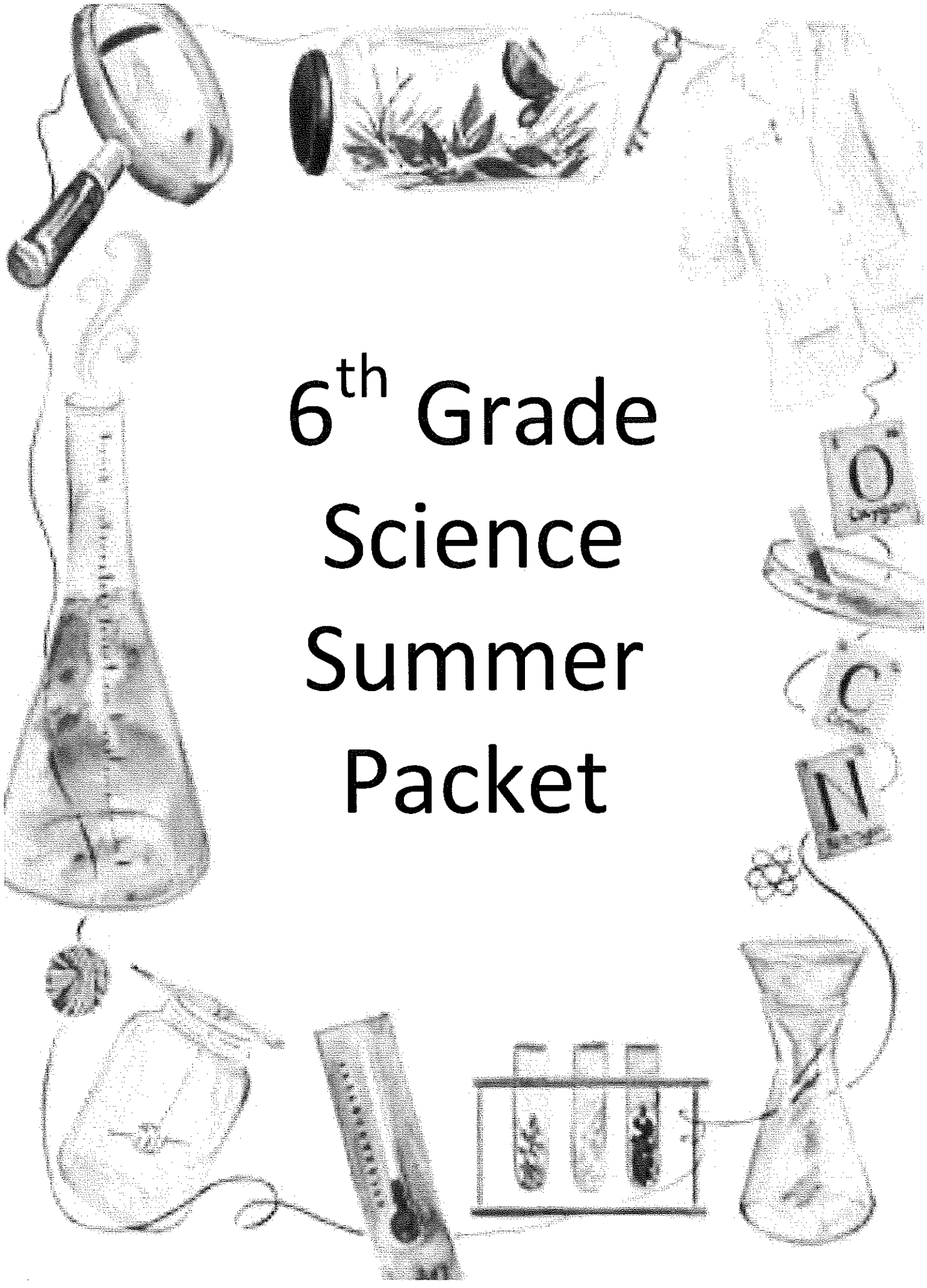
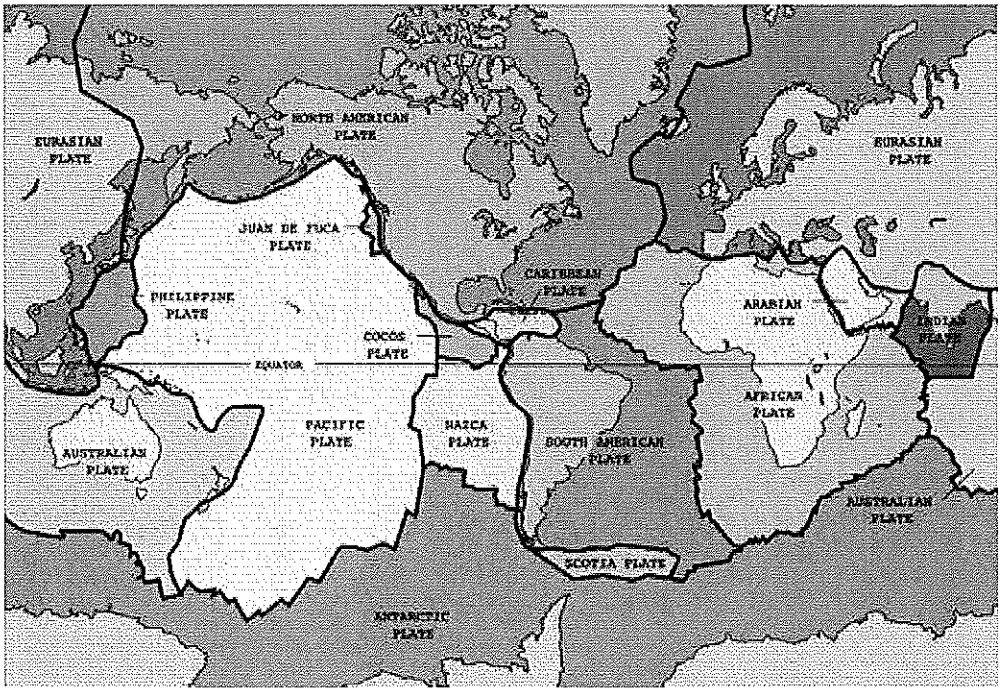


6th Grade Science Summer Packet

Earth Science - Earthquakes

by ReadWorks



tectonic plates

One summer I was in Las Vegas with my family. Our hotel room was on one of the top floors of a high-rise building. There was a morning of that vacation I will never forget. We woke up around 6 A.M. The building was shaking and swaying back and forth like a pendulum. It was an earthquake.

Las Vegas is in the western state of Nevada, which is right next to California. The epicenter was actually in California, but we still felt it over 100 miles away.

Earthquakes occur when plates in the earth's crust rub together. This friction causes the surface to shift back and forth. It also makes huge cracks in the ground, sometimes miles long and several feet deep.

Luckily, that summer in Las Vegas, my family got out of the building safely. I was never so scared in all my life. Others in history have not been so fortunate. On Jan. 17, 1995, an earthquake struck in Kobe, Japan. It caused over 6,000 deaths. In 1906, a huge earthquake hit San Francisco, killing over 3,000 people and destroying over 25,000 buildings.

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Name: _____ **Date:** _____

1. According to the text, what happens to plates in the earth's crust when earthquakes occur?

A. The plates shake and sway.

B. The plates travel to Las Vegas.

C. The plates rub together.

D. The plates strike a place.

2. A problem in this text is being on a top floor of a high-rise building during an earthquake. What is the solution for this problem?

A. Plates in the earth's crust rub together.

B. Try to get out of the building safely.

C. Buildings can be destroyed, and people can die.

D. Study earthquakes in foreign countries.

3. Read these sentences from the text.

> Las Vegas is in the western state of Nevada, which is right next to California. The epicenter was actually in California, but we still felt it over 100 miles away.

Based on this information, what can you conclude about earthquakes?

A. People who are located 200 miles away from the epicenter of an earthquake won't feel it.

B. Usually you cannot feel an earthquake if you are in the same area where it started.

C. You may be able to still feel an earthquake even if you are not in the same area where it started.

D. Every earthquake you can feel in Nevada has an epicenter in California.

4. What can be inferred from this text?

A. Earthquakes are predictable.

B. Earthquakes are unpredictable.

C. It's safe to be in an earthquake.

D. People always die in earthquakes.

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5. What is this text mostly about?

A. earthquakes and the author's experience with one

B. how scientists can predict the next earthquake

C. the difference between earthquakes in Japan and America

D. safety steps you can take during an earthquake

6. Read this sentence from the text.

Earthquakes **occur** when plates in the earth's crust rub together.

As used in the sentence, what does the word "**occur**" most nearly mean?

A. stop

B. predict

C. finish

D. happen

7. Choose the answer that best completes the sentence.

There isn't much warning when an earthquake might occur, _____ they are very scary and surprising.

A. such as

B. so

C. yet

D. but

8. According to the text, what causes an earthquake to happen?

_____

_____

_____

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9. Based on the text, why might being high up in a building be dangerous during an earthquake? Use evidence from the text to support your answer.

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Earth Science - The Weather

by ReadWorks

Weather is made up of several different components. In order to understand weather, you must understand air temperature, clouds, wind, and precipitation (rain and snow). Weather is never exactly the same everywhere. It is always changing, and depending on what climate you live in, weather can change drastically from mile to mile.

The United States uses the Fahrenheit scale to measure air temperature. When the temperature rises on the Fahrenheit scale, it shows that the temperature is hotter. When the temperature goes down, it means that it is getting cooler.

Low-pressure systems are associated with clouds and precipitation, while high-pressure systems are normally associated with dry weather and mostly clear skies. Clouds are made up of millions of tiny ice crystals. Clouds high up in the sky are very cold, and look very fluffy. Lower clouds in warmer air look sharper. From clouds, we get rain and snow. Humidity is the measure of water vapor in the air. On a beautiful day, there is low humidity. On a foggy day there is high humidity. On a rainy day there is 100% humidity.

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Name: _____ **Date:** _____

1. According to the text, what does the United States use the Fahrenheit scale to measure?

A. air temperature

B. low-pressure systems

C. high-pressure systems

D. humidity

2. How is the text organized?

A. There are descriptions of how each weather component works, and then the author introduces all of the weather components.

B. Weather components are first listed, and then only a few of these components are explained.

C. Weather components are listed, and then the author explains how they all work at the same time.

D. The author only describes the weather and how it impacts the land.

3. The nature of weather means that in one city it could be raining and the town next to it could be sunny.

What evidence from the text supports this conclusion?

A. "On a beautiful day, there is low humidity. On a foggy day there is high humidity. On a rainy day there is 100% humidity."

B. "When the temperature rises on the Fahrenheit scale, it shows that the temperature is hotter."

C. "It is always changing, and depending on what climate you live in, weather can change drastically from mile to mile."

D. "Low-pressure systems are associated with clouds and precipitation, while high-pressure systems are normally associated with dry weather and mostly clear skies."

4. Based on the text, what might be the humidity on a very foggy day?

A. 5%

B. 10%

C. 20%

D. 80%

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5. What is this text mostly about?

A. why places are sunny all the time

B. weather and some of its different components

C. why places can change weather quickly

D. how Fahrenheit and Celsius work

6. Read this sentence from the text.

> Low-pressure systems are **associated** with clouds and precipitation, while high-pressure systems are normally **associated** with dry weather and mostly clear skies.

As used in the text, what does the word "**associated**" most nearly mean?

A. linked with

B. free from

C. broken with

D. unlinked

7. Choose the answer that best completes the sentence.

Humidity is the measure of water vapor in the air, _____ on a rainy day there is 100% humidity.

A. for

B. so

C. yet

D. but

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8. Use details from the text to describe clouds.

9. If there was a high-pressure system in your area and a bunch of clouds were blown in from a different direction, how would the pressure and humidity in your area likely change? Use evidence from the text to support your answer.

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A Ride in Space

by Kate Paixão (Adapted by ReadWorks)

Sally Ride always loved science and sports. She had thought about becoming a tennis player. But she loved science more than tennis. So she studied physics in college. Physics is a kind of science.

In 1978, Sally saw a newspaper ad for an exciting job. The job was working for NASA as an astronaut. NASA is in charge of the United States' space program. People working there study space. Eight thousand people tried to get the job, but only 25 did. Sally was one of them.

At NASA, Sally helped make a robotic arm to use in space. In 1983, she went on her first trip to space. To get there, she flew on a shuttle. This was dangerous and hard to do. Flying into space took courage. Sally was brave to do it. Even though it was dangerous, when Sally came back from her trip, she said, "It was the most fun I'll ever have in my life." She was the first American woman to go to space.

In 1987, Sally left her job at NASA to teach science. Later, she started her

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own company called Sally Ride Science. She wanted to get girls and boys excited about becoming scientists. She wanted to inspire them to study science.

By studying science and inspiring others to study it too, Sally showed dedication to science. Sally Ride's courage and dedication to science inspired people around the world.

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Name: _____ **Date:** _____

1. What job did Sally Ride see an ad in the newspaper for?

A. teacher

B. scientist

C. astronaut

2. The article describes a sequence of events in the life of Sally Ride. Which event happens last?

A. Sally Ride helps develop a robotic arm to use in space.

B. Sally Ride becomes the first American woman to travel in space.

C. Sally Ride starts her own company.

3. Sally Ride always loved science.

What evidence from the article supports this statement?

A. When Sally Ride returned to Earth from her six-day shuttle trip, she said, "It was the most fun I'll ever have in my life."

B. Sally Ride studied physics in college and became a science teacher in 1987.

C. In high school, Sally Ride thought about becoming a tennis player.

4. Sally Ride loved science and sports. Based on the information in the article, what else did she probably enjoy?

A. reading

B. writing

C. teaching

5. What is the main idea of this article?

A. Sally Ride started her own company to excite boys and girls about working as scientists.

B. Sally Ride went on her first space shuttle trip on June 18, 1983.

C. Sally Ride's love of science led her to accomplish many things.

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6. Read this paragraph from the article.

"Sally Ride always loved science and sports. In high school, she thought about becoming a tennis player. Her love of science won out, however. Ride went to college and studied physics, a branch of science."

What does it mean that Sally Ride's love of science "won out"?

A. Sally Ride thought about becoming a tennis player.

B. Sally Ride chose to pursue science instead of sports.

C. Sally Ride won a science contest after losing a tennis game.

7. Most of the students who applied to NASA were not accepted, _____ Sally Ride was.

A. but

B. because

C. so

8. What was Sally Ride the first American woman to do?

9. According to the article, what two things about Sally Ride inspired people around the world?

10. Explain why Sally Ride might have inspired people around the world. Support your answer with at least one example from the article.

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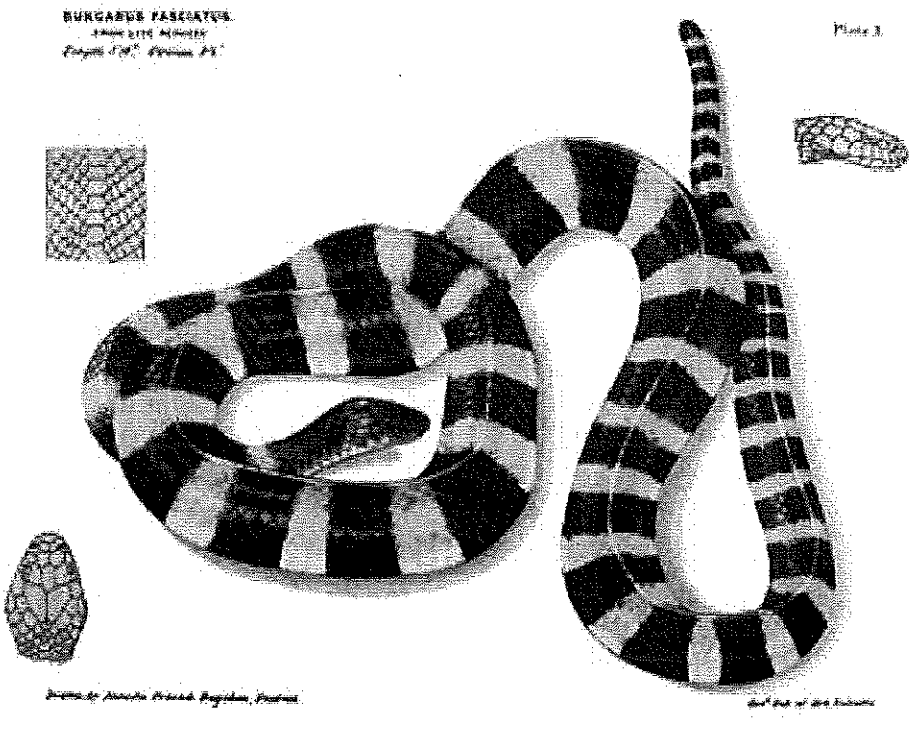
Portrait of an Animal Rescue Expert

by ReadWorks



Justin Matthews has always loved animals. As a boy, he collected turtles and lizards from the pond behind his house in Bradenton, Florida. He terrified his younger sister by slipping the reptiles into her bed at night. By the time he was 12, his bedroom looked like an exhibit at the zoo. Matthews's love of animals has lasted into his adulthood.

"At my house, we've got an iguana, a 10-foot alligator, three constrictor snakes, a hybrid wolf, a giant tortoise, a possum," Matthews says. "Every time someone comes by the house, they say it's like a visit to the Florida Zoo!"

Matthews makes his living as a wildlife rescue expert. Each day he takes between 10 and 20 phone calls from people experiencing some kind of trouble with animals. Sometimes a squirrel has gotten loose in someone's living room. Other times an alligator is sunning itself on someone's front lawn, preventing kids from going out to play. On rare occasions, a caller reports an animal attack. In such cases Matthews suggests the caller call 911. Then he jumps in his truck to see if he can help.

Fortunately, animal attacks are rare. Matthews spends most of his time educating the public

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about animal behavior. He believes that if people understood animals better, they would not be so afraid of them.

"When I was young, I tried to get to know every type of animal I could," he says. "People are scared of animals like snakes and sharks and alligators because they don't understand them. And they don't understand them because they haven't spent any time with them. But when you get to know a python, for example, you start to realize they are actually very nice creatures. People keep them as pets for a reason. They can be fun to have around!"

That may seem like a stretch. But what Matthews says is backed up by science. Burmese pythons are in fact quite calm creatures. Unless you attack *them*, they will remain peaceful. The problem is that Burmese pythons can grow to lengths of 20 or even 25 feet. Keeping a 20-foot snake in your house is not the easiest thing to do.

"Those snakes can get awfully long," says Matthews. "And what happens is, after a while, the family can't care for a snake that big. Instead of selling them, they release them into the wild. All of a sudden, you've got 20-foot snakes slithering through people's backyards!"

Matthews says that at least 10 percent of his rescue calls come from people who see snakes on their properties. When he gets snake calls, he brings a cooler to put them in. Then he drives them to the local Florida Fish and Wildlife office.

Matthews does not only deal with snakes. People call with all sorts of stories. Once, someone called to say there were three wolves running through the local state park. He knew that wolves were not allowed to be in the park, so he drove out to see what he could do. Within an hour, he had captured all three of the wolves in his van. He relocated them to a large cage in his backyard. One of the wolves, Nakia, still lives with him and his wife.

I asked how he managed to tame these wild wolves.

"Simple," he says. "I threw some chicken into the back of my van, and drove through the park until all three wolves jumped in. I figured they would be hungry. When I got back home, I put them into a cage and lay down beside them for a few hours. After a while they realized I was not their enemy. They started acting nicely toward me. We've been friends ever since."

Matthews is something of a local celebrity in Bradenton. People know him as "the wildlife guy." Some people call him "alligator man." His popularity got a boost when he competed in the Python Challenge 2013. The Everglades, a large state park in Florida, is full of Burmese pythons. So Matthews and others agreed to help park employees catch them. As a competitor, he appeared on national news shows with his best friend, Roy, who helped him search. They didn't catch any. But they did tell officials where the snakes were *not* hiding out.

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"It was a thrill," Matthews says of the contest. "I was happy to help the Florida Fish and Wildlife folks search for those snakes. They're a real problem for the state of Florida. People want to be able to enjoy the natural beauty of the Everglades, with its grasses and lagoons. But how can they relax when they know the place is full of big, scary-looking snakes?"

Due to Matthews's high profile during the contest, television stations expressed interest in giving him his own show.

"TV show or not, I'm happy doing what I'm doing," he says. "For me, it's all about the animals."

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Name: _____ **Date:** _____

1. What is Justin Matthews's job?

A. wildlife rescue expert

B. collecting animals to put in his house

C. saving snakes from the Florida Everglades

D. giving pythons to people as pets

2. The author describes what happens when people can no longer care for their pet Burmese pythons. How does the author describe this?

A. The author quotes Matthews explaining that "All of a sudden, you've got 20-foot snakes slithering through people's backyards!"

B. The author writes about how Matthews competed in the Python Challenge 2013.

C. The author quotes Matthews telling how he "threw some chicken into the back of my van."

D. The author writes about Matthews's house seeming like a zoo to guests.

3. Matthews thinks it is important to help people understand animals better so that people would not be so afraid of them. Which evidence from the text supports this conclusion?

A. Matthews spends most of his time educating the public about animal behavior.

B. Matthews has a television show about rescuing wild animals.

C. Matthews answers phone calls about wolves in public parks.

D. Matthews calls 911 when animals attack people.

4. According to the passage, Matthews caught three wild wolves and put them in his van. He says, "When I got back home, I put them into a cage and lay down beside them for a few hours. After a while they realized I was not their enemy."

Based on this information, how can Justin Matthews best be described?

A. He is easily frightened.

B. He is patient.

C. He gets tired often.

D. He is unhappy.

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5. What is the main idea of this passage?

A. Justin Matthews likes to catch Burmese pythons.

B. People are afraid of animals because they don't understand them.

C. There are a lot of pythons in Florida state parks.

D. Justin Matthews helps rescue wild animals because he has studied them and understands them.

6. Read the following sentences from the passage:

"Matthews is something of a local **celebrity** in Bradenton. People know him as 'the wildlife guy.' Some people call him 'alligator man.' His popularity got a boost when he competed in the Python Challenge 2013."

As used in the text, what does the word "**celebrity**" mean?

A. winner

B. famous person

C. animal lover

D. good person

7. Choose the answer that best completes the sentence below.

Justin Matthews has many nicknames, _____ Alligator Man.

A. as a result

B. instead

C. such as

D. therefore

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8. Justin Matthews loves animals. Give examples from the passage of things Matthews does to show that this is true.

9. In the passage, Justin Matthews says, "People are scared of animals like snakes and sharks and alligators because they don't understand them."

According to Matthews, what is one way to learn to understand animals?

10. Explain why understanding animals better may make people less afraid of them. Use evidence from the text to support your answer.

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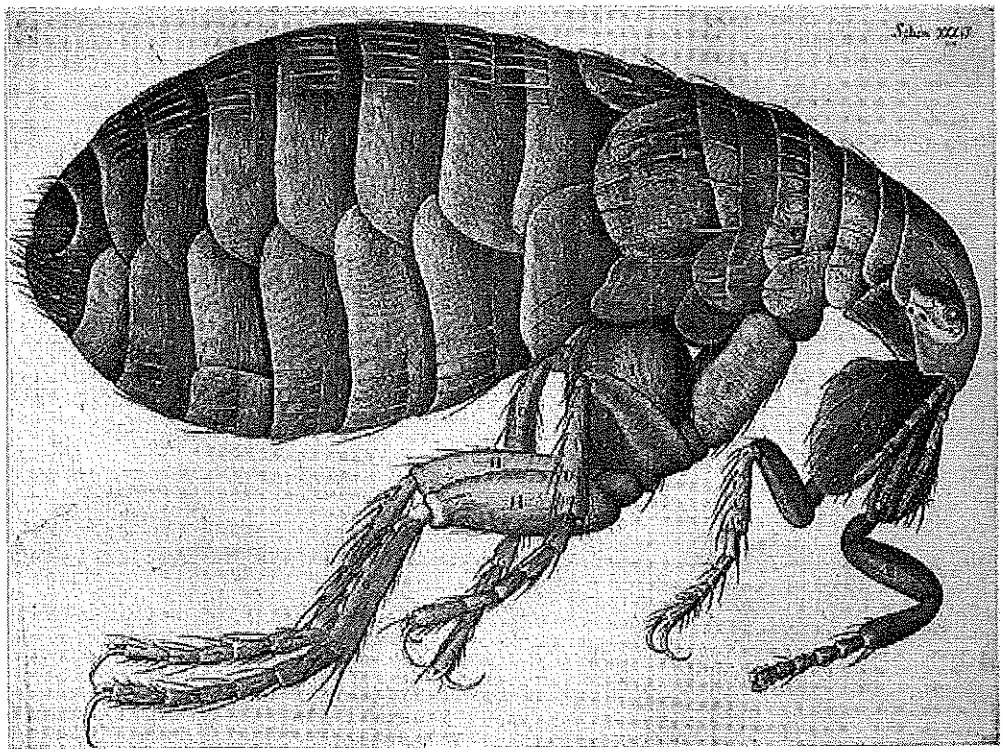
Famous Scientists - Robert Hooke

by ReadWorks

Many people have never heard of Robert Hooke. He was a very important scientist. He discovered the cell.

In 1665, Hooke created a very valuable microscope. It was the best microscope of his time. He was able to look at tiny objects like fleas and tiny slices of cork. These things had never be seen in such great detail before.



By studying these small objects, Hooke was the first person to discover cells. He discovered them first in cork and then in plants. He noticed that the cells in the cork looked like the cells in a monastery (the small rooms where monks sleep). This discovery led scientists to make great discoveries in plant and animal science.

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Name: _____ **Date:** _____

1. According to the text, where did Hooke first discover cells in?

A. cork

B. fleas

C. humans

D. plants

2. What was the cause of Robert Hooke being able to look at tiny objects?

A. Scientists made great discoveries in plant and animal science.

B. Hooke was the first person in history to discover cells.

C. Hooke discovered cells first in cork and then in plants.

D. Hooke created the best microscope of his time.

3. Read this paragraph from the text.

> In 1665, Hooke created a very valuable microscope. It was the best microscope of his time. He was able to look at tiny objects like fleas and tiny slices of cork. These things had never been seen in such great detail before.

What can you conclude based on this evidence?

A. Hooke must have had assistance in building this new microscope because it was so difficult.

B. The microscope that Hooke invented could only be used to look at small insects and bugs.

C. Microscopes before Hooke's invention could not be used to see great detail in tiny things.

D. Hooke's microscope was so valuable because it was made out of so many expensive and small parts.

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4. Based on the text, why didn't people before Hooke know about cells?

A. Their eyesight was very poor.

B. They had no way to see them.

C. They pretended they did not exist.

D. Eyeglasses had not been invented.

5. What is this text mostly about?

A. why Hooke studied fleas

B. the different kinds of cells

C. Hooke's discovery of the cell

D. how Hooke built a microscope

6. Read these sentences from the text.

He was able to look at tiny objects like fleas and tiny slices of cork. These things had never be seen in such great **detail** before.

As used in these sentences, what does the word "**detail**" mean?

A. having small parts visible

B. bright sunlight

C. being broken into pieces

D. from the opposite side

7. Choose the answer that best completes the sentence.

Many people have never heard of Robert Hooke, _____ he was a very important scientist.

A. though

B. and

C. since

D. because

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8. According to the text, why did Hooke compare cells to a monastery?

9. Why was Robert Hooke an important person in science? Use evidence from the text to support your answer.

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