is made from \_\_\_\_\_ shed by dogs and cats. People who knit like to \_\_\_\_\_ new things.

Some knitters make hats and sweaters to give to their friends or family members as \_\_\_\_\_. They may also knit things and donate them to \_\_\_\_\_ or other charities. The Mother Bear Project collects knitted \_\_\_\_\_ and sends them to children around the world. Knitting is a great way to \_\_\_\_\_ with colors and designs.

### Comprehension Response Activities FYI for Kids — Level 5



For more information about TextProject and FYI for Kids, visit [textproject.org](http://textproject.org)  
v.1.0 © 2014 TextProject, Inc. Some rights reserved (<http://creativecommons.org/licenses/by-nc-nd/3.0/us/>).  
©2012 by Dennis Wilkinson in Flickr. Some rights reserved <https://creativecommons.org/licenses/by-nc-sa/2.0/>























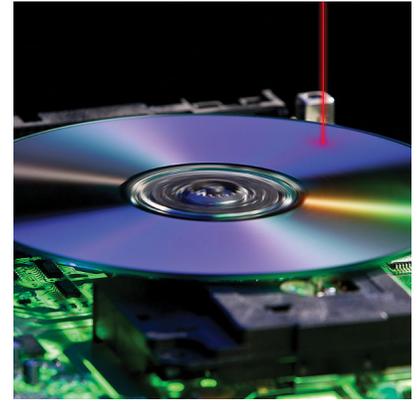




# REVIEW

## Lasers: The Power of Light

Write keywords or phrases that will help you remember what you learned.



Handwriting practice lines consisting of a solid top line, a dashed middle line, and a solid bottom line. There are ten such sets of lines provided for writing.







