grade 5

Common Core Aligned CLOSE READING

Passages and Activities

Informational

55 Non-Fiction Reading Passages

5 Passages for EACH 5th Grade CCSS Informational Standard

2 Pages of Close Reading and Text Dependent Responses per Passage

teaching and TAPAS

What is in here?

55 Original 5th grade level reading passages. Each passage falls within the Lexile Level of 770-980, which is the Common Core State Standards expectation for 5th grade. The Lexile Level is marked at the top of each passage.

Standards **RI.5.1, 5.2, 5.3, 5.4, 5.8** EACH have 5 passages and activities specifically dedicated to that standard. Standard **RI.5.5, 5.7, 5.9** are extra special (you know, the ones where you compare two texts) because they each have 10 passages so that your students can compare away!

Each passage has 2 pages of carefully written and consistent close reading tasks and text dependent questions. The first page of tasks are specifically aligned to the standard identified at the top of the page.

The second page of activities is a spiral of all the 5h grade RI standards. This is perfect for holding those kids accountable for everything they have already learned! No skill slipping on your watch!

Sneak Peek...

Lexile Level

RI.5.2 •Can Heart Attacks Be Prevented?•
#4 Lexile Level - 900 Words - 582 Page 1

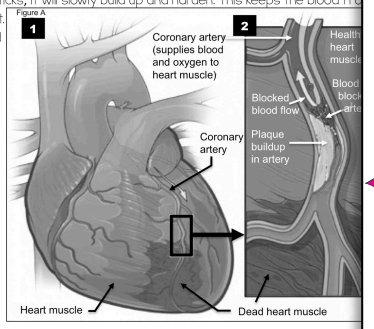
Can Heart Attacks Be Prevented?

Heart attacks are a serious threat to both men and women. The problem lies with the coronary artery which supplies the heart with blood. The blood carries oxyge that the heart and other parts of the body need in order to work properly. Witho this oxygen, parts of the heart can die and not do the work it needs to do. Sometimes, the coronary artery gets clogged and the blood is kept from flowing through. Let's take a closer look at why this happens.

Heart attacks can happen when blood does not get to the heart. There are sever reasons why this could happen. One is caused by plaque which is a waxy substar that builds up on the artery walls. Plaque can build up when there is too much cholesterol in our blood. Cholesterol is a fat found in our blood. It is produced by liver and it helps parts of the body function. We can also get this fat by some of the foods that we eat. A little of this in our blood is good. Too much is bad. When have too much of this cholesterol in our blood it will begin to stick to the side wall our arteries. As it sticks, it will slowly build up and harden. This keeps the blood fro flowing to the heart. We already learned that the heart cannot function properly without oxygen. This will cause a heart attack.

A second way that heart attacks occur is when plaque builds up, hardens, and then ruptures, or breaks apart. This

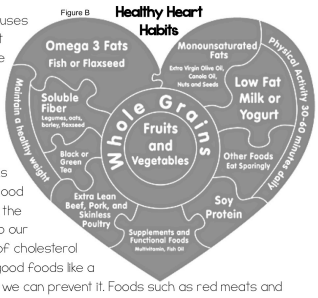
Figure A



RI.5.2 •Can Heart Attacks Be Prevented?•
#4 Lexile Level - 900 Words - 582 Page 2

releases the stuff inside and causes the blood to clot. This means that the blood will harden and clog the artery. Once again, blood will not be able to reach the heart.

Figure B



Can any of this be prevented? The good news is it can! One way to help prevent heart attacks is to manage our eating habits. Good eating habits help us by lowering the amount of cholesterol we put into our blood. Some foods contain a lot of cholesterol and some have less. If we eat good foods like a lot of vegetables, then the more we can prevent it. Foods such as red meats and high fat dairy products increase the amount of cholesterol. It is okay to eat some, but we must limit it somewhat.

Exercise is another way to help prevent heart attacks. Being active throughout the day actually lowers the amount of cholesterol in our blood. Getting plenty of exercise will also help [illegible] pressure. High pressure means that [illegible] of pressure on the walls of your arteries. If this happens, arteries [illegible] damaged and [illegible] with blood flowing to the heart. High blood pressure [illegible] get blood throughout the body. All of this can lead to heart attacks.

Eating healthy foods and exercising will help [illegible] and high blood pressure. This prevents plaque from building up in arteries which can prevent blood flow to the heart. People need to be aware that smoking, using other tobacco products, and drinking alcohol can also cause an increase in cholesterol and high blood pressure. Staying away from these things can help prevent heart attacks because it reduces the risk of plaque build-up in the arteries. So, while heart attacks are common among people, there are plenty of ways to help prevent them.

Page 32

Full of useful diagrams and photos

RI.5.2 #4 •RESPOND• Can Heart Attacks Be Prevented? NAME:

One MAIN IDEA of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

SUMMARY

Main Ideas & Supp

Write a SUMMARY of this text.

Page 1

Questions specifically focused on a certain standard

Cholesterol

Heart Attacks

RI.5.5

3. Choose one and complete

Page 2

Spiral of all common core standards

All standards clearly marked

There are 5 activities just like this for each 5th Grade Common Core Standard

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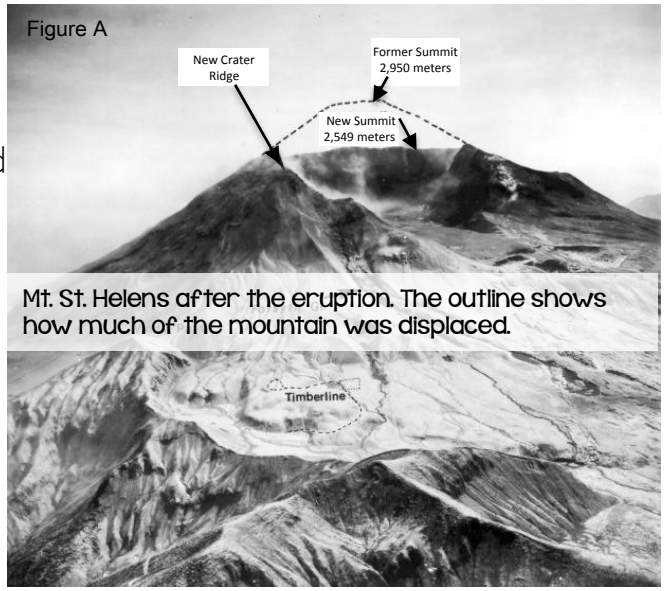
Teaching and Tapas

The Ring of Fire

In 1980, a small earthquake happened near the base of Mt. St. Helens in Washington, which is a state in the United States. The earthquake caused the northern side of the mountain to slide down the hill. Then, the mountain erupted. Lava and rock flew down the mountain, destroying everything in it's path. A thick plume of ash and smoke rose 80,000 feet into the sky.

Figure A

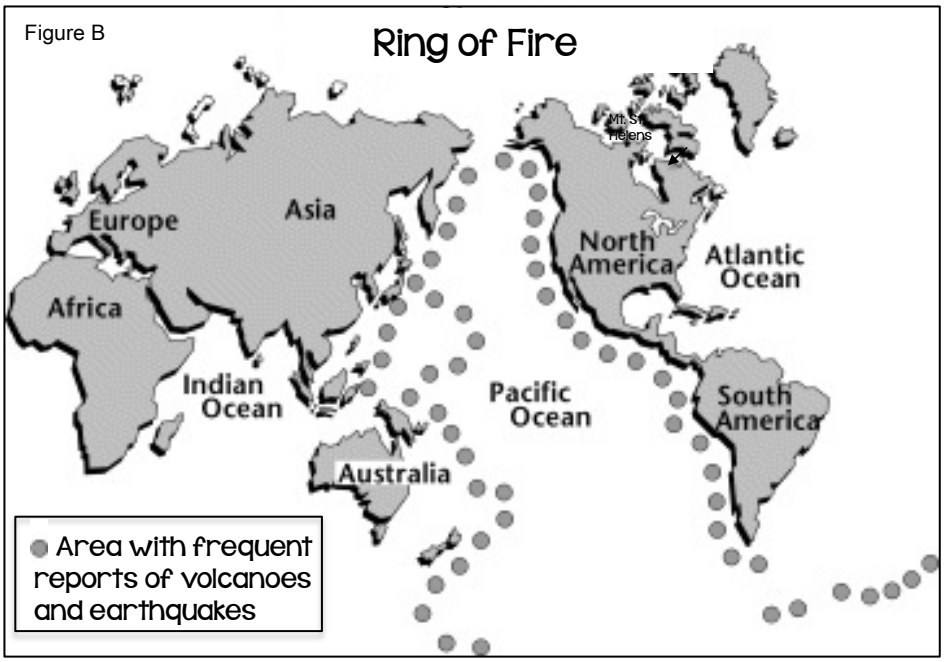


Mt. St. Helens after the eruption. The outline shows how much of the mountain was displaced.

Mt. St. Helens is an active volcano. The 1980 eruption was the largest ever in the mainland United States. There are not many volcanoes in the United States. Most volcanoes in the world are dormant, or sleeping. In the United States most active volcanoes, like Mt. St. Helens, are found on the West Coast or in Alaska or Hawaii.

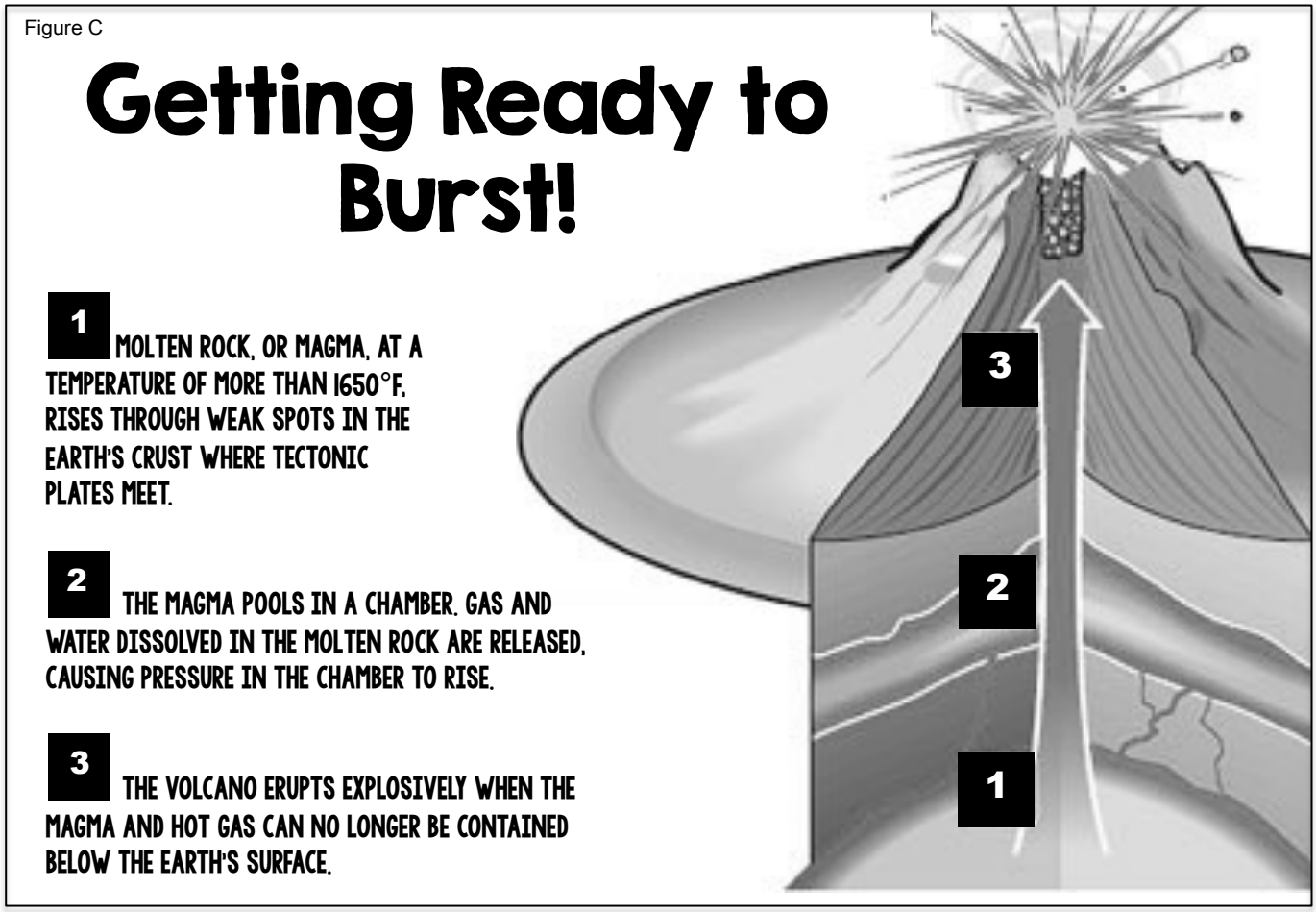
Alaska and the West Coast are in what is called "The Ring of Fire". This is a giant ring that circles the Pacific Ocean. The Ring of Fire has 452 volcanoes. These are a mix of dormant and active volcanoes. The Ring of Fire is also where nearly all of the world's earthquakes happen.

Figure B



Earthquakes and volcanoes are closely related. They both happen because of changes underneath the surface of the earth. Under the surface there are large plates of Earth's crust, called tectonic plates. These plates move and bump into each other. This can cause earthquakes. Fortunately, the plates move very slowly, so this does not happen very often.

Figure C



The movement of tectonic plates can create gaps where melted rock called magma can pool. Magma is super hot rock that can flow like water. Volcanoes happen when a lot of magma pushes against the tectonic plates. With a lot of pushing, it can explode. The tectonic plates in the world that move the most are those in the Pacific Ocean. Because they move so much, there are more volcanoes and earthquakes in the Ring of Fire than anywhere else in the world.

•RESPOND•
The Ring of Fire

NAME:

1. What happens when a volcano erupts? Include quotes from the text that support your response.

Color the text you have quoted.

2. What is the Ring of Fire? Include quotes from the text that support your response.

Color the text you have quoted.

3. How are earthquakes and volcanoes related? Include quotes from the text that support your response.

Color the text you have quoted.

NAME:

RI.5.2

4. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

5. **KEY DETAIL #1**: _____

6. **KEY DETAIL #2**: _____

7. **KEY DETAIL #3**: _____

8. Write a **SUMMARY** of this text. _____

_____

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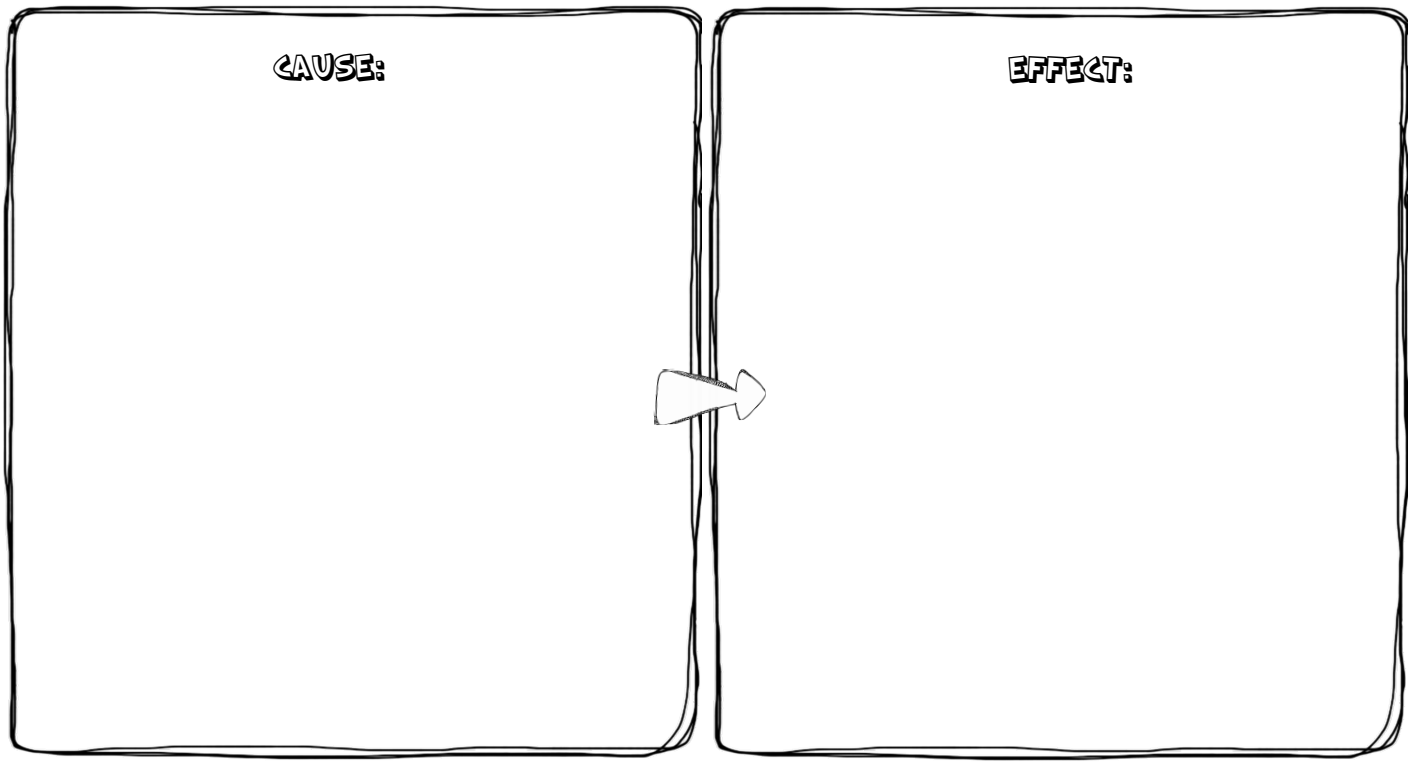
_____

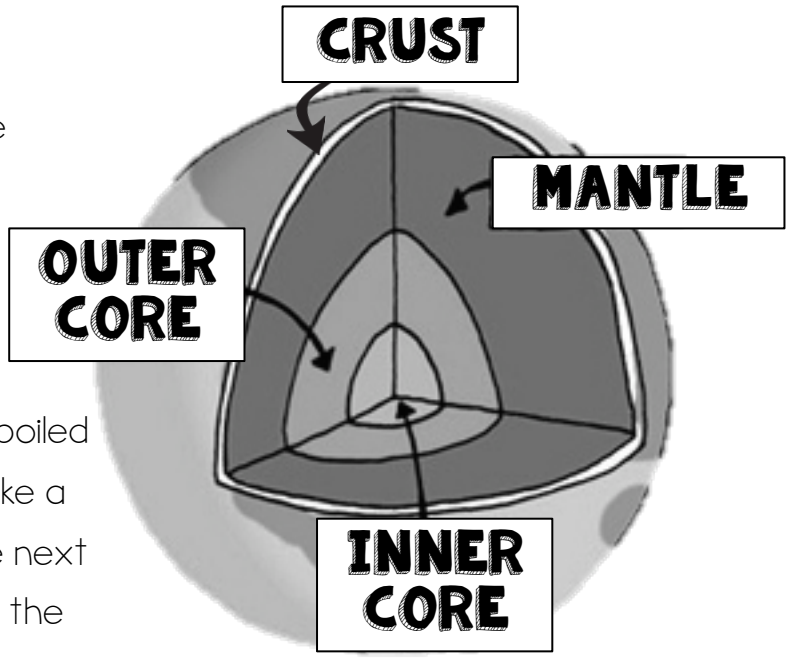
RI.5.3

9. Explain a cause and effect relationship of active volcanoes and tectonic plates.



Do Mountains Really Grow?

If you have ever looked at a mountain, you know that they are really big and tall. But did you know that they are getting a little bit taller each year? This is because there is something happening deep inside the earth. The secret to the growing mountain lies several miles beneath your feet!



First, to understand what is going on we need to understand the layers of our earth. Our earth is made up of four main layers. The inner most part of the earth is called the inner core, which is the hottest part. If you imagine a hard-boiled egg, it is like the yolk. The outer core is like a barrier between the inner core and the next layer called the mantle. The mantle is like the white part of a hard-boiled egg. The mantle is made up of magma, which is what we call lava when it is still inside the earth. The outer layer of the earth is the part we live on. It is called the crust and is very thin. It is sort of like the egg shell of a hard-boiled egg.

Next, we need to look at the crust. You probably have cracked the shell of a hard-boiled egg before. The surface of the earth, or crust, is very similar to a cracked shell. We call the broken pieces plates. These plates can move and slide around. This does not happen very fast though! As a matter of fact, it happens so slow we do not feel it going on. But what is causing these plates to move?

The magma inside the mantle is very thick and gooey. It is slow moving like thick syrup. The magma moves around inside the mantle because of the heat from

the core of the earth. This happens much like when water boils. You put water in a pot and place the pot on the stove. The heat from the stove warms the water near the bottom. As the water heats up, it begins to rise to the top. That is why you see bubbles start at the bottom and then move up. Magma does the same thing. The magma near the core heats up and slowly begins to rise towards the crust of the earth. And when it does, it pushes against the plates of the earth.

Magma that has moved toward the surface of the earth is very strong. It is so strong that it actually causes the earth's plates to move. When those plates move around, they sometimes slide past each other, move away from each other, or even crash into each other. The result of these movements creates what we call landforms. Some examples of landforms are valleys, plateaus, volcanoes, and mountains.

Mountains are made by the magma forcing two plates to crash into each other. Each plate folds up like the hood of a car that has crashed into another car. Since the magma inside the mantle does not stop moving, it causes the plates to keep pushing into each other. The result is that the mountains keep getting bigger and bigger.

Even though mountains are getting taller, you won't be able to notice it. We cannot see mountains getting bigger because it happens so slowly. Most mountains will only grow one or two centimeters each year. However, some mountains have grown as much as a couple of inches in one year.

NAME:

RI.5.1

1. Do mountains really grow? Include quotes from the text that support your response.

Color the text you have quoted.

2. How is magma related to mountains? Include quotes from the text that support your response.

Color the text you have quoted.

NAME:

RI.5.2

3. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic ✪ What the author says about the topic

_____

9 **KEY DETAIL #1**: _____

5. **KEY DETAIL #2**: _____

6. Write a **SUMMARY** of this text. _____

_____

_____

_____

_____

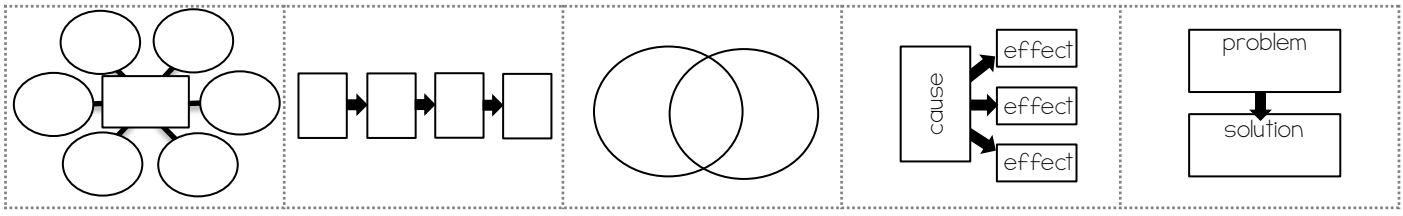
RI.5.5

7. Describe the **TEXT STRUCTURE** the author used in Do Mountains Really Grow?

_____

_____

8. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



Why Do Leaves Change Colors?

A sure sign of fall is when the temperature begins to drop and the days become shorter. In some parts of the world, trees change as well. Leaves burst into vivid purples, oranges, yellows, and reds. For a few short days, nature transforms into a beautiful wonderland of color. In order for a tree to change colors, the tree needs leaf colors, longer nights, and weather changes.

Pigments, or leaf colors, are the first item that a tree needs to change colors. Inside every leaf are millions of little cells full of pigment. Many colors such as oranges and yellows are actually in the leaves all year long. In the spring and summer, trees make a lot of green color. The green color is called chlorophyll. The other colors in the leaves are hidden by the chlorophyll in spring and summer.

The second item that leaf colors need are shorter days and longer nights. Chlorophyll is made in a leaf when a tree has a lot of sunlight. During fall, daylight hours grow shorter. This makes the nighttime hours longer. Less sun will be able to shine on the tree each day as the daylight hours grow shorter. Since the tree has less sunshine, the tree is not able to make as much chlorophyll. Soon a tree will stop making chlorophyll for the rest of the winter.

Once a tree stops making chlorophyll, the green color in the leaves starts to disappear. It is now time for the orange and yellow colors that were in the leaf from the very beginning. Since the green color is no longer showing, the leaves begin to display many bright fall colors.

The third thing that leaves need for a bright display of fall colors is a change in the weather. The best weather for leaves is when the fall days are warm and the nights are cool but not freezing. This weather pattern allows the trees to produce the brightest of the red, purple, and orange colors. Trees also need rain to grow

healthy and strong. Rain can also change the brightness of the colors.

Leaves do not truly change colors. In the fall, the trees start to lose the green first. Without the green, then other colors are visible. Soon, however, the trees stop making all of the colors found in the leaves. This is when the leaf will die. First the leaf will turn brown and dry out. Next the leaf will fall off the tree entirely.

Trees that lose their leaves each fall are known as deciduous trees. Specific trees will display the same colors year after year. For example, a Red Oak tree will show red colors each fall after losing its chlorophyll. A Redbud tree will show a glorious yellow tree in the fall. Shortly after, these glorious trees lose all of their leaves for the winter. The amount of purple and red a tree has will change from year to year, depending on the weather. Some trees will display more than one color on the same branch.

Not every tree changes colors in the fall. Some trees remain green all year round. These trees are known as evergreen trees. Leaves on evergreen trees are tough and thin. Evergreen leaves are known as needles. These special needles do not freeze in winter. The needles are able to stay alive and green.

NAME:

RI.5.1

1. Why do leaves change colors? Include quotes from the text that support your response.

Color the text you have quoted.

2. Is a Red Oak tree a deciduous tree or an evergreen tree? How do you know? Cite the evidence and details in the article that help you answer this question. Include quotes from the text that support your response.

Color the text you have quoted.

3. What can you **INFER** about the chlorophyll in evergreen trees? Include quotes from the text that support your response.

Color the text you have quoted.

RI.5.1 •RESPOND• #3 Why Do Leaves Change Colors?

NAME:

RI.5.2

3. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic ✪ What the author says about the topic

_____

4. **KEY DETAIL #1**: _____

5. **KEY DETAIL #2**: _____

6. Write a **SUMMARY** of this text. _____

_____

_____

_____

_____

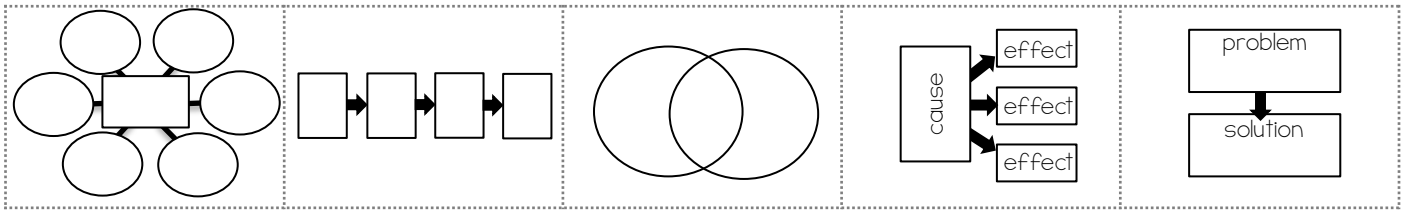
RI.5.5

7. Describe the **TEXT STRUCTURE** the author used in Why Do Leaves Change Colors?

_____

_____

8. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).

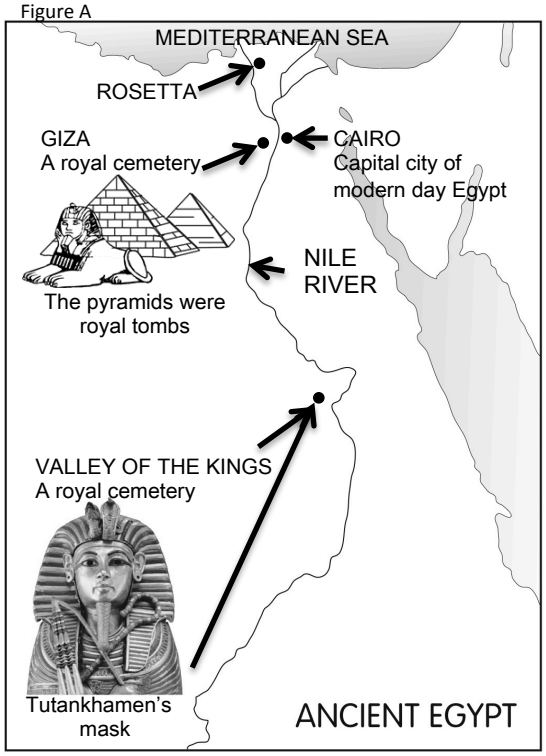


Egypt: History and Mystery

Ancient Egypt was one of the greatest cultures in history. It was a world power for 3,000 years and people are still talking about it.

Ancient Egypt was located along the Nile River in North Africa. The Nile River is over 4,000 miles long and is the longest river in the world. This river was important to the Ancient Egyptians. It gave food and water and it was also used for transportation. The Ancient Egyptians traveled in boats to deliver goods and visit other kingdoms. To the Ancient Egyptians, the Nile River was their highway system.

Figure A



Writing was very important to the people of Ancient Egypt. It was one of the first cultures to invent writing. The style of writing they used looked like pictures. The pictures were called hieroglyphics. Ancient Egyptian writing was meant to be beautiful artwork.

Egyptian hieroglyphics

Not everyone in Ancient Egypt could write and read. Scribes were the only people who could read and write, so they were very powerful people in Ancient Egypt. Modern people were unable to read hieroglyphics until 300 years ago when a French soldier discovered a large black stone in the town of Rosetta. This stone had the same message written in both Egyptian hieroglyphics and another language called Greek. Since the message was the same, and modern people knew how to read Greek, they were then able to figure out what the hieroglyphics meant.

The leaders of Ancient Egypt were kings called pharaohs. The pharaohs were in charge of the government. In Ancient Egypt the pharaoh was also the leader of the

religion. A pharaoh was so powerful that Ancient Egyptians had to do whatever the pharaoh told them to do.

When a pharaoh died in Ancient Egypt, he was buried in a pyramid or a secret tomb. About 138 pyramids are in Egypt. It was believed that the pharaohs needed to be buried with a lot of treasures. Many of these tombs have been discovered. However, most of the tombs that are found today do not still contain treasures.

One famous tomb that was discovered nearly 100 years ago belonged to King Tutankhamen (known as King Tut). In 1922, a man named Howard Carter found King Tut's tomb in Egypt's Valley of the Kings. King Tut's tomb had not been robbed over the years, so it was still filled with ancient treasures. More than 5,000 objects were found in King Tut's tomb. Among the objects found in the tomb was King Tut's mask. This mask was made with 22 pounds of gold. This was a huge discovery!

King Tut had become the pharaoh when he was 9 years old. He was the king for only 9 years. In Ancient Egypt, King Tut was not a very important pharaoh. However, the discovery of King Tut's tomb was one of the most important finds in all of history.

Ancient Egyptians were great at science and math. They had many important inventions that are still used today. These inventions include eye makeup, a calendar, toothpaste, breath mints, as well as door locks. The Ancient Egyptians did not invent paper. However they did use a product called papyrus, which was a lot like paper.

The time of Ancient Egypt was thousands of years ago, yet people still wonder about this culture. In many ways, it is like modern culture. Yet in other ways, it is so different than anything we could imagine today. It truly is an interesting history!

Ten Inventions by People From Egypt

Written language
Papyrus paper
The calendar
The plow
Breath mints
Toothpaste
Shaving and haircuts
Eye makeup
Bowling
The door lock

NAME:

1. What were some Ancient Egyptian inventions? Include quotes from the text that support your response.

Color the text you have quoted.

2. The text says, "Many of these tombs have been discovered, however most of the tombs that are found today do not still contain treasures." What can you **INFER** about this statement? Include quotes from the text that support your response.

Color the text you have quoted.

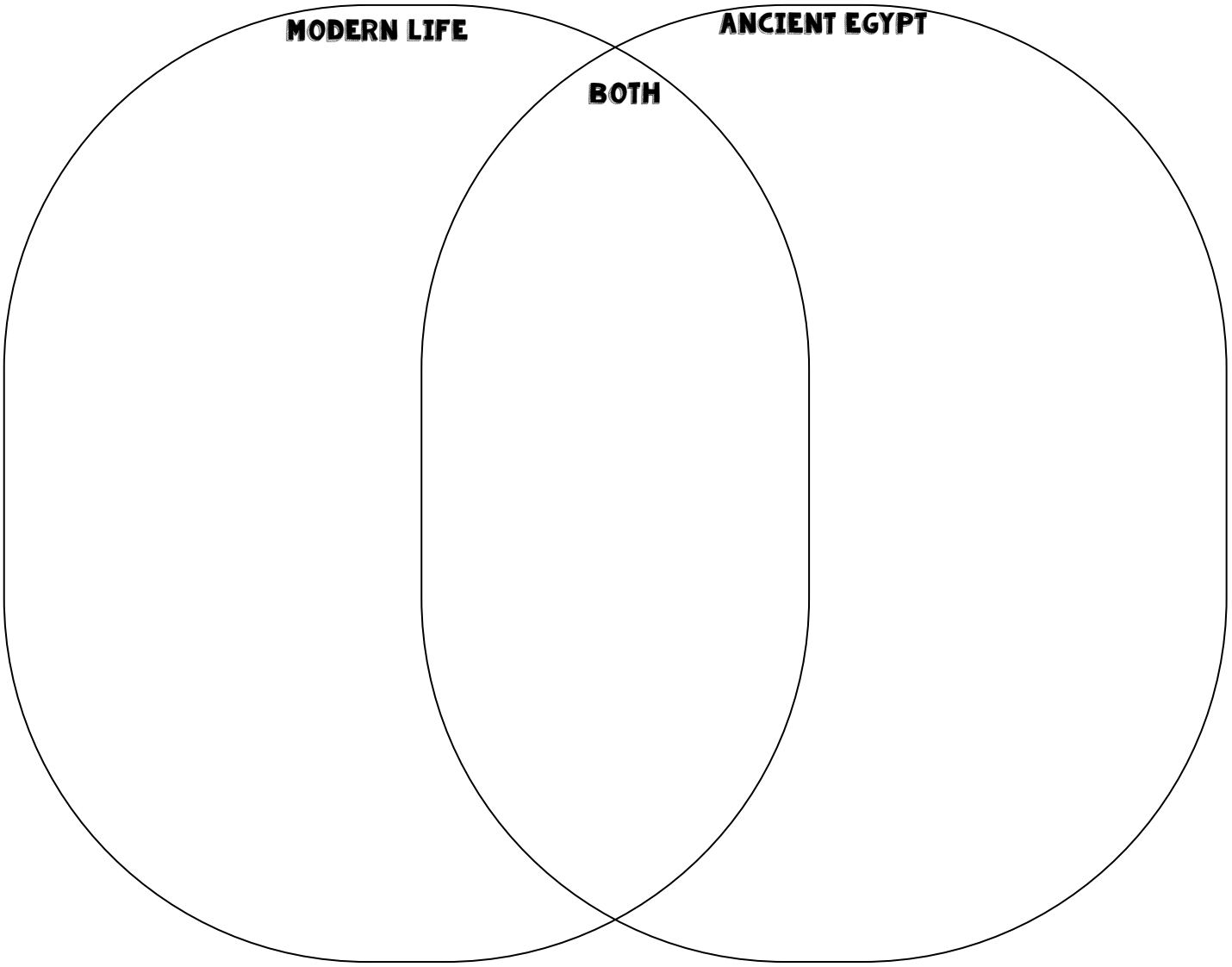
3. The text says, "However, the discovery of King Tut's tomb was one of the most important finds in all of history," What can you **INFER** about this statement? Include quotes from the text that support your response.

Color the text you have quoted.

NAME:

RI.5.3

4. Complete the Venn Diagram showing the shared and different characteristics of our modern life and life during Ancient Egypt.



RI.5.4

5. Find the underlined word, hieroglyphics in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

_____

_____

6. Find the underlined word, pharaohs in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

_____

_____

Talking Plants?

There is some fascinating new research that says plants actually talk to each other. Did you know that? Plants share information about diseases and invaders such as bugs. When a plant is under attack, it produces a chemical compound. The chemicals from this plant travel through the air. Eventually the chemical warning lands on a healthy plant. A healthy plant that is not yet infected may not be able to protect itself. The healthy plant receives the warning chemicals and begins to produce its own protection. Now the healthy plant can begin to guard itself from the danger.

The warning that plants send to each other is not a loud scream that can be heard by humans. It is a mix of chemicals that is released into the air by the damaged plants. The chemicals might contain a slight smell, but humans cannot see or hear a plant's warning.

More than 30 years ago, two scientists studied damaged poplar and maple trees. They first reported that the injured trees were sending chemical warning signals. These signals traveled through the air to nearby trees. Once warned, the nearby healthy trees began to produce chemicals that could fight the threat.

D Researchers in Japan recently studied the tomato plant communication. The scientists wanted to know how the tomatoes reacted to an invading bug called the cutworm caterpillar. In their experiment, they grew tomato plants in two different containers. One plant was infested with the cutworm caterpillar and one plant was healthy. After a while, the healthy plant was exposed to the invading caterpillar. The scientists found that the healthy plant that had been near the infested plant was able to defend itself better than before.

The scientists in Japan also studied the leaves of the tomato plants. They discovered a chemical compound called HexVic in the leaves of the infested plants. Nearly 1/5 of

the caterpillars died when the scientists fed HexVic to the bugs. They also learned that healthy plants began to produce HexVic when that chemical was sprayed on the leaves.

In another study, scientists studied the chemicals released from a bean plant when faced with an aphid bug invasion. Many of the chemical compounds that the bean plants made were used to warn nearby plants about invaders. The scientists also found that the damaged bean plants were creating a chemical that attracted wasps. Wasps love to eat aphids. This means that the plant was creating chemical signals that were both a warning signal and a cry for help.

Scientists are studying many more plants than tomatoes and maple trees. It has been discovered that sage, corn, and barley also send out chemical warnings. Scientists have also found that plants can send signals to different types of plants. Researchers did an experiment with a damaged sagebrush plant. The sagebrush plant sent a chemical signal that resulted in a nearby tobacco plant responding to the warning.

Scientists think that all plants are sending chemical signals. It is fascinating to think that plants might be using chemical compounds that have not even been discovered yet by scientists. One day science hopes to prove that all plants send messages in order to help their neighbors survive. This is a topic that is exciting in so many ways!

•RESPOND• Talking Plants?

NAME:

1. How do plants communicate with each other? Cite the evidence and details in the article that help you answer this question. Include quotes from the text that support your response.

Color the text you have quoted.

2. In paragraph D, the text says, "The scientists discovered that the healthy plant that had been near the infested plant was able to defend itself better than before." What can you **INFER** about this statement? Include quotes from the text that support your response.

Color the text you have quoted.

3. What can you **INFER** about aphid bugs? Include quotes from the text that support your response.

Color the text you have quoted.

RI.5.1 #5 **•RESPOND•** *Talking Plants?*

NAME:

RI.5.2

4. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

5. **KEY DETAIL #1**: _____

6. **KEY DETAIL #2**: _____

7. **KEY DETAIL #3**: _____

8. Write a **SUMMARY** of this text. _____

_____

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_____

RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

The World at Night

The world during the day is very busy. Adults go to work and children go to school. Animals graze in fields and birds are busy flying and searching for food. But what happens when we turn out the lights? Is everyone asleep? The answer is no! There is a whole amazing world that awakens when you and I go to sleep.

Animals, insects, and other creatures that wake at night and begin their busy life are called nocturnal. There are many animals that are nocturnal. You probably hear the buzz begin outside in the evenings before you go to bed.

Some animals sleep during the day because of the temperature. In many areas, it can be too hot for an animal to be out in the day. For example, iguanas live in the desert. During the day, it can be over 100 degrees in the sun! This is way too hot for an iguana to hunt for food and do all the things iguanas do. So, they sleep in the shade of trees or rocks to keep cool. At night, when the temperature drops, they wake up and hunt.

If you have ever had a hamster as a pet, or know someone who has, you know that they sleep during the day and are active at night. This is because it is part of their nature. They are nocturnal. Hamsters are not fast animals. If they had to go out during the day to get food and water, it would be easy for predators like hawks or other large birds to catch them. Hamsters rely on being nocturnal for survival. It is easier for them to hide in darkness to avoid being caught by predators.

There are some animals that eat the same types of food as others. For example, coyotes and mountain lions like to eat rabbits and deer. This can mean big trouble, though. Imagine there is one piece of your favorite pie left. You see it at the same time as your little brother or sister. What is going to happen? You're going to fight over it. The same thing happens in nature. This is called competition. Since coyotes and mountain lions eat the same things, it is better for one to hunt and eat during the day and the other at night. So, coyotes are nocturnal while mountain lions are active during the day. This is a way that nature finds an amazing way to balance.

Nocturnal animals often have special traits that help them find food in the dark. Owls are a perfect example of this. Owls eat mice and other small rodents. Because these animals come out only at night, owls must come out at night to find them. Owls are extremely strong nighttime hunters. They have excellent hearing and can hear even the slightest movement of their prey in total darkness. Even their face shape helps direct sound toward their asymmetrical ears so they are able to find prey based on sound alone. Owl feathers are specialized for silent flying, landing, and hunting. Even with the darkness providing cover for small rodents, owls are very successful hunters. Because of their nocturnal hunting abilities, owls are able to hunt in the dark without competition.

How Are Owls Such Successful Nocturnal Hunters?

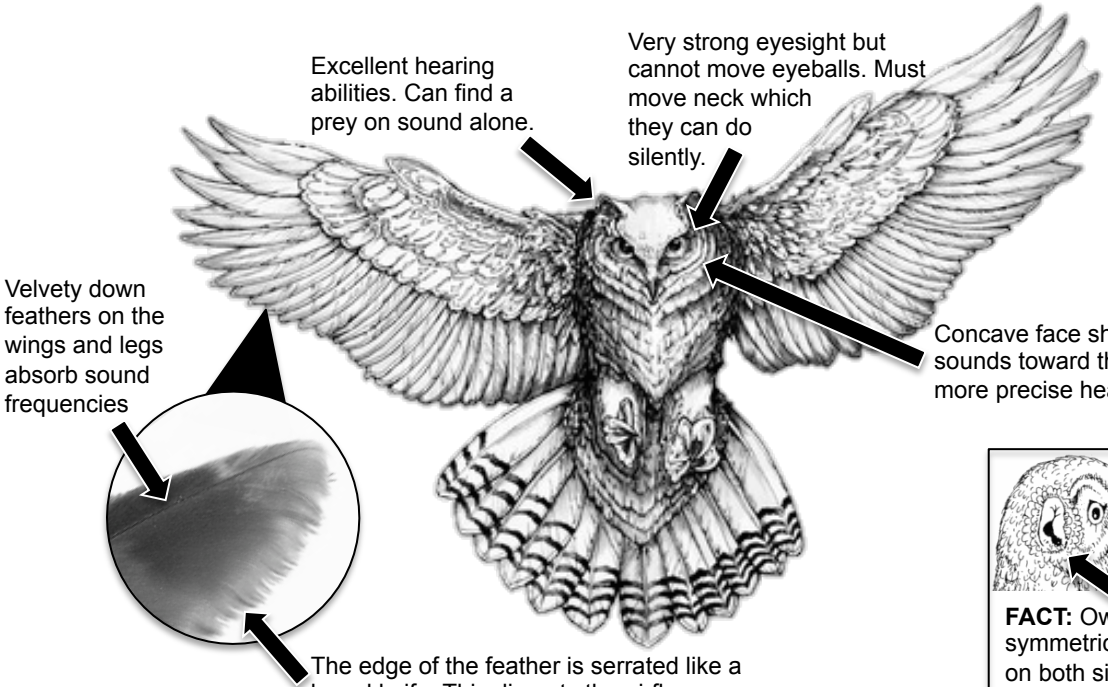


Figure A

The most well known nocturnal animals include cats, rodents, and owls, which all have heightened senses. Yet the list also includes snow leopards, red foxes, and skunks. One thing all of these animals have in common is that they have special abilities that help them survive in the dark.

Our human world is very busy during the day. Most of us are awake and active during daylight. The fascinating world of nocturnal animals just starts to wake up as our heads hit the pillow at bedtime.

RI.5.2 **#1**

•RESPOND• The World at Night

NAME:

RI.5.2

One **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Another **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Write a **SUMMARY** of this text.

SUMMARY =
Main Ideas + Supporting Details

RI.5.2 #1

•RESPOND• The World at Night

NAME:

RI.5.4

1. Find the underlined word, nocturnal in the text. Use the **CONTEXT CLUES** to explain what this word means. Circle the words in the text that are a clue to the meaning of the word.

_____

_____

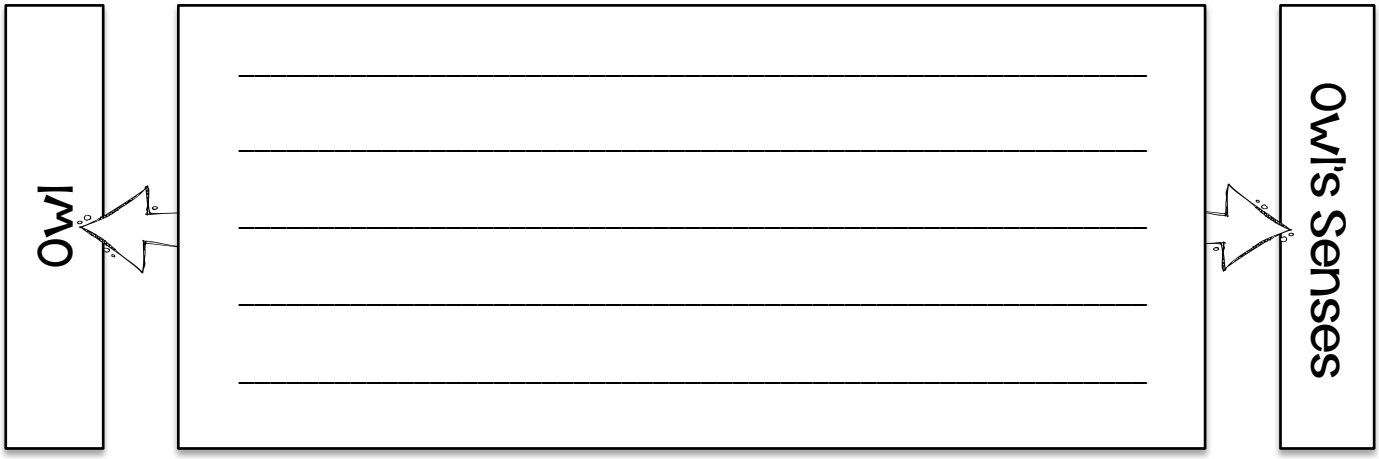
2. Find the underlined word, competition in the text. Use the **CONTEXT CLUES** to explain what this word means. Circle the words in the text that are a clue to the meaning of the word.

_____

_____

RI.5.3

3. Explain how an owl and its senses are **CONNECTED**.



RI.5.1

4. Why are some animals nocturnal? Include quotes from the text that support your response.

Color the text you have quoted.

_____

_____

_____

_____

_____

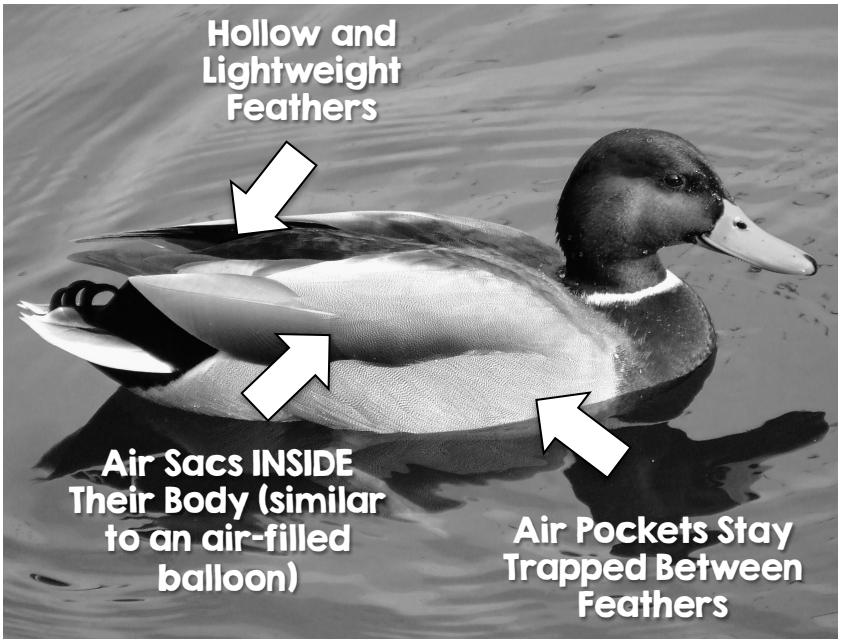
Can We Float Like a Duck?

The Secret Behind Duck Feathers

Have you ever seen a duck float on the water? Don't they sit there on top of the water so perfectly? A gentle breeze gently pushes them across the surface of the water. They go up and down without losing balance as a wave passes by. Have you ever tried it before? It's impossible. So, why can they do it and not us? What can we learn from nature and how it keeps this bird floating so easily?

B

If something is waterproof, it means that water cannot go through it. This is the first secret of the duck feather. Ducks are able to secrete oil that coats their feathers. This causes the feather to become waterproof. This does two things for the duck. First, it keeps them warm by keeping the cool water away from their skin. Secondly, it helps the duck stay light. Without the oil to keep the feathers waterproof, the feathers would soak up the water causing the duck to become a lot heavier. This would probably cause them to sink. It would be like trying to swim in wet clothes.



Have you ever seen a duck flap and shake its feathers? There are a couple of reasons for this. One reason is it shakes off any water that might be sitting on top of the feathers. The second reason is to trap air between the tightly packed feathers. This would be like you wearing floaties when you went swimming at a younger age. These floaties keep you from sinking below the water. The air under the duck's feathers does the same sort of thing. If ducks want to dive under the water, they simply squeeze their feathers tightly to get rid of

the air. When they come back up, all they have to do is shake their feathers to get rid of the extra water and trap the air again.

Another secret about duck feathers is that they are hollow. This means they are empty on the inside, sort of like a drinking straw. Most birds have hollow feathers so that they can be lighter in weight. This allows them to fly more easily. Ducks are the same way. Hollow feathers help keep the ducks light so they can stay on top of the water.

While we have looked at how the feathers keep the duck floating, there is another secret why ducks are also able to float on the water so well. Ducks have air sacs inside their bodies. These sacs are a lot like your lungs. They hold air. Have you ever held your breath and gone under water? If so, you probably noticed that you kept going back up towards the surface. This is because of the air in your lungs. But if you let the air out slowly you will begin to slowly sink. So, in order for the duck to sit on top of the water like he does, he must also keep air in the air sacs.

If you combine oil with hollow feathers, trap air under your armpits, and are able to keep your lungs really full, then maybe you will be able to float like a duck. But I wouldn't bet on it! However, we can learn from nature. We call this biomimicry, which means solving human problems by looking at how nature has solved the problem. For example, engineers from Brigham Young University are developing extremely waterproof surfaces that mimic waterproof duck feathers. These surfaces can have many uses. They could be used on the outside of ships to help them glide through the water more quickly and smoothly. These surfaces could also be used on wetsuits so that divers can dive is extremely cold water, yet remain insulated. Some more everyday uses are to make extremely waterproof sprays for boots and jackets. In addition to the biomimicry of waterproofing, engineers are copying the bone structure of ducks to build lightweight ships. The wood on these ships is hollow, just like duck feathers.

Humans are land animals. We don't have the same natural abilities in the water that a duck has. But that does not mean we can't learn a few tricks from watching this beautiful creature dive around it's watery home.

RI.5.2 #2 **•RESPOND•** *Can We Float Like a Duck?*

NAME:

RI.5.2

One **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Another **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Write a **SUMMARY** of this text.

SUMMARY =
Main Ideas + Supporting Details

RI.5.2 #2 •RESPOND• Can We Float Like a Duck?

NAME:

RI.5.1

1. Why are ducks able to float so easily? Include quotes from the text that support your response.

Color the text you have quoted.

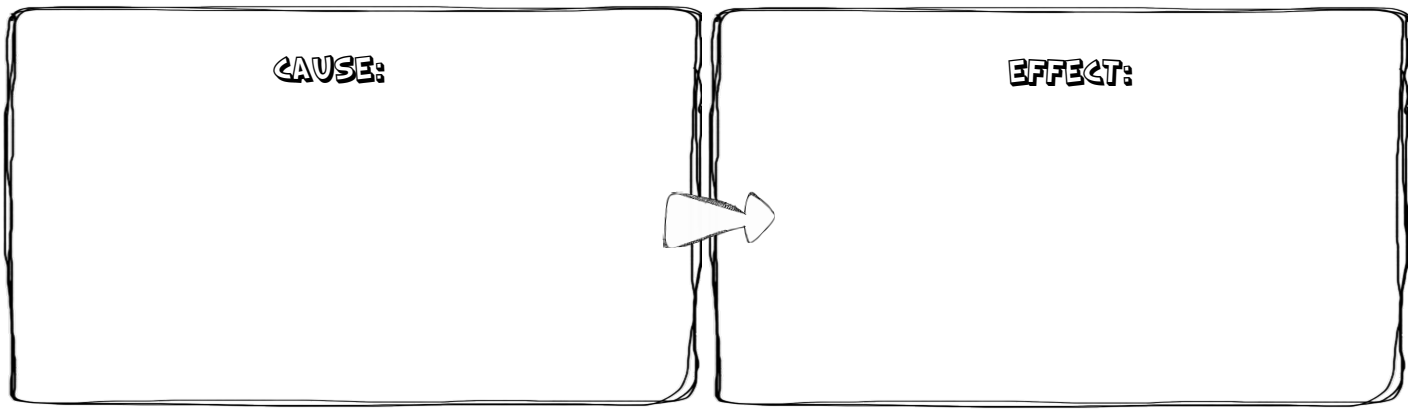
RI.5.4

2. Find the underlined word, <u>secrete</u> in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

3. Find the underlined word, <u>biomimicry</u> in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

RI.5.3

4. Read Paragraph B.
This paragraph has a cause and effect relationship. **DESCRIBE** this cause and effect.



Body Advantage?

Have you ever watched a swimming competition? The swimmers make it look easy as they glide through the water. It really is not as easy as it looks. It takes a lot of effort to push yourself from one end to the other. Many coaches and competitive swimmers say that motivation and training are the keys to finding success as a swimmer. But is motivation and training all that is needed to win the most competitive swimming competitions in the world?

The best swimmers in the world must all train extensively. Most swim two or three times a day. They typically spend up to three hours on each of these swims. Between swims, they spend time lifting weights and building up their muscle strength. Many of these swimmers take only one day of rest per week.

In addition to exercise, competitive swimmers must follow a strict diet. This diet includes eating healthy foods that meet the body's extra needs when exercising so much. They tend to stay away from junk foods that might slow their body down. As a competitive swimmer, every day in the gym and every meal makes a difference when it comes to race day.

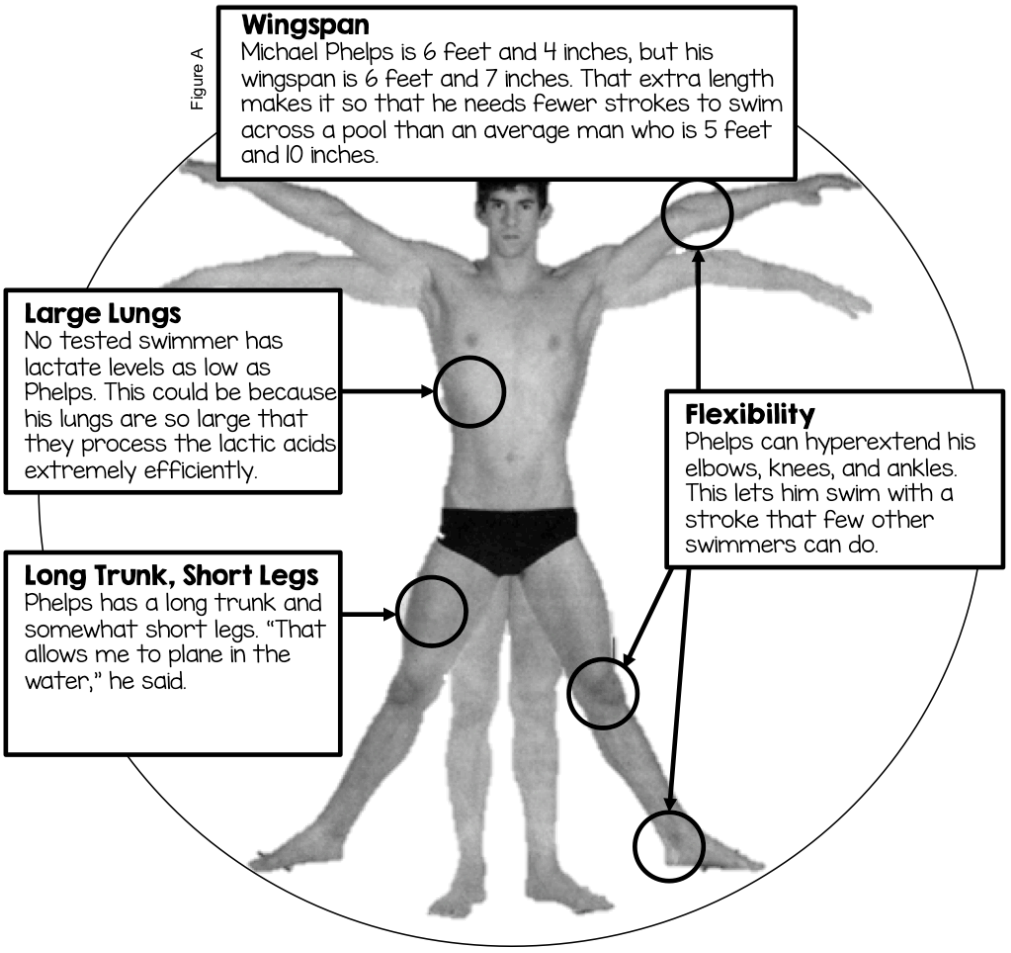
Some people say that there is something besides motivation and training that is critical for success as a competitive swimmer. Many coaches say that there is a "swimmer's build", which is a body shape that has an advantage in the pool. An example of someone who many claim has a perfect swimmer's build is Michael Phelps. Michael Phelps is an Olympic gold medalist in this sport. Some wonder why he is so good at what he does. Does he have any advantages over other swimmers? If so, what are those advantages? Let's take a closer look at Michael.

Michael Phelps is tall but this is because he has a longer trunk (chest and stomach). His legs are actually short for a man of his height. This helps him glide through the water smoother. This means that he can reduce the amount of water friction against him. Friction is where two things are in contact with one another. The more friction there is, the slower the object will move. In Michael's case, he wants very little friction against his body. The less friction, the faster he can go. Think about boats. Faster boats tend to be longer and narrower. They can move faster because there is less friction.

If you stand with your arms straight out to the side, this is called your wingspan. The length of your wingspan is usually close to your height. However, Michael's wingspan is longer than he is tall. Michael Phelps has a height of 6 feet 4 inches. His wingspan is 6 feet 7 inches. Having longer arms helps him push through the water. The more water he can push back, the faster he goes forward. This also means that he needs fewer arm strokes to get to the other end of the pool. This allows him to use less energy.

The point where two bones meet is called a joint. For example, the point where your upper leg bone meets the lower leg bone at the knee is called a joint. Joints let your body parts move. Your ankles and elbows are other examples. These joints are only supposed to move so far. Michael's joints can go a little bit further than most people's joints. His ankles can flex a little more so they act like a flipper. Many animals that live in water have flippers. This helps them be better swimmers than those that do not have them. Because Michael's ankle can act like a flipper, he can swim faster than people with less flexibility in their ankles.

Figure A



Could all of these things about Michael Phelps give him an advantage over other swimmers? It might. But without hard work and training, none of these things would allow him to out-perform the other swimmers who also put in a lot of time and hard work. When preparing for a competition Michael Phelps trained 6-8 hours a day. He lifted weights, ran, biked, and swam. He worked with trainers to perfect his swimming technique. He trained six days a week, only resting one day. Michael Phelps's body may give him a strong advantage, but it was the hard work of all that training that gave him the ability to win so many gold medals!

•RESPOND• Body Advantage?

NAME:

RI.5.2

One **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Another **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Write a **SUMMARY** of this text.

SUMMARY =
Main Ideas + Supporting Details

RI.5.2 #3 **•RESPOND•** *Body Advantage?*

NAME:

RI.5.3

1. Explain how a "swimmer's build" might be **CONNECTED** to having an advantage when swimming .

RI.5.1

2. How does Michael Phelps's body fit the definition of a "swimmer's build"?

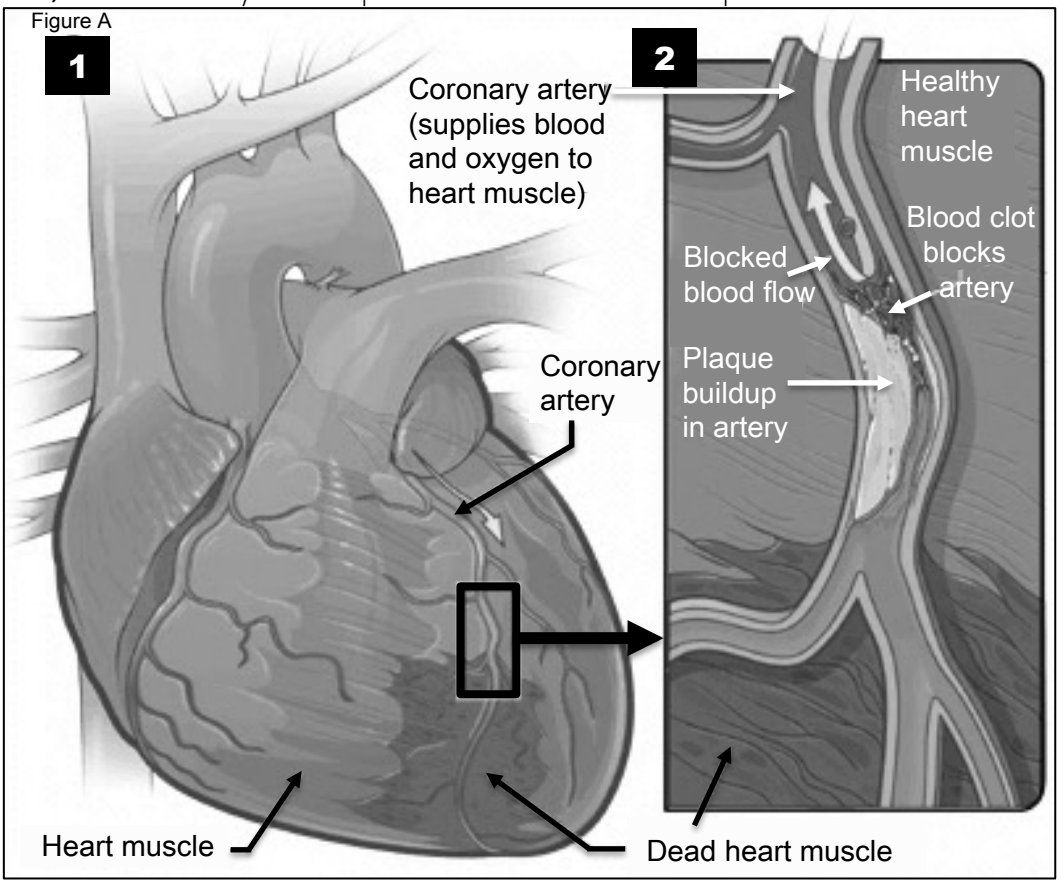
Color the text you have quoted.

Can Heart Attacks Be Prevented?

Heart attacks are a serious threat to both men and women. The problem lies within the coronary artery which supplies the heart with blood. The blood carries oxygen that the heart and other parts of the body need in order to work properly. Without this oxygen, parts of the heart can die and not do the work it needs to do. Sometimes, the coronary artery gets clogged and the blood is kept from flowing through. Let's take a closer look at why this happens.

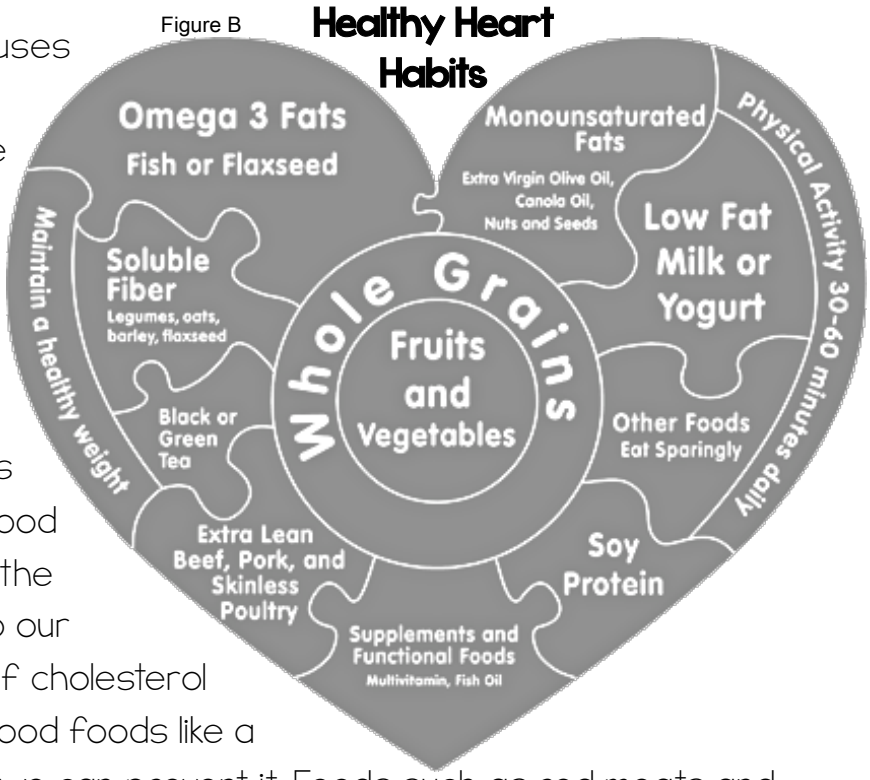
Heart attacks can happen when blood does not get to the heart. There are several reasons why this could happen. One is caused by plaque which is a waxy substance that builds up on the artery walls. Plaque can build up when there is too much cholesterol in our blood. Cholesterol is a fat found in our blood. It is produced by our liver and it helps parts of the body function. We can also get this fat by some of the foods that we eat. A little of this in our blood is good. Too much is bad. When we have too much of this cholesterol in our blood it will begin to stick to the side wall of our arteries. As it sticks, it will slowly build up and harden. This keeps the blood from flowing to the heart. We already learned that the heart cannot function properly without oxygen. This will cause a heart attack.

Figure A



A second way that heart attacks occur is when plaque builds up, hardens, and then ruptures, or breaks apart. This

Figure B



releases the stuff inside and causes the blood to clot. This means that the blood will harden and clog the artery. Once again, blood will not be able to reach the heart.

Can any of this be prevented? The good news is it can! One way to help prevent heart attacks is to manage our eating habits. Good eating habits help us by lowering the amount of cholesterol we put into our blood. Some foods contain a lot of cholesterol and some have less. If we eat good foods like a lot of vegetables, then the more we can prevent it. Foods such as red meats and high fat dairy products increase the amount of cholesterol. It is okay to eat some, but we must limit it somewhat.

Exercise is another way to help prevent heart attacks. Being active throughout the day actually lowers the amount of cholesterol in our blood. Getting plenty of exercise will also help you lower blood pressure. High blood pressure means that there is a lot of pressure on the walls of your arteries. If this happens, arteries can become damaged and could cause a problem with blood flowing to the heart. High blood pressure also means that the heart has to work harder to get blood throughout the body. All of this can lead to heart attacks.

Eating healthy foods and exercising will lower cholesterol and high blood pressure. This prevents plaque from building up in arteries which can prevent blood flow to the heart. People need to be aware that smoking, using other tobacco products, and drinking alcohol can also cause an increase in cholesterol and high blood pressure. Staying away from these things can help prevent heart attacks because it reduces the risk of plaque build-up in the arteries. So, while heart attacks are common among people, there are plenty of ways to help prevent them.

RI.5.2 #4 **•RESPOND•** *Can Heart Attacks Be Prevented?*

NAME:

RI.5.2

One **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Another **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Write a **SUMMARY** of this text.

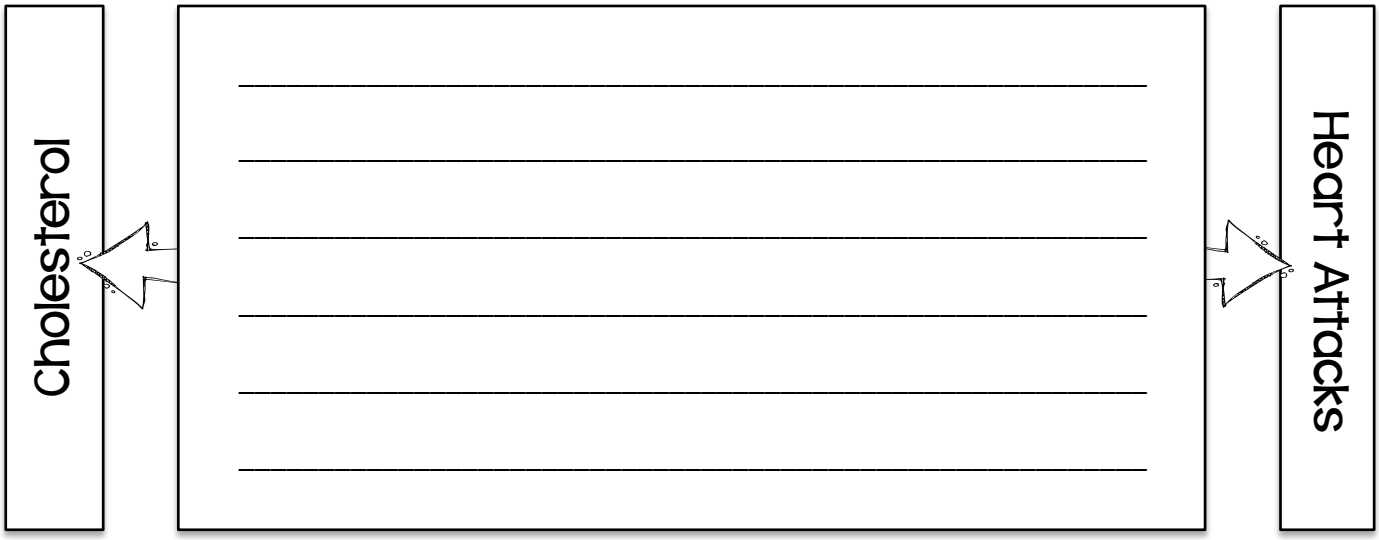
SUMMARY =
Main Ideas + Supporting Details

RI.5.2 #4 •RESPOND• Can Heart Attacks Be Prevented?

NAME:

RI.5.3

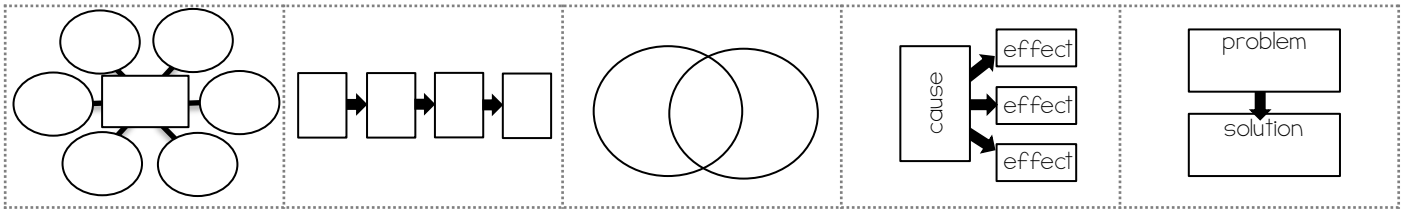
1. Explain how cholesterol and heart attacks are **CONNECTED**.



RI.5.5

2. Describe the **TEXT STRUCTURE** the author used in <u>Can Heart Attacks Be Prevented?</u>

3. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



Saving Daylight

Did you know that there comes a time in the spring where one whole hour just completely disappears? And then several months later in the fall, that hour reappears! It might sound like a magic trick but it is not. What really happens is that we set our clocks forward during spring and then set it back to its original time when fall comes around. So why exactly did this crazy event begin? It dates back over 200 years ago to around 1784.

The idea of having a time of daylight savings was brought up by Benjamin Franklin. It was to help solve the problem of having to light up homes and shops. Oil and gas lamps, along with candles, were the primary sources of light at this time. The problem was that they were all pretty expensive. So, people tried to use these resources as little as possible. But this made it hard for them to do things that needed to be done after a long day's work. Dinner still had to be made, chores needed to be taken care of, and people needed time to relax and have fun. People could not even enjoy a good book without having to burn fuel. So, Ben Franklin proposed the idea that we take a little time from the morning and move it to the evening. This would mean that we would move the time ahead by an hour so that the extra amount of daylight would be at the end of the day. The idea for daylight savings time had begun in England. At first, it was not a popular change. Soon the idea caught on as people began to save money on candles and gas lamps.

Daylight savings took longer to reach the United States. It was not until World War One and World War Two that people began to realize that we needed to save on our energy resources. It took a lot of fuel to supply the war. People were getting nervous about how much fuel we had. Once again, the idea was that if people had more daylight hours or natural light from the sun, then they wouldn't have to use as much electricity in the evenings. Therefore, it was thought that people needed to adjust their schedules according to the sun. If people got home from work and had an extra hour of natural light from the sun, then they would not have to turn on their lights. This would save on how much electricity was being used. This seems to be backed up by facts in current times. Power companies have found that people use 5% less electricity during daylight savings time months.

A third reason daylight savings time was suggested was because it was noticed that during the summer months, the sun would come up and people would still be in bed. Blinds and curtains stayed closed for about the first hour of a new day. In the evenings, people would stay up well past sunset. So, if we moved up the time in the spring, people would be getting up and moving around about the same time as the sun. It is a fact that the sun comes up earlier in the summer months. This would allow people to have more sunlight during the evenings. It just made sense. In 1976, a study in Australia found that nearly ¾ of the people polled preferred to have daylight savings time because it gave them longer summer evenings.

There are more than 70 countries that participate in daylight savings time. But there are two states in the U.S. that currently do not follow it. These are Hawaii and Arizona. It is not mandatory that states do it. There are many countries near the equator that also do not follow daylight savings. This is because the areas near the equator have almost equal amounts of day and night time hours. Therefore, it does not make sense for them to change their time or schedules.

Even though so many countries in the world use daylight savings time, not everyone agrees that it is still needed. There is a growing movement to end the practice. A group called StandardTime.com wants to get rid of daylight savings time altogether. They claim that there is no proof that it saves electricity. Their webpage opens with a message that says, "If we are saving energy, let's go year round with daylight savings time. If we are not saving energy, let's drop daylight savings time!"

In recent years, several studies have suggested that daylight savings time does not actually save energy. A study at the University of Washington found that during daylight savings time, people reduce electricity in the evening, but use more during the dark mornings. They also found that people were more likely to use air conditioning for more time in the day. This is because the extra hour that daylight savings time adds in the evening is a hotter hour. In addition, the Australian government extended daylight savings time by two months for the Sydney Olympics. They expected to see lower energy usage. However a study found that it didn't lower energy usage at all. Maybe the energy savings are a thing of the past?

Daylight savings time has a great place in history. At one time it made so much sense in terms of energy savings. In modern times, not everyone agrees it is still needed.

RI.5.2 #5 **•RESPOND•** *Saving Daylight*

NAME:

RI.5.2

One **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Another **MAIN IDEA** of this text is:

SUPPORTING DETAIL:

SUPPORTING DETAIL:

Write a **SUMMARY** of this text.

SUMMARY =
Main Ideas + Supporting Details

RI.5.2 #5 **•RESPOND•** *Saving Daylight*

NAME:

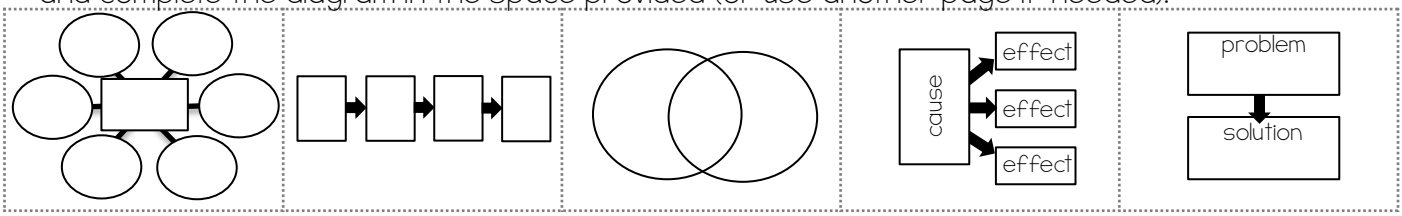
RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in Saving Daylight.

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.1

3. Do you think it makes sense to continue having daylight savings time? Why or why not? Include quotes from the text that support your response.

Color the text you have quoted.

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Brontosaurus: The Mixed Up Dinosaur

If you know anything about dinosaurs, you probably have heard of a Brontosaurus before. You might even be able to tell others what it looked like. It was a huge dinosaur with a long neck and really long tail. Its head was very small for its body. Even though it was very powerful, the Brontosaurus was also very gentle. It was not a meat eater. Instead, it was what we call an herbivore, or something that eats plants. This dinosaur is very popular and well known by many people.

The Truth Behind The Brontosaurus

It may seem strange to you, but Brontosaurus never really existed. Have you ever thought you knew what a certain animal or insect was but found out later that you were wrong? This is called mistaken identity. Brontosaurus was really a dinosaur that was made up of two dinosaurs that were already discovered and given names. The reason this happened was because of two men who had too much pride. They were both scientists called paleontologists. A paleontologist is someone who studies fossils. Each of these guys wanted to be better than the other.

Bone Wars

Othniel Marsh and Edward Cope were the two paleontologists with too much pride. They did not like one another, and they sometimes competed against each other. Back in 1877, they were on a mission to see who could discover the most dinosaur remains. They would even smash fossils just so the other could not get them. Sometimes, Marsh would pay people who worked for Cope to send the fossils they found to him instead of Cope. This rivalry between the two men became known as the Bone Wars.

Discovery Of Apatosaurus

In 1877, Marsh found the remains of a dinosaur skeleton. This skeleton had a long neck and tail. However, it was not the complete skeleton. Marsh did not care. He just wanted to make sure he was a better paleontologist than Cope. This caused him to be careless in his discovery. Usually, scientists would take their time to research their discoveries. Marsh decided to quickly name his new found dinosaur, Apatosaurus.

The Discovery Of Brontosaurus-a Mixed Up Dinosaur

Two years later, in 1879, Marsh had a team looking for fossils in another area. They found a skeleton that was similar to the one he called Apatosaurus. This newer skeleton was much larger and had more bones to it. However, there was one problem. This skeleton had no head! Marsh had a solution though. A few miles away they found a skull. Once again, Marsh was in a hurry to claim another discovery. So instead of figuring out who the skull belonged to, he added it to this second skeleton. He called his "new" discovery, Brontosaurus.

Marsh and his team did not tell anyone about what they had done. Several years later, someone realized that the Brontosaurus skeleton was actually the same as Apatosaurus. Since the second skeleton was larger and had fewer vertebrae bones, Marsh decided it had to be a new species. If he had taken time to research and investigate the bones, he would have found that the second skeleton was just an adult Apatosaurus. The first one was smaller because it was a young Apatosaurus.

The skull that Marsh used for Brontosaurus actually belonged to another type of dinosaur called Camarasaurus. There were many Camarasaurus remains found in the same area the skull was found. Marsh was too impatient to wait and find this out himself. It is even said that Marsh used the feet of the Camarasaurus for his Apatosaurus skeleton!

The Belief In Brontosaurus

People do not seem to want to let Brontosaurus go. It may have something to do with the name. Brontosaurus means "thunder lizard". This sounds more powerful than Apatosaurus, "deceptive lizard".

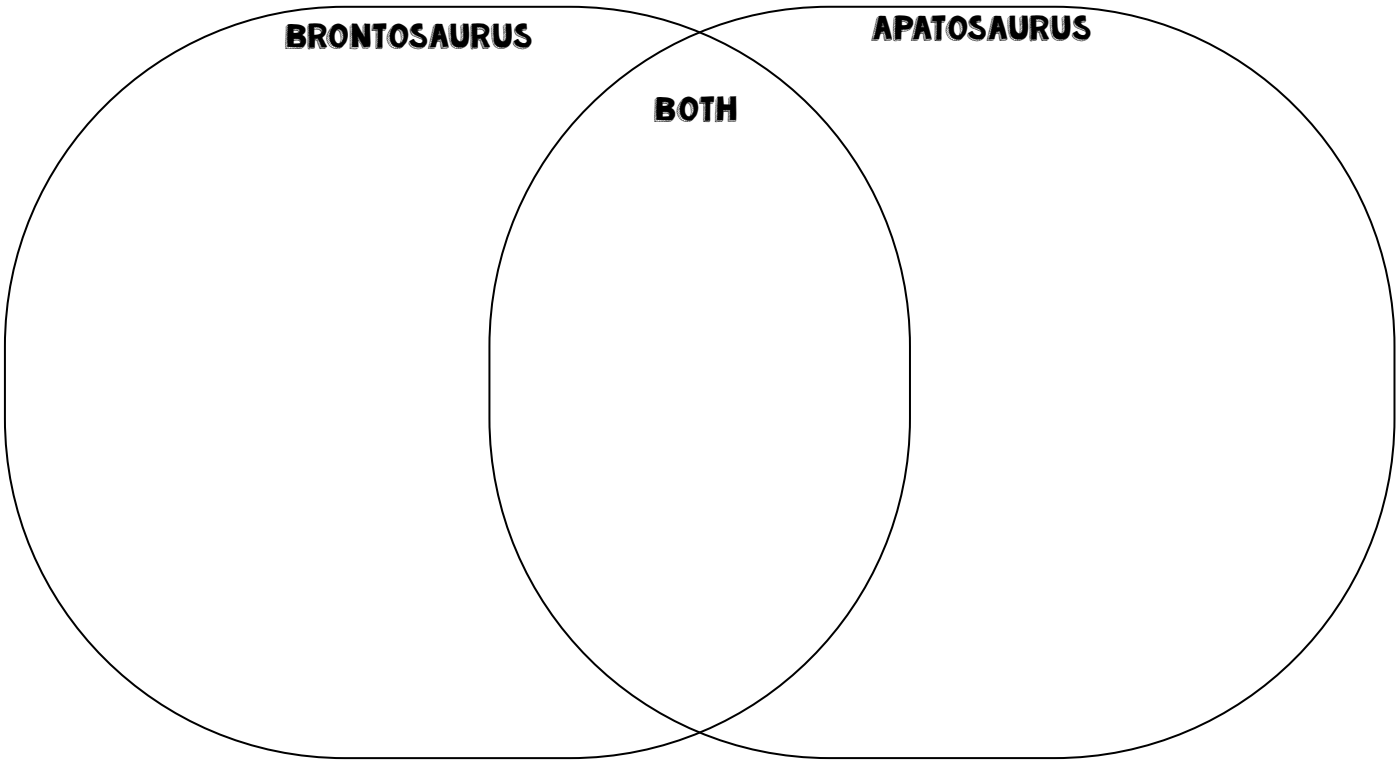
So, some may argue that the Brontosaurus really did exist. They would be sort of correct. But, you must remember that Brontosaurus was really a combination between Apatosaurus and Camarasaurus. Both of these dinosaurs had already been discovered and given their names. And in the scientific community, the name given first is the name that stays. Since Marsh originally discovered and named his first skeletal remains Apatosaurus, this is the official name.

NAME:

RI.5.3

1. Explain how an Apatosaurus and a Brontosaurus are **CONNECTED**.

2. Complete the Venn Diagram showing the characteristics of an Apatosaurus and a Brontosaurus. Color the section of the text where you found the information.



NAME:

RI.5.2

3 What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic ✪ What the author says about the topic

_____

_____

4. **KEY DETAIL #1**: _____

5. **KEY DETAIL #2**: _____

6. **KEY DETAIL #3**: _____

7. Write a **SUMMARY** of this text. _____

_____

_____

_____

_____

_____

RI.5.1

8. Explain why the confusion about the Brontosaurus happened. Include quotes from the text that support your response.

Color the text you have quoted.

_____

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_____

The Clean Up Crew

Have you ever taken a walk while eating a tasty treat or two? Chances are you have. I bet while you were walking around you even dropped some of it on the ground. If you have done it and I have done it, how many other people have done it? Think about large cities where a lot of people do this every day. How often do we stop and pick up the food crumbs that we drop? I am pretty sure not many of us do. We figure that if we are outside, some wild animals will come along and eat it. We are right about that. But have you ever taken a moment to see exactly who is coming for the food?

It makes sense that there are a lot of food scraps lying around in big cities. The more people there are, the more food that is dropped. Wild animals love to munch on the remains left behind. We might see this as no big deal at first. Someone or something will have to pick it up at some point, right? Why not let the wild animals have it? They need to eat, too! This can be dangerous though. No one really wants to see rodents such as rats and mice running around trying to collect food. Many rodents carry diseases.

Rodents are pretty smart animals. All they care about is finding food. They want to find it as quickly and as easily as possible. What better place to go than a large city? Rats and mice will usually come out at night. This is when they feel safe to scurry around the streets and dark alleys. They can be found searching for food in trash cans and dumpsters. Sometimes they will even go into people's homes.

However, there is an insect that has helped get rid of a large amount of rodents. This is the tiny pavement ant. Pavement ants are scavengers. Scavengers are animals or insects that feed on the remains of dead animals or other things found lying around. Pavement ants get their name because they like to live near cement. This makes cities perfect places to live. There is a lot of food nearby so it is easy

to go out and search for food, find it, and bring it back to their home. Since they are so small, most of this activity goes on without humans knowing about it. These ants are a tiny clean up crew working around the clock, cleaning up after us just below our feet.

Did you know? An ant can lift 20 times its own body weight. If a 4th grader was as strong as an ant, they would be able to lift up a car!

Here is how it works. If pavement ants are cleaning up all of the food scraps, then there is nothing left for the rodents to come after. Since mice and rats do not like to be out during the day, they wait until it is dark. Ants on the other hand are so small that it does not matter if they are out during the day. Most people won't react if they see an ant crawling around on the ground. So, by the time night falls, the ants have already cleaned up the area. This leaves nothing for the rodents to eat and soon they will have to go elsewhere to find their next meal.

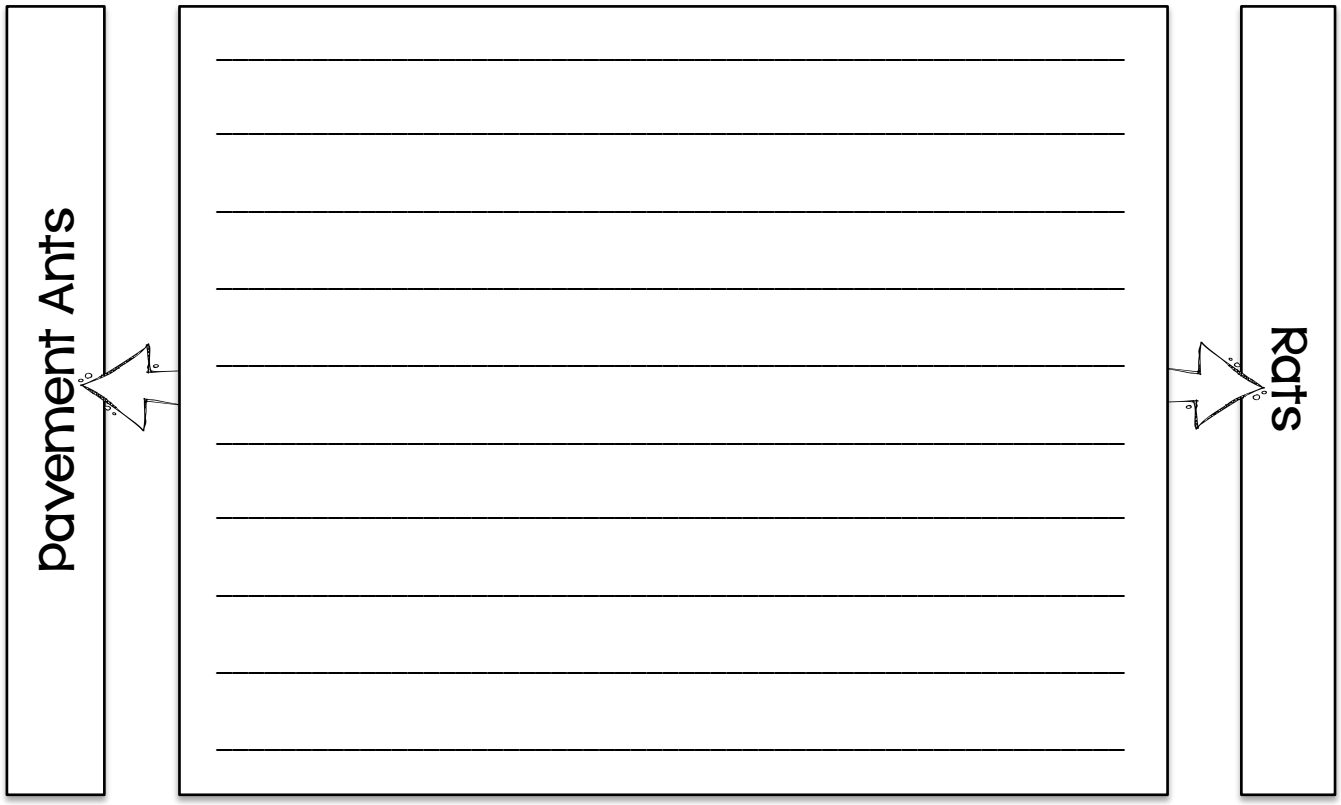
Thanks to the mighty pavement ant, not only are our streets and parks cleaned up, they are also free of unwanted rodents! So next time you see an ant crawling around, don't squash them. They are busy at work cleaning up after you and me.

•RESPOND•
The Clean Up Crew

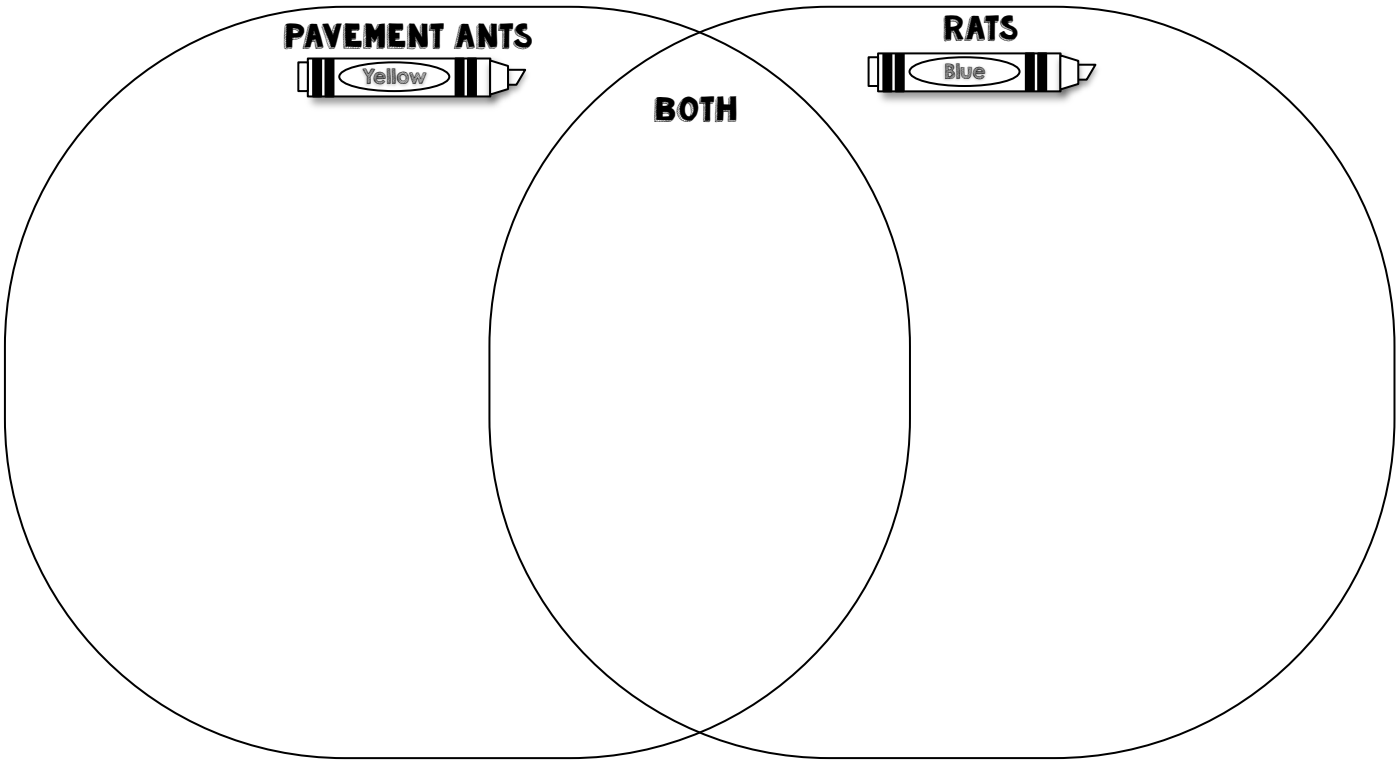
NAME:

RI.5.3

1. Explain how pavement ants and rats are **CONNECTED**.



2. Complete the Venn Diagram showing the characteristics of pavement ants and rats. Color the section of the text where you found the information.



NAME:

RI.5.2

4 What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

5. **KEY DETAIL #1**: _____

6. **KEY DETAIL #2**: _____

7. **KEY DETAIL #3**: _____

8. Write a **SUMMARY** of this text. _____

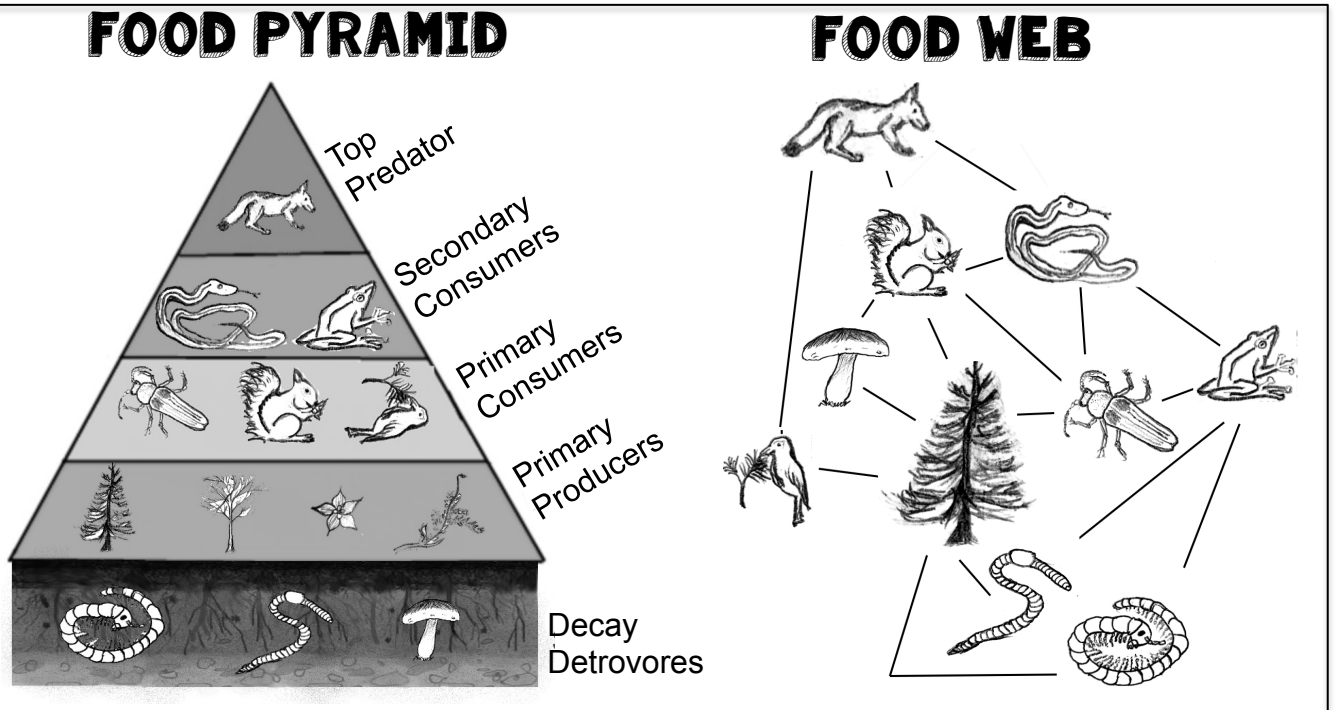
RI.5.1

9. Does the author think people should kill pavement ants when they see them? Why or why not? Include quotes from the text that support your response.

Healing Power of Wolves

Did you know that wolves are like doctors? Just like a doctor helps heal people, or helps them get better, wolves do the same for ecosystems. An ecosystem is an area where living things interact with other living things. Let's read further to find out how wolves can help ecosystems heal.

Wolves are what we call "top predators" because they are at the top of their food chain. This means that they have no other animals that hunt them for food. A food chain starts with decay detrivores (worms, insects, and mushrooms that live in soil). The next level is vegetation that uses the waste of the decay detrivores. Examples of vegetation are plants, trees, grasses, and shrubs. A bird will eat the grass and then a snake eats the bird. Finally, the wolf eats the snake and the food chain is complete.



A food pyramid and food web are similar diagrams for showing a food chain.

If wolves no longer live in an area, then the number of animals that they eat will increase in their population. For example, the number of deer will increase, or go up. If the number of deer increases, there will be a lot more of them eating grass and vegetation. With more deer eating, there will be less vegetation growing. After this happens for several years, the deer and other animals that eat vegetation will no longer have enough food.

Vegetation isn't just food for animals. It is also a home or place of protection for many insects and other small creatures. Mice and other rodents can hide from hawks and other large animals in the tall grasses. If wolves no longer live in an area, then these small animals cannot hide because there would be less vegetation. Without vegetation, these animals have to find another place to live or they could die.

Plants, trees, shrubs, and grasses all have roots that dig deep into the ground. These roots act like fingers that hold soil in place. Imagine you stick your hands into a jar full of Skittles, grab as many as you can, and pull your hands back out. What keeps the Skittles from falling back into the jar? Your fingers! Roots do the same thing. This is important near rivers. If there is no vegetation along a riverbank, there are no roots to hold the soil. Without roots to hold the soil, the dirt along the side of the river can fall into the water. This can be very harmful.

There are many different animals and fish that live in rivers. If the water becomes too dirty, these animals can die. Fish can breathe underwater because they have gills that act like our lungs. There is oxygen in water that goes into their gills for them to breathe. If too much dirt falls into the water, it could keep the fish from getting enough oxygen.

Trees along the river can provide shade for animals living in or near the water. If the water isn't a certain temperature, some fish will leave the area. They are a food source to other living things that live in and around the river. Without trees around, beavers will not have wood to sharpen their teeth, which is needed for survival. Without beavers, dams won't get built. Dams provide protection and shelter for turtles, fish, and insects.

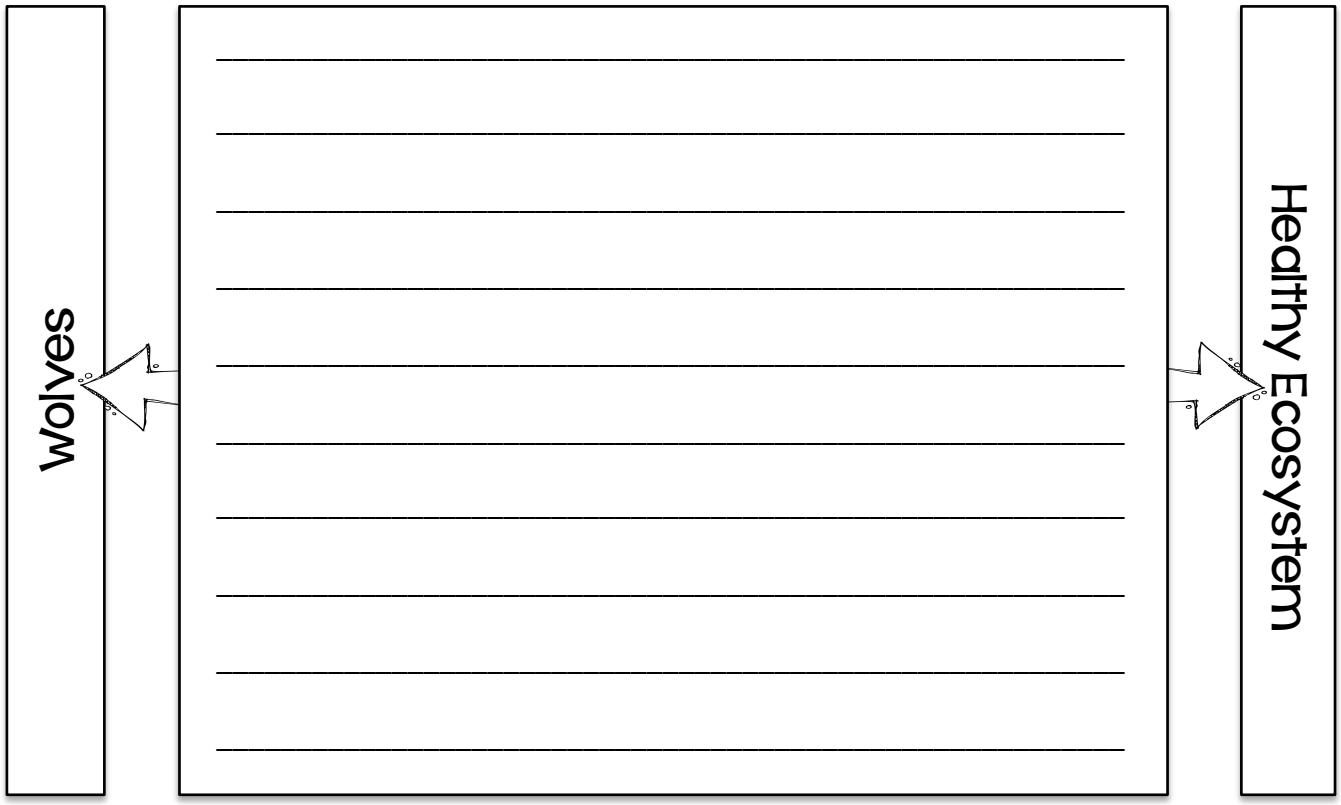
Just by removing wolves from an ecosystem, all of these things will begin to happen. And they have. Yellowstone National Park is an example. For 70 years, wolves were not around. Slowly, all of these animals were affected because deer ate much of the vegetation. But later, wolves were put back into Yellowstone. After a short amount of time, the deer population went down, grass grew, fish returned, beavers began building dams. Large birds and bears came around because they had food to eat. Things returned to normal again. Wolves healed this ecosystem!

•RESPOND•
The Healing Power of Wolves

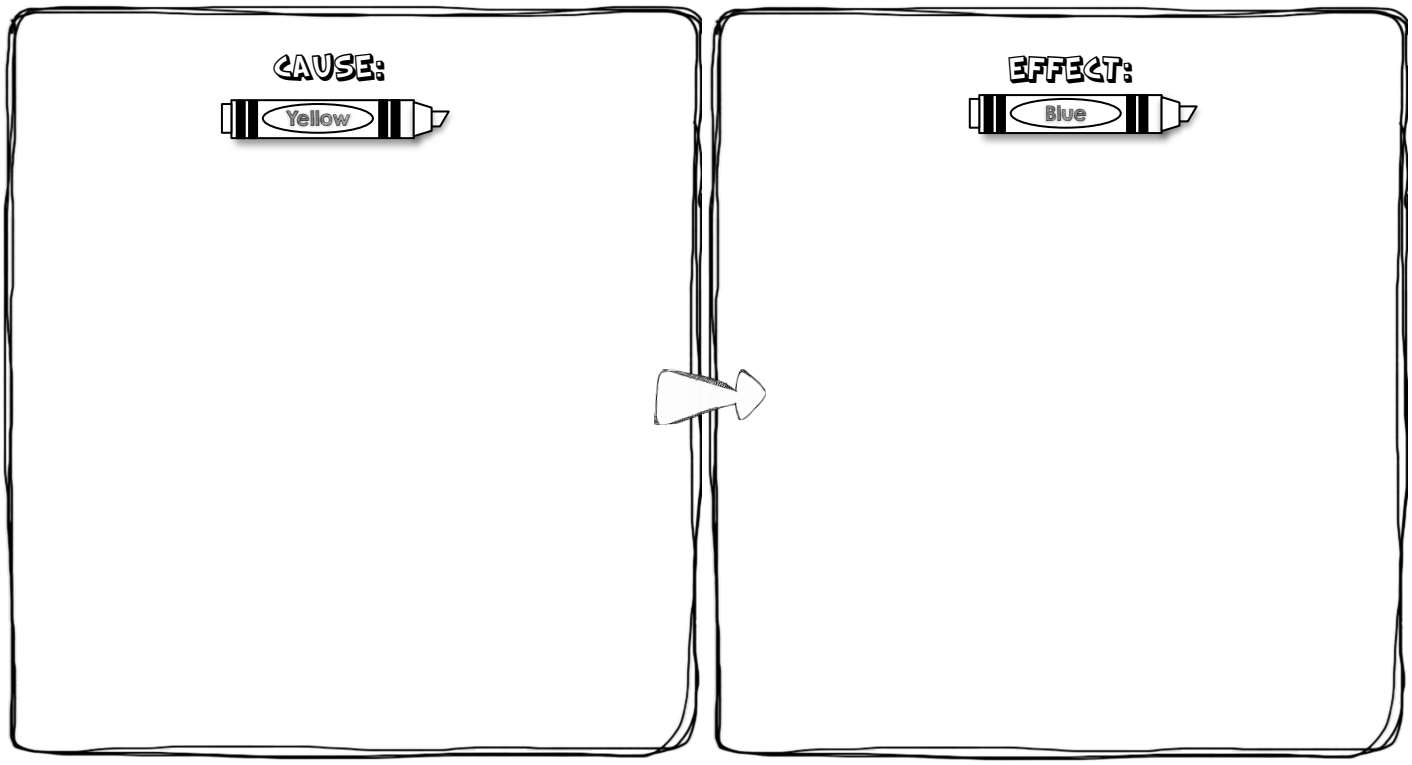
NAME:

RI.5.3

1. Explain how wolves and a healthy ecosystem are **CONNECTED**.



2. Explain a cause and effect relationship of wolves on their ecosystem. Color the text that matches the cause **YELLOW** and the effect **BLUE**.



NAME:

RI.5.5

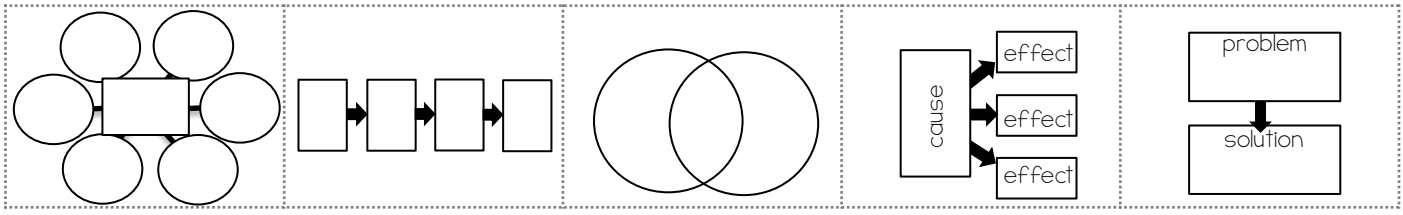
3. Describe the **TEXT STRUCTURE** the author used in The Healing Power of Wolves.

_____

_____

_____

4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.1

5. What happens if you remove wolves from an ecosystem? Include quotes from the text that support your response.

_____

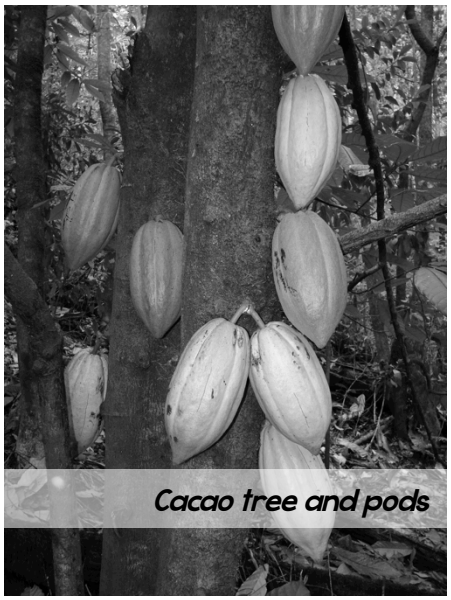
_____

_____

_____

_____

Cacao to Chocolate


Cacao tree and pods

Did you know that delicious chocolate comes from a plant? It comes from cacao pods. These pods grow on trees in Central America. A cacao tree only grows in very specific weather conditions. It only grows in hot and rainy climates, usually near Earth's equator. The trees grow best under the shade of taller rainforest trees. At first, cacao trees grew in the wild. Soon after, farmers began to grow them as crops when cacao became more popular.


Cacao pods and beans

A cacao tree will not produce any fruit until the tree is about four years old. The trees make large orange fruit pods. Each pod is about the size of a small pumpkin. Inside the fruit pod are many small beans, kind of like peas in a pea pod. The raw beans are filled with vitamins and minerals. They taste very bitter. Like tea and coffee, cacao beans also contain caffeine. One cacao fruit has 30-50 beans. This is enough beans to make seven milk chocolate bars.

Cacao beans are known as cocoa (pay attention to the similar words) once the beans are dried and roasted. The beans lose a lot of vitamins and minerals when they are processed. Cocoa powder often has many sugars added to it to make the cocoa taste sweeter. Chocolate is sweetened cacao.

People living in Central America have been drinking cacao for thousands of years. About 4,000 years ago, people were grinding up the beans with hot chili peppers and vanilla to make a spicy drink. Sometimes they would also mix the ground beans with chili peppers and corn to make a spicy soup.

About 1,400 years ago, Mayan people began farming the trees as crops instead of picking it as wild fruit. Then, during the 1400s (about 615 years ago), the Aztecs believed that cacao was valuable. This made it very expensive. As a result, the Aztec government required people to pay taxes using the beans. The beans became extremely valuable as money for the Aztecs. Eventually, only rich people could afford to buy it. The Aztec Emperor Montezuma drank 50 golden goblets of chocolate every day.

When explorers from Spain arrived in Central America in the 1500s (about 515 years ago), the Aztecs introduced them to cacao and chocolate. The explorers did not care for the bitter cacao. However, they did love the sweet chocolate. The Spanish explorers took sweet chocolate back to Europe. Other crops the explorers took from Central America to Europe included chili peppers, corn, tomatoes, and vanilla.

Chocolate was considered to be a type of medicine when it got to Europe. It quickly became extremely popular. The Europeans loved it! In 1657 (about 360 years ago) the very first chocolate shop and restaurant opened in England. Since cacao only grows in hot rainy regions, it could not grow in Europe. Europeans began to plant cacao farms in countries near the Equator. They set up cacao farms all over Asia and Africa.

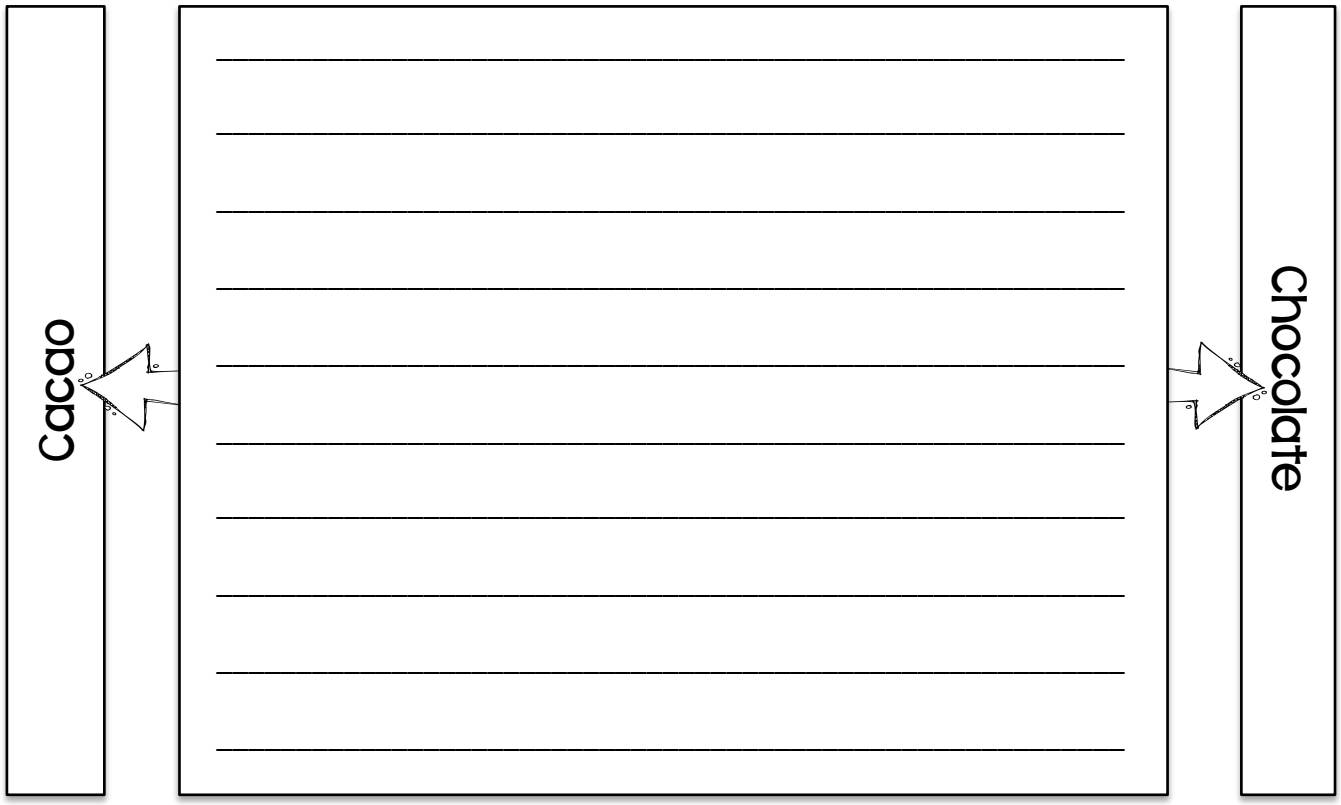
Today, people all over the world enjoy chocolate and cocoa. Chocolate is more than just a great tasting candy bar or dessert. The American soldiers in World War II were given chocolate rations to help them feel better. Astronauts have carried chocolate into outer space. Chocolate is very popular and it all starts with a plant that has a unique and interesting history.

•RESPOND•
Cacao to Chocolate

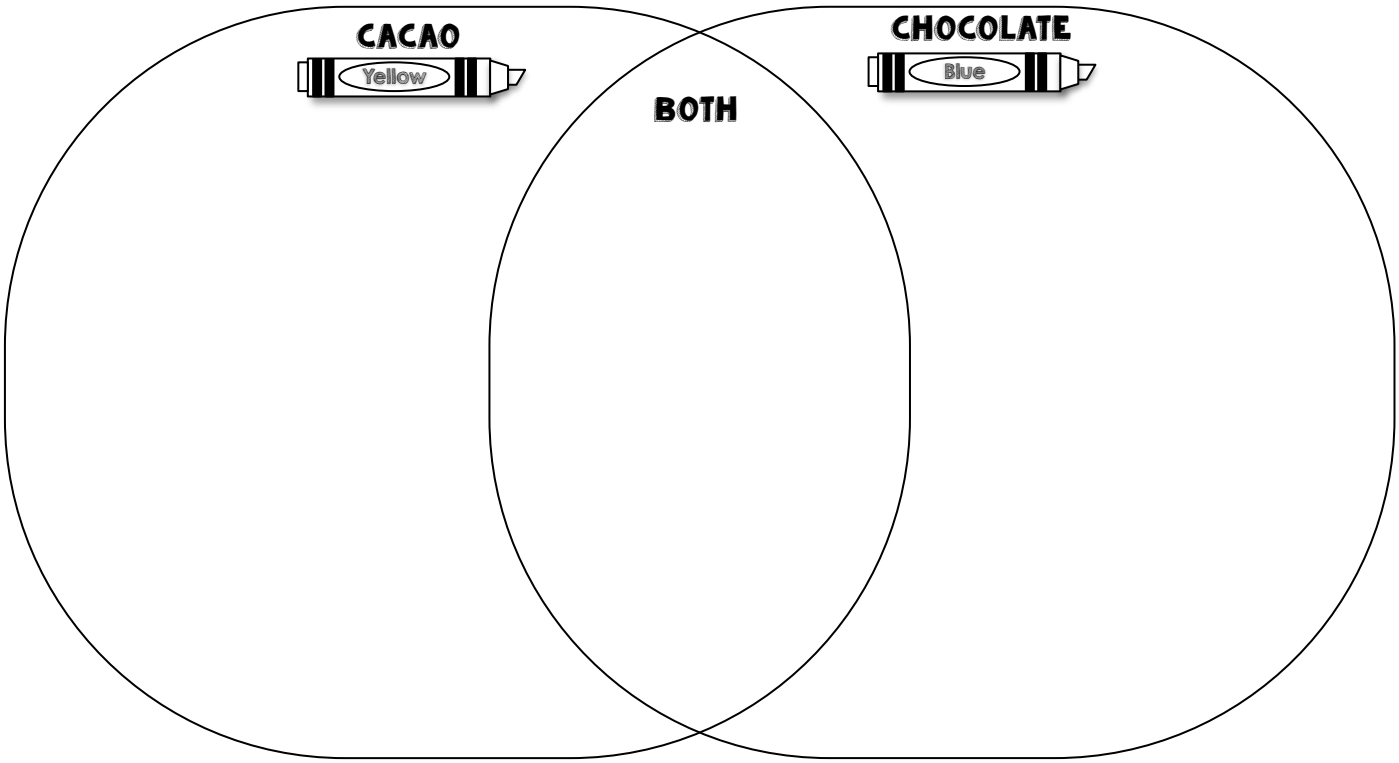
NAME:

RI.5.3

1. Explain how cacao and chocolate are **CONNECTED**.



2. Complete the Venn Diagram showing the characteristics of cacao and chocolate. Color the section of the text where you found the information.



RI.5.5

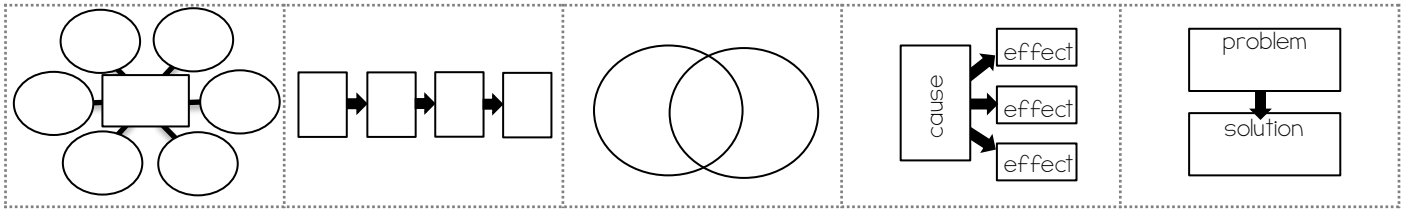
3. Describe the **TEXT STRUCTURE** the author used in Cacao to Chocolate.

_____

_____

_____

4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.2

5. Write a **SUMMARY** of this text. _____

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Sharks: The Ecosystem Needs Them!

When people hear the word shark, panic often follows. Sharks have a bad reputation. This is partly because they have a lot of sharp teeth. They even look a little scary. Some people fear the worst when they go into the ocean for a swim. Sharks have been killed because some people fear the worst. This has happened even when the shark is unprovoked. But sharks are not really interested in hurting people. They are just doing what they were meant to do. Sharks are extremely important to the health of the underwater ocean ecosystem of plants, animals, and fish. Without sharks, oceans would become unbalanced and unhealthy.

Have you ever caught a cold or the flu from someone? All of us have had this happen. Sickness can quickly be passed from person to person. The same thing can happen under water. Diseases and illness can be passed from one fish to another. Unlike us, fish do not have doctors to go to for medicine. Diseases can spread through their populations and cause many fish to die. When fish get sick, they tend to move slower than healthy fish. Sharks prefer to eat food that is easy to catch. Catching sick fish can be done without much effort. They become easy prey, or food. Scientists have found that by removing the sick and the weak fish in an ecosystem, sharks prevent disease and outbreaks that could be devastating.

An ecosystem can easily become over populated. This means that there are too many fish in one area. Some fish can reproduce, or have babies, very quickly. All living organisms need food to eat so that they can stay alive. If there are too many

fish, then some won't have enough food to eat. This will cause them to die.

Whatever organism that these fish eat will eventually be gone from that ecosystem because they will all have been eaten. Sharks help keep the number of fish in an ecosystem balanced. The number of fish won't grow too large in one area as the shark eats them. Scientific studies show that sharks keep the food chain in balance all the way down to tuna and coral reefs.

Scientists in Hawaii have found that tiger sharks have a positive impact on the health of sea grass beds. Turtles, which are the tiger sharks' prey, graze on sea grass. Without tiger sharks, the turtles spent all their time grazing on the best quality, most nutritious sea grass. Sea turtles like it so much that if they got a chance, they would stay all day eating in one area until no more was left. This can be harmful because other fish and sea life rely on that sea grass for food and shelter. Without the sea grass protection, larger fish would be able to catch them more easily. As sharks swim around and patrol the area, the sea turtles are more likely to eat quickly and move on to another place.

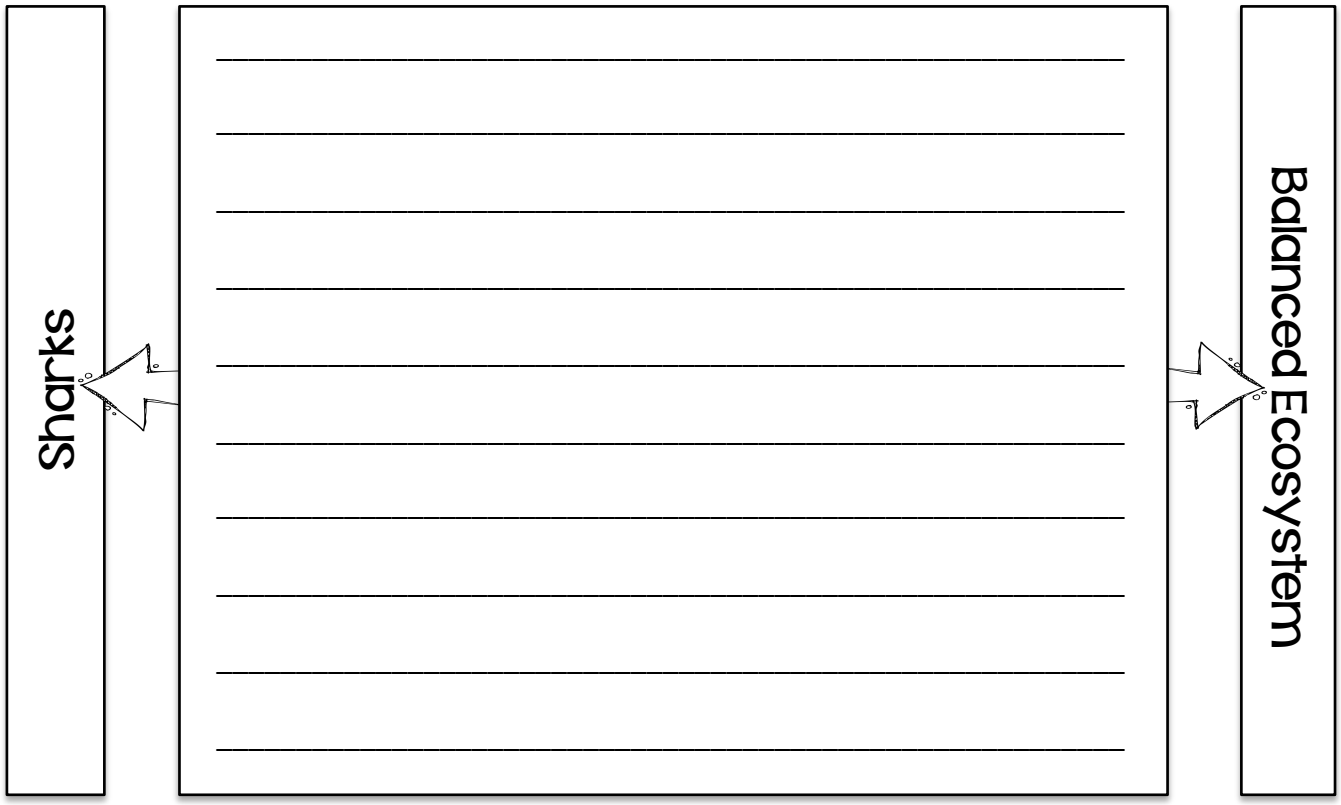
Thanks to sharks, our oceans stay healthy and balanced. Because sharks eat a variety of fish and other sea life, no one population will become too large and out of control. This ensures that organisms living in the ocean have enough to eat. Sharks also protect fish populations from being wiped out by disease. Sharks will eat the sick fish so that diseases do not spread as easily. And finally, they keep sea turtles and other marine life from eating all of one food source. Sea turtles are prevented from eating all of the grass that other fish rely on for safety and food. We should all be thankful to sharks for helping to keep our ocean ecosystems balanced and healthy.

•RESPOND•
Sharks: The Ecosystem Needs Them!

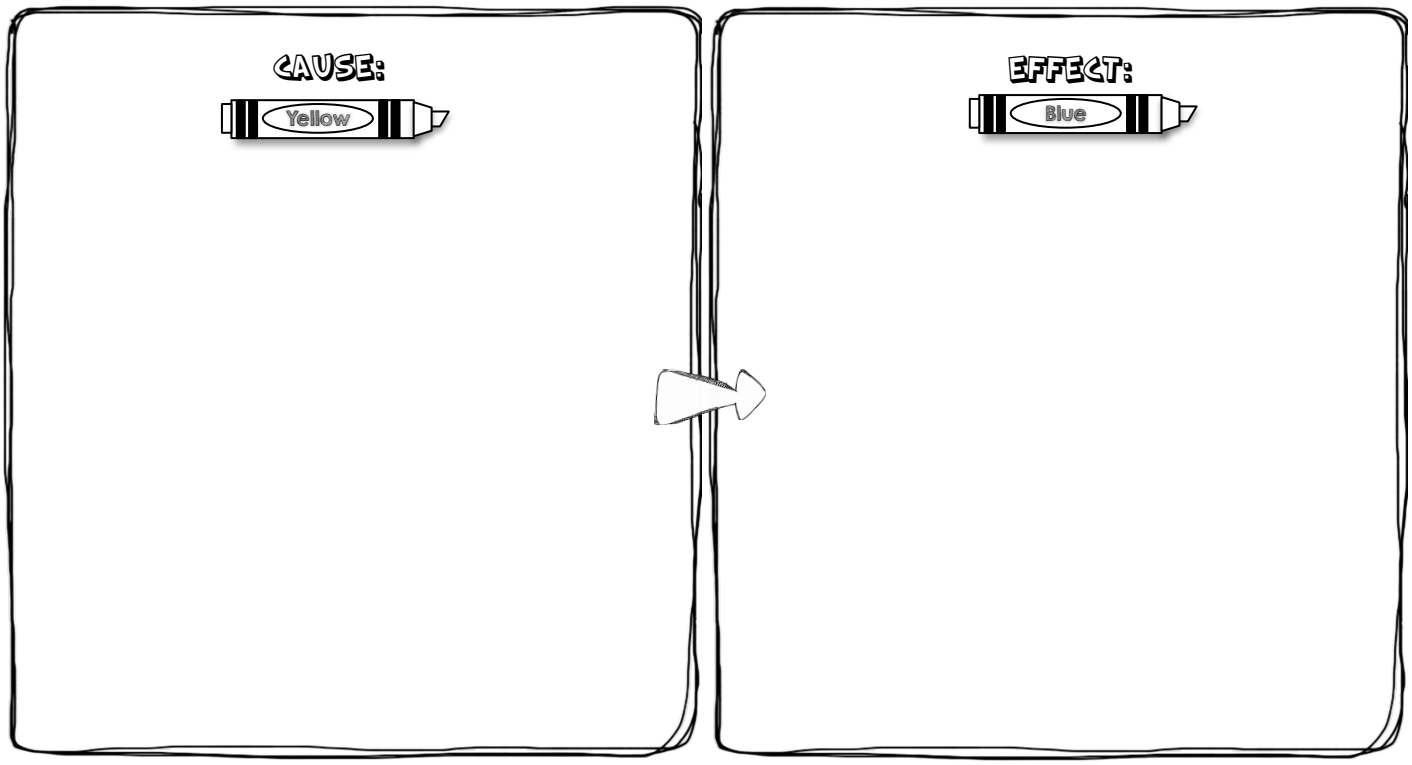
NAME:

RI.5.3

1. Explain how sharks and a balanced ecosystem are **CONNECTED**.



2. Explain a cause and effect relationship of sharks on their ecosystem. Color the text that matches the cause **YELLOW** and the effect **BLUE**.



NAME:

RI.5.5

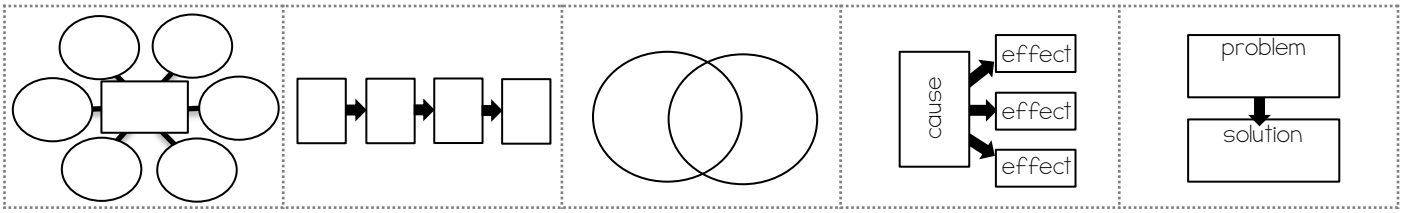
3. Describe the **TEXT STRUCTURE** the author used in Sharks: The Ecosystem Needs Them!

_____

_____

_____

4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.1

5. How can sharks be helpful to sea grass? Include quotes from the text that support your response.

_____

_____

_____

_____

_____

Can We Drink Salt Water?

Humans need to drink water every day in order to live. The human body cannot survive more than a few days without fresh drinking water.

We know water is critical for life. Human bodies are more than 3/5 water. Blood is mostly (92%) made of water and the brain is nearly ¾ water. Even human bones are made of nearly 1/4 water. A person who does not drink enough water can become dehydrated. A dehydrated person can become weak and could possibly die.

Our world is made of two types of water - fresh water and salt water. Fresh water helps the body flush out excess salts and other wastes. Not all salt is bad. The human body can process a small amount of salt. Too much salt is not good at all, though. The human body must stay in balance. Cells in the body release water when salt levels are too high. Eating salty foods and not drinking enough water can make a person thirsty. Thirst is the body's signal that it needs more water to keep working properly.

Drinking saltwater from the ocean is not healthy. Saltwater is a hypertonic fluid. This means that saltwater contains more salt than a body can handle. The amount of salt in the body increases quickly when a person drinks saltwater. The sudden rise in salt triggers the body's cells to release water. This makes the person drinking saltwater get thirsty faster. The body can become unbalanced very quickly. This can make the person critically sick.

However, fresh drinking water is not easy to find in many parts of the world. Some parts of the world struggle to find water even though they might be surrounded by ocean water. The Earth's oceans cover nearly ¾ of the Earth's surface. The oceans also hold about 9/10 of all of the Earth's water. Many countries rely on a process known as desalination in order to provide fresh drinking water to the citizens. Desalination can turn saltwater into water that humans can drink safely.

Scientists have discovered some ways to desalinate the ocean's water. Reverse osmosis relies on very fine filters to separate the water while leaving the salt behind. Distilling is the oldest method of desalination used by humans. Ancient sailors relied on distilling to create fresh water. In order to distill water, saltwater is heated to boiling which causes steam to rise. The steam is pure fresh water. The salt is left behind in the pan. The steam is captured and turned into fresh distilled water.

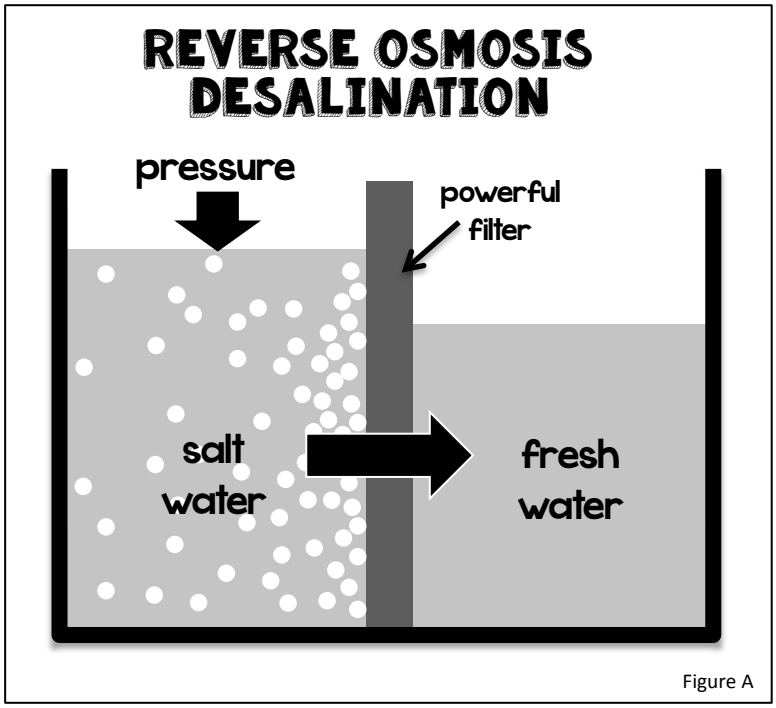


Figure A

The desalination process can cost a lot of money. The cost of water usually doubles for desalinated water. Some countries of the world must rely on desalination in order to have fresh drinking water. Countries in the Middle East, such as Kuwait and Qatar, now drink around ¾ of the world's desalinated water.

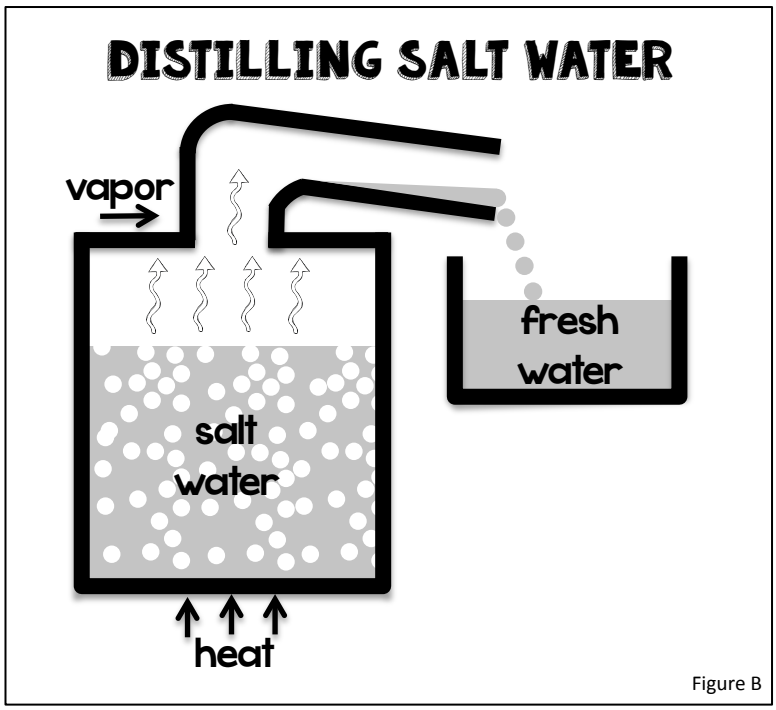


Figure B

Water is absolutely essential for life on Earth. However, not all water is safe to drink. The salinity, or the saltiness of the water, can make a huge difference.

•RESPOND•
Can We Drink Salt Water?

NAME:

Use the text to find and explain the meaning of the following words and phrases.

Step 1: Underline the text that helps you understand the meaning
Step 2: Explain the meaning in your own words.

HYPERTONIC FLUID is...

Now use the word **HYPERTONIC FLUID** in a sentence:

_____

DESALINATION is...

Now use the word **DESALINATION** or **DESALINATE** in a sentence:

_____

REVERSE OSMOSIS is...

Now use the word **REVERSE OSMOSIS** in a sentence:

_____

DISTILLING is...

Now use the word **DISTILLING** or **DISTILL** in a sentence:

_____

RI.5.4 #1

•RESPOND•
Can We Drink Salt Water?

NAME:

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic ✪ What the author says about the topic

2. **KEY DETAIL #1**: _____

3. **KEY DETAIL #2**: _____

4. **KEY DETAIL #3**: _____

5. Write a **SUMMARY** of this text. _____

RI.5.1

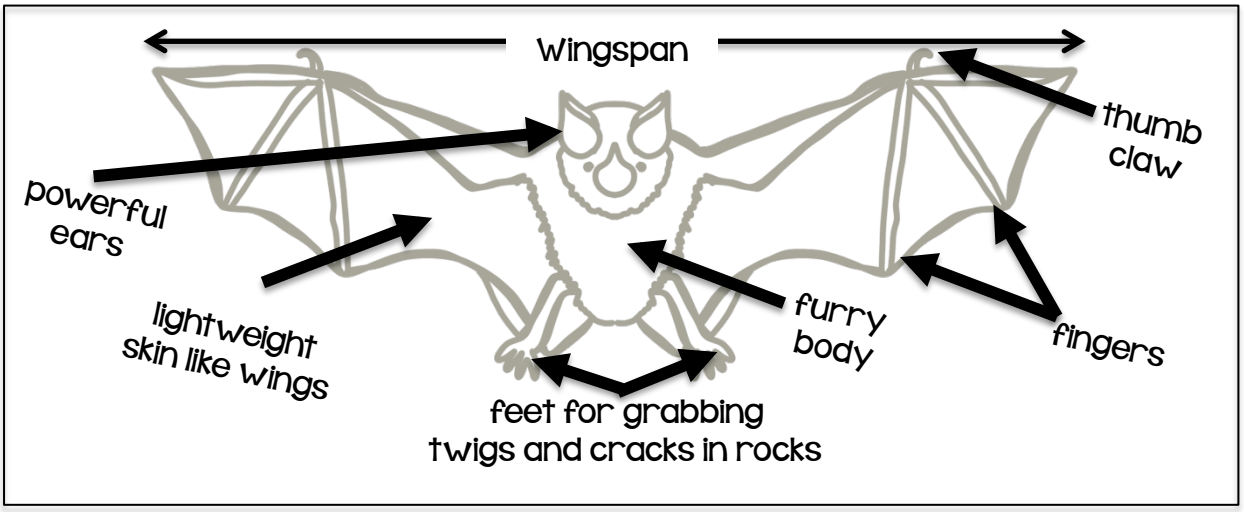
6. If someone told you it is impossible to drink salt water, how would you respond? Include quotes from the text that support your response.

Color the text you have quoted.

Bats

A lot of people think bats are scary. What do you think? Do they creep you out? Would you run away if you saw one? Or do you find them interesting? Bats are actually very helpful to our planet. Imagine being swarmed by insects and bitten by mosquitos from head to toe. Imagine pests wiping out farm crops across the country, causing food prices to go up. If bat populations decline, this could be our reality.

There are thousands of types of bats on Earth and they come in all different sizes. Some are tiny with a wingspan of only five inches. Others are much bigger. One type of bat has a wingspan that is six feet wide. That is as tall as a full grown man!



Bats can fly, but they are not birds. Birds have feathers, but bats do not. Instead, they have fur on their body and skin on their wings. In the winter months, some bats fly to warm places so they can eat bugs year round. Other bats spend the warm summer months getting fat so can sleep in caves in the cold winter months.

Bats can be helpful for the planet. About ¾ of the bats in the world are insectivores who eat only insects. Much of the rest are frugivores, or fruit eaters. One Mexican

free-tailed bat can eat 1,000 mosquitos per hour. A large colony of bats at Bracken Cave in Texas eats about 250 tons of insects every night. Many of these insects are a threat to farm crops. Thankfully, bats can keep these insect populations to a reasonable size.

Bats are in the pollinator group along with bees, birds, and butterflies. They all help with the pollination of fruits such as bananas, mangos, and peaches. Bats do not tend to like bright flowers or those with strong scents. This is opposite of what attracts bees. Many experts also believe that birds and bees take the day shift of pollinating, while bats take the night shift. Bats can fly great distances. Because of this, they help pollinate and spread flowers far away from each other.

Bats look for food at night. That means they sleep in the day. They really do sleep upside down! They use their claws and feet to hold onto cave rocks when sleeping. Animals such as bats that are awake at night are called nocturnal. To find food at night, bats "see" using their ears. Bats make a noise. Then they wait for the sound to return to them. This allows them to know how far away or close an object is. Being able to "see" using hearing is called echolocation.

So why are people so scared of bats? One reason is that people are scared of things they do not know much about. We do not see bats everyday so they are mysterious to us. Another reason is because they come out only at night and many people are scared of the dark. Some people are scared because bats can have rabies. Rabies is a disease you can get if an infected bat bites you. This is extremely rare yet people associate bats with this disease. In fact, scientists have found that fewer than one in twenty bats has rabies. Even with this many infected bats, there are usually only one or two people per year in the United States who catch rabies.

What do you think? Are bats as scary as people say?

NAME:

RI.5.4

Use the text to find and explain the meaning of the following words and phrases.

Step 1: Underline the text that helps you understand the meaning
Step 2: Explain the meaning in your own words.

What does it mean?

WINGSPAN means...

Now use the word **WINGSPAN** in a sentence:

_____

A **POLLINATOR** is...

Now use the word **POLLINATOR** or **POLLINATE** in a sentence:

_____

NOCTURNAL means...

Now use the word **NOCTURNAL** in a sentence:

_____

ECHOLOCATION means...

Now use the word **ECHOLOCATION** in a sentence:

_____

RI.5.4 #2 **•RESPOND•** *Bats*

NAME:

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

2. **KEY DETAIL #1**: _____
3. **KEY DETAIL #2**: _____
4. **KEY DETAIL #3**: _____
5. Write a **SUMMARY** of this text. _____

RI.5.1

6. How are bats helpful? Include quotes from the text that support your response.

Color the text you have quoted.

How Much Do You Know About Water?

Life on Earth depends on water. About ¾ of Earth's surface is covered in water. Even about ¾ of a human being is made up water. But what is water made of? Scientists have a special name for water. It is called H2O. This is the scientific name for a water molecule. Molecules are TINY and can only be seen under special microscopes. Everything on the Earth is made up of molecules. When scientists look at water under special microscopes, so much can be learned about the different states of water.

Water is not always a liquid. Water can be in three forms. It all depends on the energy and temperature of the water's molecules. These three forms are ice, liquid, and gas.

Liquid is the form of water used for drinking. It is the form of water that fills the rivers and oceans.

Ice is the solid form of water. Water will remain in a liquid form until the temperature goes lower than 32 degrees F. As the temperature lowers, the tiny water molecules begin to move slower. This means that the water molecule is losing energy. If the temperature is low enough, then liquid water freezes into ice.

Gas (also known as "vapor") is the form of water when the temperature is hotter than 212 degrees F. As the temperature goes up, the tiny water molecules begin to move faster. This means that the water molecule is producing more energy. If the temperature is hot enough, then liquid water changes into vapor.

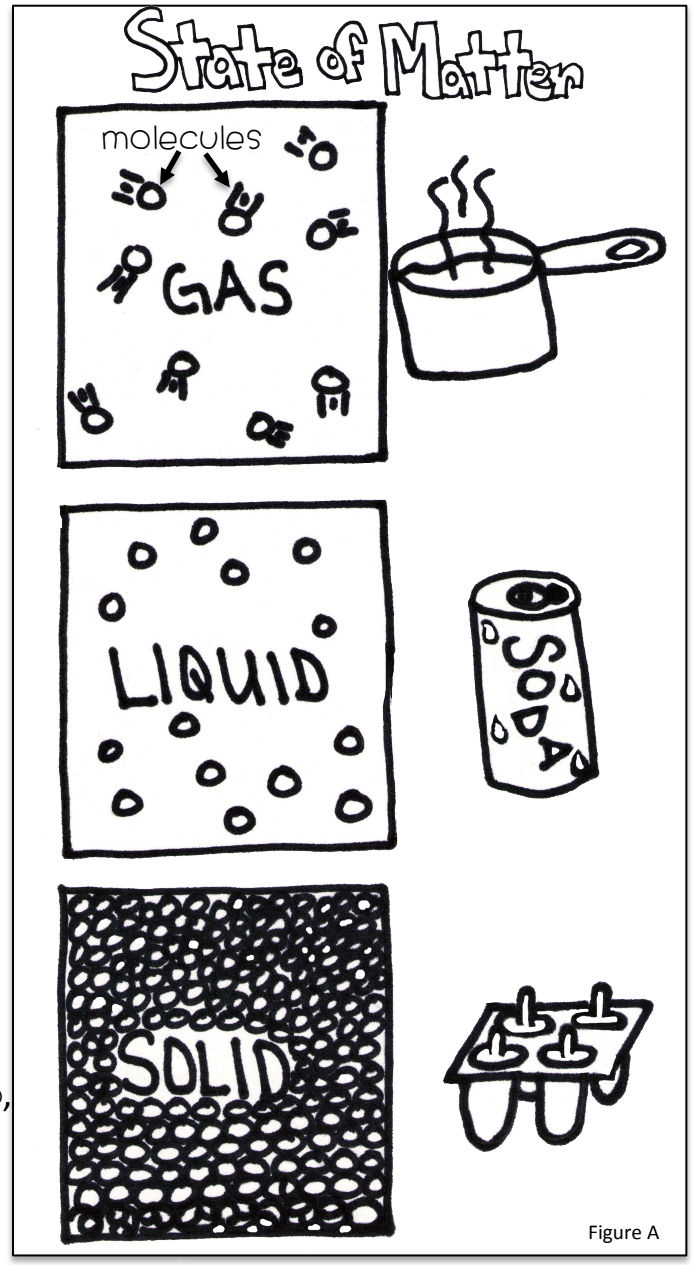
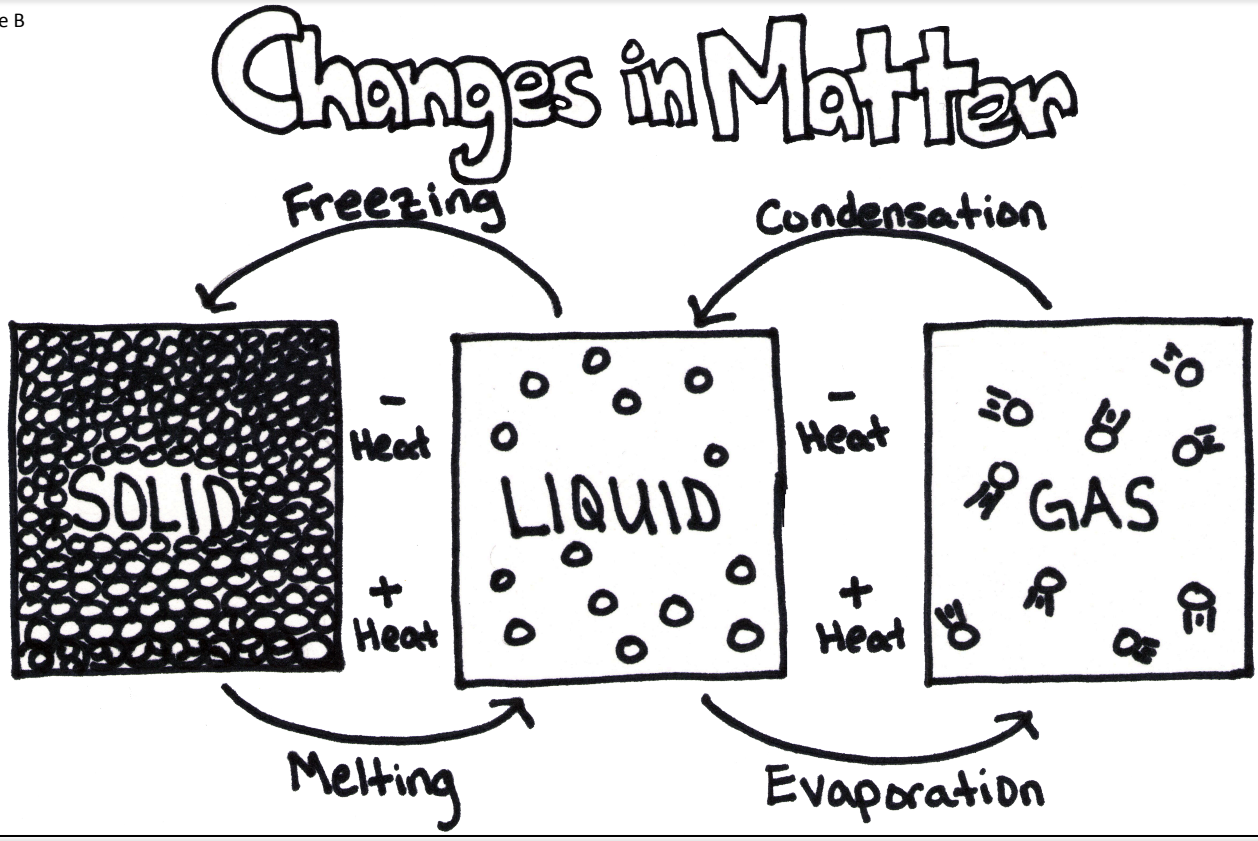


Figure A

Water is constantly moving around Earth in a water cycle. The stages of the water cycle are called evaporation, condensation, precipitation, and collection.
As the sun warms up water found in lakes and oceans, water molecules can change into vapor. Water vapor is collected in the sky in the form of clouds. This vapor rises into the sky in a process known as evaporation.

When the water vapor reaches the clouds, the molecules begin to cool. As the water molecules cool, the molecules begin to stick closer to each other. This process is known as condensation.

Figure B



As the water molecules go through condensation, the droplets begin to get larger. Once a water droplet is too heavy to remain in the clouds, the water will fall to the ground in the form of rain or snow. This process is known as precipitation.

Water can be used in many helpful ways! It is critical that we drink it to stay alive. We use it to clean our clothes and cook our food. For fun, we can swim in its liquid form and go skiing on its frozen form. These little tiny specks of molecules are the building blocks of our lives!

NAME:

Use the text to find and explain the meaning of the following words and phrases.

Step 1: Underline the text that helps you understand the meaning
Step 2: Explain the meaning in your own words.

What does it mean?

A **MOLECULE** is...

Now use the word **MOLECULE** in a sentence:

_____

VAPOR is...

Now use the word **VAPOR** in a sentence:

_____

CONDENSATION means...

Now use the word **CONDENSATION** or **CONDENSE** in a sentence:

_____

PRECIPITATION means...

Now use the word **PRECIPITATION** in a sentence:

_____

RI.5.4 #3 **•RESPOND•** *How Much Do You Know About Water?*

NAME:

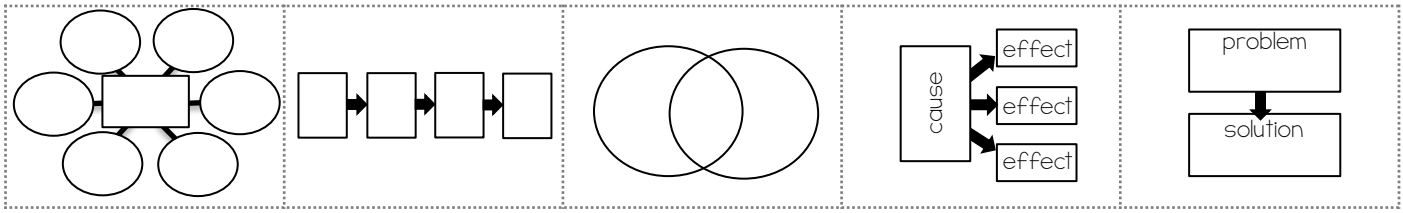
RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in How Much Do You Know About Water?

_____

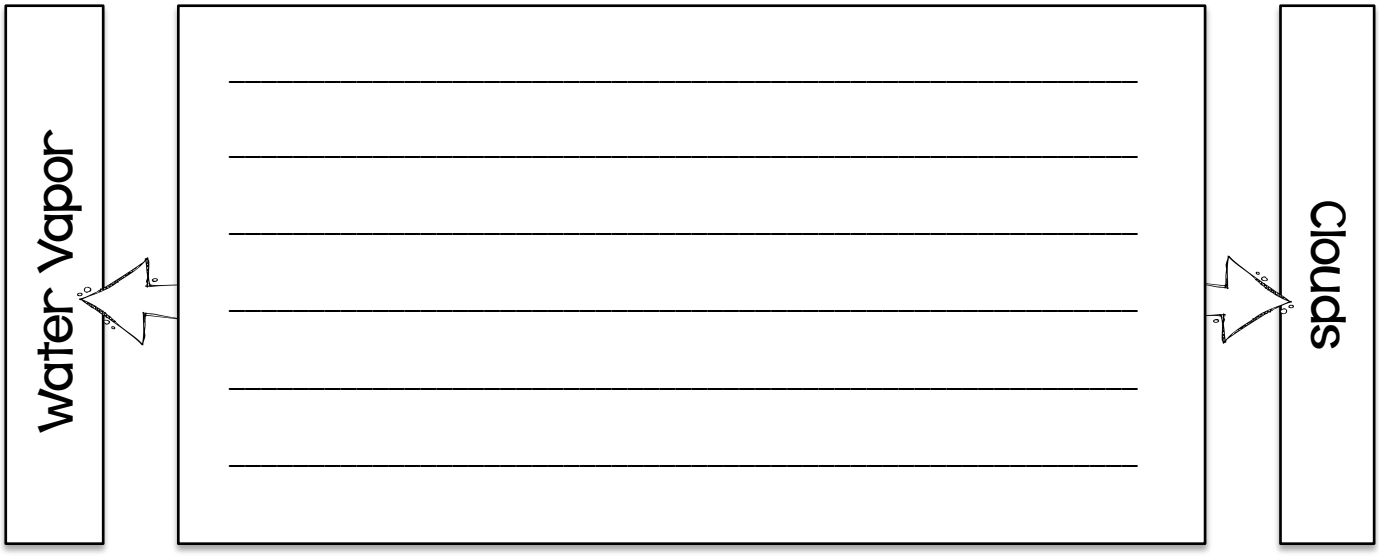
_____

2. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.3

3. Explain how water vapor and clouds are **CONNECTED**.



The World's Oceans

The oceans of the world are a vital part of the planet. Oceans cover nearly ¾ of the surface of Earth. Oceans also contain nearly all (97%) of the water found on the planet. Geographers have divided the Earth's oceans into five main oceans. They are the Pacific, Atlantic, Indian, Arctic, and Southern Oceans.

The largest ocean on the planet is the Pacific Ocean which covers almost 1/3 of Earth. The Pacific Ocean also has more islands than any other ocean. More than 25,000 different islands can be found in the Pacific Ocean. Other oceans are quite large, but not as big as the Pacific Ocean. The second largest ocean on the planet is the Atlantic Ocean. It covers more than 1/5 of the Earth's surface. The third largest ocean is the Indian Ocean, which spreads over nearly 1/6 of the Earth.

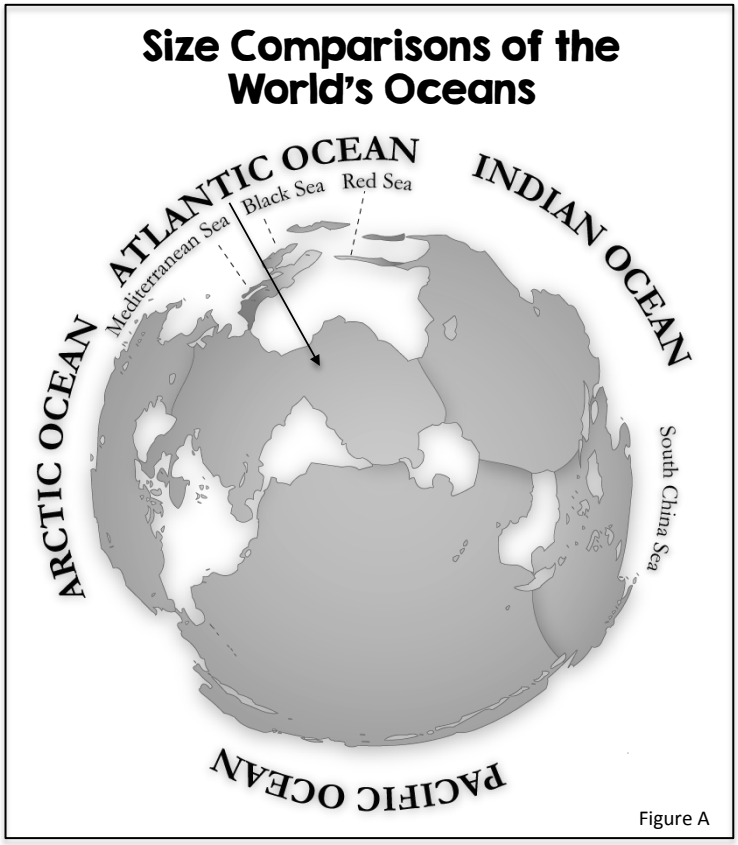


Figure A

The ocean at the North Pole is known as the Arctic Ocean. Massive ice as well as permafrost is found on most islands in the Arctic. Permafrost is soil, rock, or sediment that has been colder than the freezing point of water for at least two years. Permafrost does not melt. It thaws. An analogy is when a freezer door is left open. The ice in the freezer may melt into a liquid but the food does not change state. It still remains a solid but it has thawed.

The ocean at the South Pole is known as the Southern Ocean. The Southern Ocean completely surrounds the continent known as Antarctica.

The deepest part of all of Earth's ocean is located in the Pacific Ocean. It is

called the Mariana Trench. It reaches down 36,000 feet. By comparison, Mt. Everest, Earth's highest mountain, rises up 29,029 feet above sea level. That means that the Mariana Trench is deeper than Mt. Everest is high.

The largest living structure on Earth can be found in the ocean off the coast of Australia. The Great Barrier Reef is more than 1,400 miles long. It is a reef system that consists of almost 3,000 coral reefs and 900 islands. The Great Barrier Reef is so large that it can be seen from outer space.

Hundreds of thousands of different species live in the ocean. Life in the ocean ranges from extremely large whales to organisms that are so small that they can only be seen with a microscope. Scientists claim to have only explored 5% of the Earth's oceans so far. This means that many life forms probably exist in the oceans that have yet to be discovered.

Ocean levels are constantly rising and falling throughout the day. The changes in the ocean levels are called tides. Ocean tides change due to the gravitational pull of the Moon and the Sun as well as the rotation of the Earth. In the open ocean, the water typically rises and falls around two feet during each cycle of the tides. In the Bay of Fundy in Canada, however, the tide can rise and fall by as much as 40 feet during a cycle of the tides.

Tsunamis are large waves that can be extremely dangerous. A tsunami wave is not created in the same way a normal ocean wave forms. Tsunamis are caused when a large amount of water is moved suddenly. Most commonly, tsunamis happen when an underwater earthquake occurs. During an underwater earthquake, large holes open on the ocean floor. As the ocean water rushes in to fill those huge holes, a tsunami wave might begin.

Humans have spent most of their history on land. Some might say that the oceans are a part of our earth that plays by different rules.

NAME:

RI.5.4

Use the text to find and explain the meaning of the following words and phrases.

Step 1: Underline the text that helps you understand the meaning

Step 2: Explain the meaning in your own words.

What does it mean?

PERMAFROST is...

Now use the word **PERMAFROST** in a sentence:

_____

A SPECIES is...

Now use the word **SPECIES** in a sentence:

_____

TIDES are...

Now use the word **TIDE** or **TIDES** in a sentence:

_____

TSUNAMIS are...

Now use the word **TSUNAMI** in a sentence:

_____

RI.5.4 #4

•RESPOND• The World's Oceans

NAME:

RI.5.5

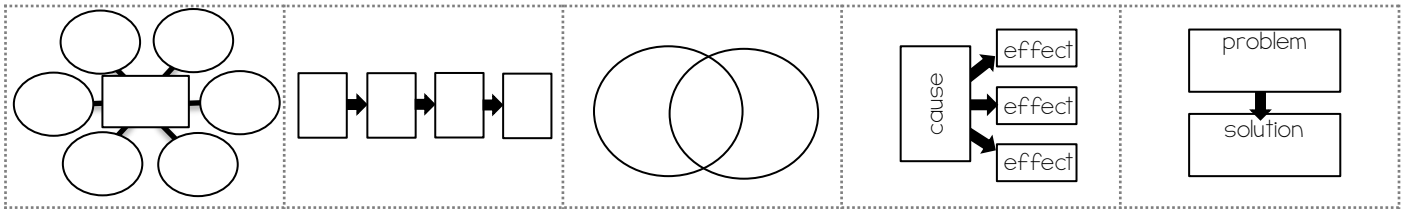
1. Describe the **TEXT STRUCTURE** the author used in The World's Oceans.

_____

_____

_____

2 Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.1

3. What is the Great Barrier Reef? Include quotes from the text that support your response.

Color the text you have quoted.

_____

_____

_____

_____

Dinosaurs: Warm Blooded or Cold Blooded?

Dinosaurs walked the earth millions of years ago but scientists are still learning new things about them. Scientists recently discovered that dinosaurs were neither warm-blooded or cold-blooded. They were actually a little bit of both.

Birds and mammals such as cats are endothermic animals. Endothermic means that the animal can generate its own heat. Humans are also endothermic. The human body systems work together to maintain a constant 98.6 F degree average. Another term for endothermic is "warm-blooded".

Reptiles such as lizards and snakes are ectothermic. Ectothermic means that the animal cannot generate its own heat. Lizards and snakes must depend on the warmth of the sun to maintain a desired body temperature. You may have heard this described as "cold-blooded".

Paleontologists have recently wondered if dinosaurs were neither endothermic nor ectothermic. Some think they were actually mesothermic creatures. This means that the animal was both warm-blooded and cold-blooded.

Dinosaurs lived many millions of years ago and of course they do not still roam the earth today. Paleontologists must study their fossils in order to learn about them. Fossils are the bones and other remains of creatures that lived in a different time.

Paleontologists have recently been studying fossil remains to learn about dinosaur metabolism. Metabolism is the chemical reactions needed to maintain life. Metabolism is slow in cold-blooded animals. A cold-blooded animal, such as a frog, does not eat as much food as a warm-blooded animal, such as a dog. Cold blooded animals like frogs must also conserve energy and maintain a relatively slow life. Metabolism is fast in warm-blooded animals. A warm-blooded animal such as a dog eats a lot of food to fuel its body. The food is used to keep the dog warm and to give the dog energy to run and play.

For many years it was assumed that dinosaurs were cold-blooded. Dinosaurs seemed to look and act much like modern day reptiles. This meant that dinosaurs would have had a slow metabolism.

In a recent study, however, paleontologists found that the metabolism rate of dinosaurs may have been somewhere in the middle between warm and cold blooded, otherwise known as mesothermic. Being mesothermic might explain why dinosaurs were able to survive on Earth for millions and millions of years because they could go without food for long periods, yet they still had energy. It seems like they had a high metabolism and grew large, which would indicate being warm blooded. We also know that some were fast runners, which is also a sign of being warm blooded. They would have been able to move more quickly than a cold blooded crocodile, yet would need less food than a similarly sized warm-blooded animal. Dinosaurs were neither sluggish like lizards, nor high energy like mammals, but something in between, the study suggests.

A few mesothermic species still exist on Earth today. The spiny echidna in Australia is a warm-blooded mammal but it lays eggs like a cold-blooded reptile. Great white sharks and tuna are both cold-blooded creatures. They live in the cold ocean, yet their strong muscles work hard to heat their blood. Cold-blooded leatherback turtles also keep warm using their strong muscles much like the great white shark. This shows us that it is possible for some species to be mesothermic.

The idea that dinosaurs were mesothermic is a controversy because not all scientists agree on this theory. Some paleontologists believe dinosaurs were warm-blooded like birds. Others think dinosaurs were cold-blooded like a crocodile. Finding a clear answer to this is difficult when we only have a limited number of fossils to study. Therefore, this is a question in science that has not been answered yet. However, it is an exciting new theory that brings some new life to studying old fossil remains!

NAME:

Use the text to find and explain the meaning of the following words and phrases.

Step 1: Underline the text that helps you understand the meaning
Step 2: Explain the meaning in your own words.

What does it mean?

ENDOTHERMIC means...

Now use the word **ENDOTHERMIC** in a sentence:

_____

ECTOTHERMIC means...

Now use the word **ECTOTHERMIC** in a sentence:

_____

MESOTHERMIC means...

Now use the word **MESOTHERMIC** in a sentence:

_____

METABOLISM means...

Now use the word **METABOLISM** in a sentence:

_____

RI.5.4 •RESPOND•
#5 Dinosaurs: Warm or Cold Blooded?

NAME:

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

2. **KEY DETAIL #1**: _____
3. **KEY DETAIL #2**: _____
4. **KEY DETAIL #3**: _____
5. Write a **SUMMARY** of this text. _____

RI.5.1

6. Why do some scientists think dinosaurs could have been mesothermic? Cite the evidence and details (and include quotes from the text) in the article that help you answer this question.

Color the text you have quoted.

Rise to the Challenge: Helen Keller

Helen Keller was born in 1880. She was a happy and healthy baby. However, she became very sick when she was one year old. After a few days, Helen began to recover from her extremely high fever and her headache. A short time later, however, her parents realized that Helen had become both blind and deaf.


Helen Keller in 1905
25 years old

When Helen was a child, she tried to communicate with those around her. She would try to use special hand signals to let others know what she wanted. It was difficult to understand what Helen was saying. This made her frustrated and angry. She began to act out toward others, often kicking and hitting those around her.

Helen's parents knew they needed to help Helen. They hired Anne Sullivan to be her guide. Anne Sullivan had been blind herself. However, she had been able to have surgery that fixed her eyesight. Helen's parents hoped Anne Sullivan's experience could help Helen.

Anne Sullivan came to the Keller's home 1887. Anne was able to help Helen overcome her anger by helping her learn to communicate. Anne remained Helen's assistant for more than 50 years. She earned the nickname "The Miracle Worker" for the achievements she made with Helen Keller.

When Anne first arrived at Helen's home, she began to teach Helen the words for items. Anne would place the item in Helen's hand. Then she would press the letters of the words into Helen's other hand. Helen would then repeat the words by pressing the letters into Anne's hands.

Helen was still a little confused that all of the words had meaning behind them. One day Anne put Helen's hand into a stream of water that was coming out of a water

pump. She then spelled "w-a-t-e-r" into Helen's other hand. Suddenly Helen understood what Anne had been showing her. She understood that the letters spelled out words that had meanings.

Next, Anne taught Helen how to read using special books written in Braille. Braille is a special type of alphabet that uses raised dots on a page in order to spell out words. Helen was a smart student. By the time she was 10 years old, she could read books in Braille and use a typewriter. Eventually, she would also learn to read French, German, and Latin in Braille.

After learning how to spell words and read books in Braille, Helen wanted to learn how to speak. A woman named Sarah Fuller taught her how to speak. Sarah was a teacher for deaf students. She learned to speak by putting her hands on Sarah's lips in order to feel how the words would sound.

When Helen was 16, she went to college. Anne Sullivan went along with her. Anne was responsible for signing the lectures into Helen's hand. In 1904, Helen Keller graduated from Radcliffe College with honors.

Helen wrote about what her life was like as a person who was both deaf and blind. She wrote many books. She wrote one book called "The Story of My Life" and another titled "The World I Live In." She also wrote a book about Anne Sullivan titled "Teacher".

Throughout her life, Helen met 12 American Presidents and traveled all over the world. She devoted her life to helping others with disabilities, especially the blind and the deaf. She was an incredibly determined woman who did not let anything stop her from living the life she wanted.

Steps of Inspiration

As you grow older, things change. You get taller, learn new things, and take on more responsibility. These are all positive things that most of us look forward to. No one really thinks about the negative things that could happen. But they happen. However, they can be overcome. We can still do great things even if life gives us challenges. We are going to read about one such example.

On June 27, 1880, a little girl by the name of Helen Keller was born in Tuscumbia, Alabama. Helen was a healthy little girl. However, things changed a few months before she turned two years old. Doctors were unsure of the cause, but suspected that it was either a disease called meningitis, or scarlet fever. The disease affected Helen's brain, causing her to become blind and deaf.

As Helen grew, she began to come up with signs that would allow her to communicate with her family. By the time she was 7, she knew more than 60 signs. Her parents realized that Helen was very advanced for the condition that she had. They decided it was time to hire someone to help her learn even more. A family friend, Alexander Graham Bell, introduced the Keller family to Anne Sullivan, who herself was visually impaired.

In 1887, Anne Sullivan began to teach and work with Helen. She taught her the alphabet in sign language by placing her hand into Helen's hand and making the signs. One day, Anne handed Helen a doll and signed the letters to spell it. Helen did not understand. Helen eventually got so frustrated that when Anne handed her a mug and spelled it out, Helen threw the mug, causing it to break. It was not until Anne placed Helen's hand under running water from an outdoor pump that Helen realized what it was. Helen was so excited that she touched the ground and made Anne sign the word. This led to Helen learning more than 625 words in the next six months.

Helen was such a fast learner, that by the time she was 10, she knew how to read braille, which is an alphabet for people who are blind. She also learned how to use a typewriter. By the time she reached the age of 16, she had learned how to speak

some. Because of how well she was doing, Helen was able to get into a school that prepared her for college.

In 1888, Helen went to the Perkins Institute for the Blind. Two years later, she began attending Radcliffe College. Helen graduated four years later and became the first person who was blind and deaf to earn a Bachelor's degree. After she graduated, Helen spent a lot of her time working with organizations that helped those who were blind and deaf. She moved in with Anne and her husband as she continued to learn. Helen eventually learned how to read lips by touching them as others spoke.

Anne never left Helen's side once she began working with her when she was 7 years old. In 1937, Anne Sullivan died of tuberculosis. Polly Thomson was Anne's hired housekeeper who took over. Helen moved in with Polly and continued her work trying to improve the lives of those who were deaf and blind. She became an author and lecturer as she traveled and spoke all around the world. From 1946-1957, Helen traveled to 39 different countries and to 5 different continents. Helen died in her sleep on June 1, 1968 in her home in Connecticut.

Helen is an inspiration that shows it does not matter what our challenges or difficulties in life may be. We can all make a difference in the lives of others. It is up to us!

•RESPOND•

Compare: Rise to the Challenge and Steps of Inspiration

NAME:

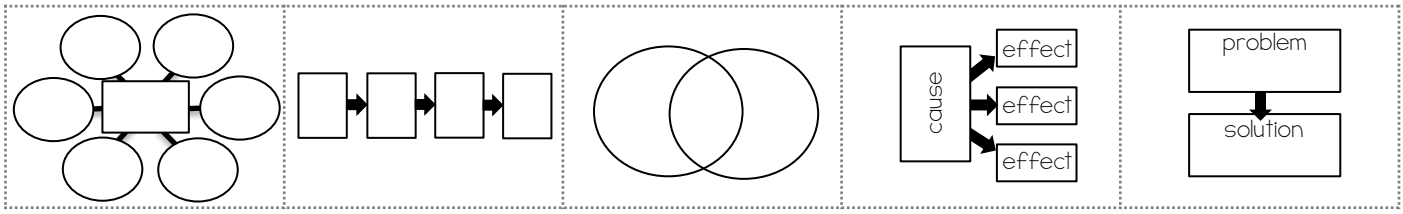
1. Describe the **TEXT STRUCTURE** the author used in Rise to the Challenge: Helen Keller.

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Rise to the Challenge: Helen Keller. Draw and complete the diagram in the space provided.



RI.5.5 #1 b

•RESPOND•

Compare: Rise to the Challenge and Steps of Inspiration

NAME:

RI.5.5

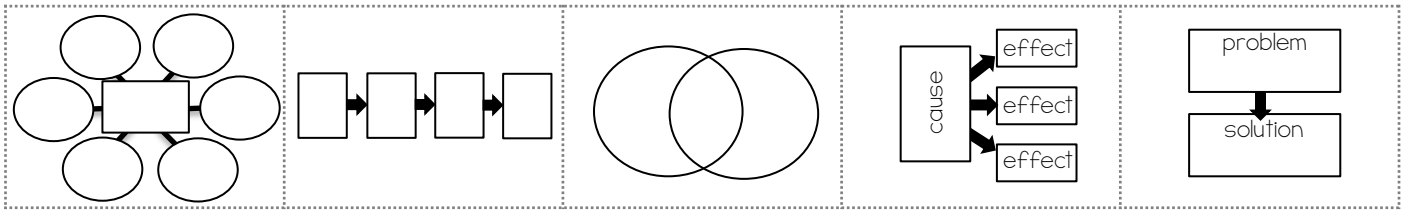
1. Describe the **TEXT STRUCTURE** the author used in Steps of Inspiration.

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Steps of Inspiration. Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in Rise to the Challenge: Helen Keller and Steps of Inspiration?

_____

_____

_____

•RESPOND•

Compare: Rise to the Challenge and Steps of Inspiration

NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

How did Helen Keller overcome challenges in her life?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

What's Erasing the Polar Bears?

Imagine it is a hot, sunny day. You are enjoying a popsicle to help cool down. But what happens to that popsicle if you don't eat it quickly enough? The answer is, it begins to melt. We all know that when the temperature rises, ice will melt. But, if your popsicle melts, it is not the end of the world for you. However, other things are affected by ice melting. For the polar bears, it can be a matter of life and death.

The arctic is an area found in the northern part of the world that is very cold and usually covered in ice. Polar bears rely on this ice in order to survive. The amount of ice that you will find there depends on the time of the year. For example, the summer months have less ice, so the polar bears can be found on land hunting for foods such as berries and plants. This type of diet is not enough for the bears to survive on all year.

In the winter months, the ice stretches for hundreds of miles. The bears walk along this ice in search of other food. They usually eat seals and fish. The ice allows the bears to get to deeper water where some of the larger fish are found. The bears also know that there are openings in the ice that the seals have created. The holes allow the seals to swim along under the ice and come up for air when they need it. Polar bears are smart, though. They will wait patiently by these openings for a seal to pop up. Sometimes the ice will end and so the bears will have to swim to the next chunk of ice. They are used to it and are very good swimmers.

Within the past decade or so, the ice hasn't stretched as far as it once did. The distance between the two chunks of ice have gotten larger and farther apart. This is causing problems for the bears. Without the ice, the bears cannot get to deeper water to catch the fish. Also, seals won't have to worry about making holes in the ice so that they can pop up to catch a breath of air. Distances will become too far for the bears to swim. All of these things can lead to a decrease in the polar bear population.

So what causes the ice to melt? Isn't the arctic area cold enough for it to stay icy? Some scientists think the reason for the melting ice is humans. They believe we give off gases by doing the things we do in everyday life. We drive cars to get from place to place. You have probably noticed the smoke coming from the back of the car. Grocery stores, malls, restaurants, and even our homes all use electricity. Factories must create this electricity and when they do, they give off gases by burning fuel for energy. These gases go up into the sky and act like a blanket. Just like blankets trap our body heat when we lay under them, some scientists believe the gases trap the heat in our atmosphere. And just like your popsicle melts because of the heat, so does the polar bear's ice. Some scientists worry that in time, this could erase all of the polar bears.

Not all scientists believe that the ice is melting because of humans. Some agree that the climate is changing and getting warmer. However, they think that the warming is caused by natural weather pattern changes. They believe Earth has had periods of warm climates and periods of cold climates. They do not think human activity can affect the climate. Even with natural weather changes, the polar bear habitat may suffer. The melting ice still affects the polar bears.

Is there any way to fix this problem for the polar bears? If you believe that humans are causing Earth to warm up, then there are solutions. We can do things to cut down the amount of gases that heat our atmosphere. Some ways to cut gases are to drive cars less often, use less electricity, and buy fewer things made in factories. If humans can slow down the ice melting, then maybe we can save the critical polar bear habitat.

Saving the Polar Bears

What is causing the ice to melt?

Imagine eating ice cream on a hot and sunny day. The heat from the sun immediately begins to melt the ice cream. Like ice cream, heat is causing ice in the Arctic region where the polar bears live to melt quickly as well. Some scientists believe this is because the average temperature of the earth is beginning to rise. If you have been inside a greenhouse before you may have noticed that it was very warm and humid. This is because the heat energy from the sun is trapped inside causing the temperature to rise. One theory is that the same effect is happening around the earth. We call this the greenhouse effect.

The greenhouse effect is where gases given off as pollution create a blanket-like layer in the atmosphere. These gases trap the heat energy from the sun, instead of letting some of it bounce off the earth back into space. This is normal, except when the blanket layer gets too thick, more and more heat is trapped. As the heat is trapped, the temperature rises. When the temperature rises, ice melts!

Our Carbon Footprint

Have you ever heard the term, carbon footprint? You might have heard someone talk about it before. Carbon is a gas that is given off into the atmosphere when fossil fuels like oil and gases are burned. So, your carbon footprint is how much carbon is given off into the atmosphere based on how much carbon was given off to create the products you buy and by how much energy you use. We can reduce our carbon footprint by making a few changes in our lives. If everyone did this, then we would begin to see a change.

Fixing the problem!

In order to help the polar bears, some scientists believe we must reduce the amount of greenhouse gases we produce and reduce our carbon footprint so that temperatures do not continue to increase. There are several ways that we can do

this.

Power plants create energy for our homes and businesses. The more energy we use the more energy power plants have to make. And when they do, they give off carbon and other greenhouse gases. So does that mean we should stop using energy? Absolutely not! We have come to rely on electricity and other types of energy. What we need to do though, is use less energy.

Saving energy in our homes is one way to use less. When we are not using electronics or certain appliances, we can unplug them. We can ride our bikes or walk to places that are short distances. Instead of spending so much time indoors, we can go outside and enjoy nature. If we are not inside, then we won't be using as much energy. When we are inside we can open curtains or blinds on our windows which allow natural light to come in instead of using electricity.

Another thing we can do is talk about these issues with others so that we can come up with some solutions. We can be active in our communities by discussing greenhouse gases and carbon footprints and brainstorming what we can do to solve these problems.

Many people probably have not thought much about how our everyday lives impact animals and their habitats that are thousands of miles away. But each and every thing we do has an effect. That is why it is so important to become aware of our actions and hold each other accountable. Otherwise, organisms elsewhere could suffer the consequences.

.

•RESPOND•

Compare: What's Erasing the Polar Bears? and Saving the Polar Bears

NAME:

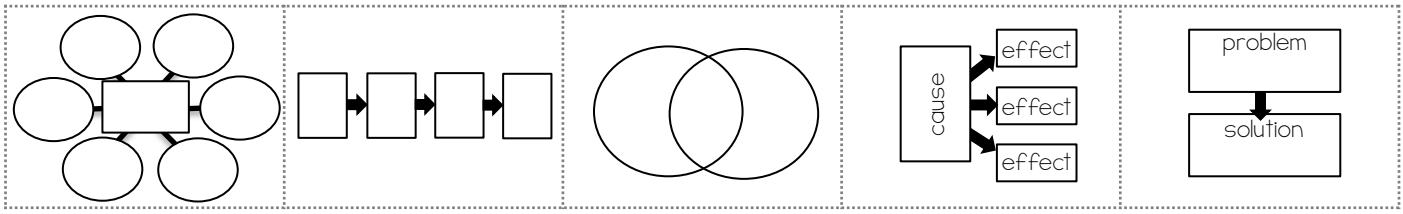
1. Describe the **TEXT STRUCTURE** the author used in What's Erasing the Polar Bears?

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in What's Erasing the Polar Bears? Draw and complete the diagram in the space provided.



•RESPOND•

Compare: What's Erasing the Polar Bears? and Saving the Polar Bears

NAME:

RI.5.5

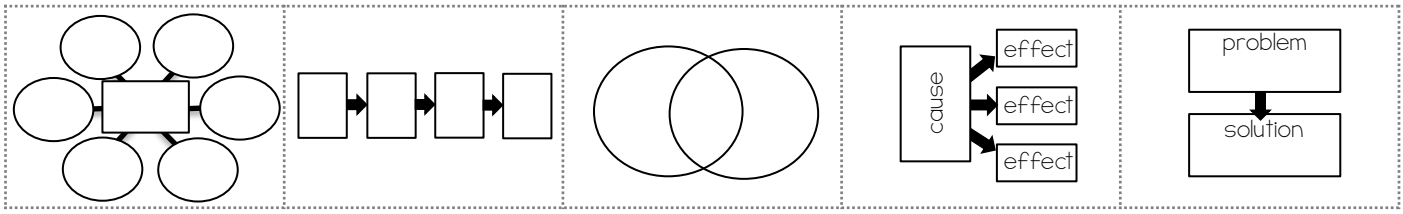
1. Describe the **TEXT STRUCTURE** the author used in Saving the Polar Bears.

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Saving the Polar Bears. Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in What's Erasing the Polar Bears? and Saving the Polar Bears?

_____

_____

_____

RI.5.5 #2

•RESPOND•

Compare: What's Erasing the Polar Bears? and Saving the Polar Bears

NAME:

RI5.9

RI5.7

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own.

Do you believe humans are causing the Arctic ice to melt? Why or why not?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

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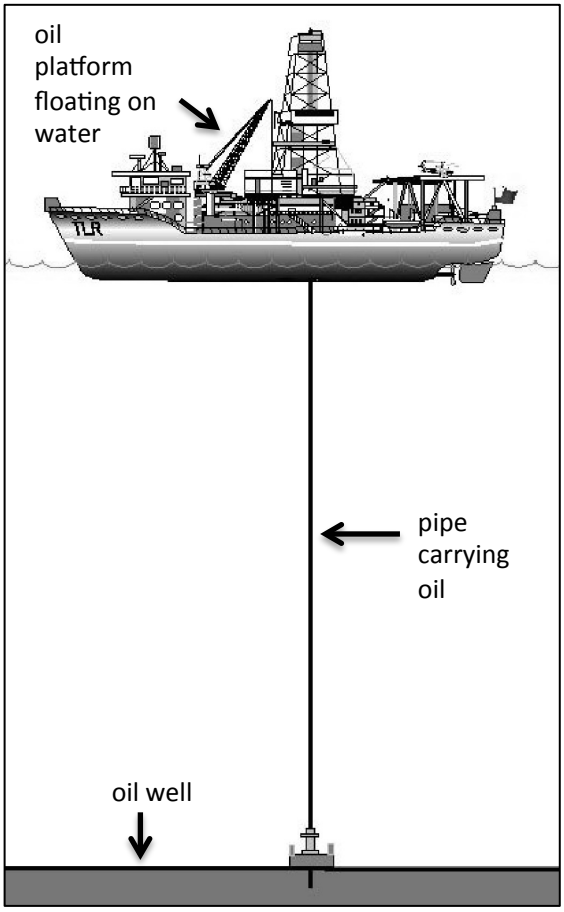
Oil Spill in the Gulf



The United States has a vast supply of oil and natural gas. This resource can be found deep under the ocean waters of the Gulf of Mexico. Hundreds of oil wells have been drilled in order to access this oil. At each oil well, a pipe carries oil from deep underground. The oil moves through the water and up to a platform that is floating on the ocean surface. Oil is collected at each platform and then shipped to the shore. The oil is then unloaded on shore and processed for us to use for heating homes and powering cars.

On April 20, 2010, a huge accident occurred on an oil platform known as the Deepwater Horizon. The oil platform was 40 miles off the coast of Louisiana. An oil well had just been drilled into the land deep beneath the ocean. Suddenly, some oil and natural gas escaped from the pipe. The fuel rushed to the surface of the water. The oil and gas exploded in a large fireball below the platform. The platform was so damaged that it eventually sank into the ocean. As the platform sank it also pulled down the large pipe that had just been drilled into the ground. Tragically, eleven people died in the accident.

Oil spilled from the broken pipe into the Gulf of Mexico for months before the pipe could be repaired. It was estimated that each day, more than 200,000 gallons of oil gushed out of the damaged well. Eventually, the Deepwater Horizon disaster would become the largest accidental oil spill in the world. The oil spill was also known as the BP oil spill, named after the BP Corporation that was in charge of the drilling project.

Oil is thick liquid and it has a strong odor. The oil leaking from the accident site floated to the surface of the ocean. It spread out for hundreds of miles. Everything that the oil touched was quickly covered with the disgusting dark substance.

The ocean water was filled with lakes of oil. Strong fumes of oil polluted the air above the spill. The oil eventually reached the shoreline. Hundreds of miles of coastline in several states were closed. Oil was covering the beaches. The spill also surged inland polluting coastal wetlands.

The environmental impact of the spill was terrible. Millions of birds and other marine life were threatened because the beaches and wetlands were covered in oil. Birds were covered in oil as they landed on the water to find food. As the birds tried to clean their feathers, they accidentally ate some of the oil. These birds became extremely sick and many of the birds died. Hundreds of volunteers worked to scrub each bird that was found covered in oil. Marine life such as dolphins and turtles were also in danger from the oil spill. Many animals were covered in oil as they swam through the oil or came up to the surface to breathe. The oil pollution also injured the shrimp, crabs, and oysters that lived in the Gulf.

The economic impact of the BP oil spill was also quite high. It was expensive to fix such a big problem. Hotels and restaurants along the beaches suffered because tourists avoided the oily beaches. The fishing industry in several states was harmed as well. In fact, fishing was not allowed in the Gulf for nearly a year after the accident.

Fishing has now resumed in the Gulf waters and tourists have returned to the beaches. The devastating results of the BP oil spill still affect the Gulf region though. The long-term effects of exposure to oil pollution in both humans and wildlife will be studied by scientists for many years.

Spill! What We Did and How to Fix It

The Gulf oil spill that happened in April of 2010 did a lot of harm to animals and their environment. The spill was the result of an explosion onboard an oil rig named Deepwater Horizon. Because of the explosion, more than 200 million gallons of oil poured into the Gulf of Mexico. The oil had an impact on all of the states that sit along the gulf. This means that the number of animals and habitats affected was enormous!

Effect on Animals

Birds can float on the surface of water and this has a lot to do with their feathers. The natural oil that they secrete on their feathers helps keep them waterproof. It also keeps them warm as it helps their feathers stick together so no water touches their skin. If their feathers were not waterproof, they would soak up water. This would cause them to be very heavy and not able to float. Spilled oil strips the feathers of their natural oil. Not only does this remove the waterproofing, but their feathers do not stick together as well. The can cause the temperature of their bodies will to below normal, which could be deadly. Oil coming into contact with their skin can cause growths and sores. Birds usually clean their feathers with their beaks, but if their feathers are covered in oil, they will ingest the oil. This can poison the birds.

Dolphins and whales that are exposed to spilled oil can receive chemical burns. They can also be poisoned by the toxic fumes when they go to the surface for air. Whales that have thick, hair-like teeth, called baleen, can have a hard time catching prey if oil is stuck in the baleen. It makes it too easy for the prey to escape.

Land animals that live near the water can get sores on their bodies from oil. They can also easily lose their food sources and habitats. Oil can kill off the vegetation that these land animals need as a food source. This vegetation also acts as a home for some organisms and offers protection from danger.

Turtles can eat the oil causing internal bleeding and poisoning. This oil can also cause turtles and other reptiles to become permanently blind if it gets in their eyes. Just like the dolphin and whales, turtles can breathe in the toxic fumes which can lead to organ failure.

Fish can get burns from the oil, but the oil does something else to their fins. The oil causes the fins to erode away. Without fins, fish are not be able to swim. In addition, fish can easily eat the oil, causing them be become toxic to the larger fish and predators that eat them. Depending on what type of fish you eat, you and I could eventually become affected by this oil spill.

How can we fix this?

The best way to keep these animals and their homes safe, is to prevent anything from happening in the first place. Businesses that deal with oil take a lot of steps to prevent something like the gulf oil spill from happening, but sometimes it is out of our hands.

Once an oil spill happens, it is important to stop it from spreading. Since oil and water do not mix, and oil floats on top of the water, this makes things easier for us. If boats can get there fast enough, it is possible to contain the oil by surrounding it with nets. It can then be scooped up, or a vacuum like device can suck it up. However, there is very little we can do to stop it from spreading too quickly because of ocean currents. Scientists have come up with absorbent materials that can soak up oil. One crazy solution is a substance that is made of hair mixed with mushrooms. It was used in an oil spill that happened several decades ago and it worked very well. Another method for cleaning up spills is with bacteria. Many types of bacteria eat oil. This is because small amounts of oil is always seeping up from the ground into the water. Small bacteria usually take care of this so it's not an issue for us. Scientists are researching efficient methods for using this natural remedy.

Once the oil spill occurs, damage will be done and organisms will be affected. So how can we help these organisms and their environment? It is a very delicate process to clean bird feathers. Trained volunteers and workers take the time to hand wash the birds by placing them inside tubs filled with warm water and the appropriate soap. Turtles, dolphins, and other organisms must also be handled and cleaned by those who are trained to do so. The process of cleaning them can take several weeks since the oil is very thick and hard to remove. The animals can be released back into the wild once they have gone through an examination by a doctor.

It's our job to correct our mistakes. Accidents caused by human activity must be fixed by humans. It is our job to look after nature, especially when we are the cause of the troubles and pain that nature faces.

•RESPOND•

Compare: Oil Spill in the Gulf and Spill: What We Did and How to Fix It

NAME:

RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in Oil Spill in the Gulf.

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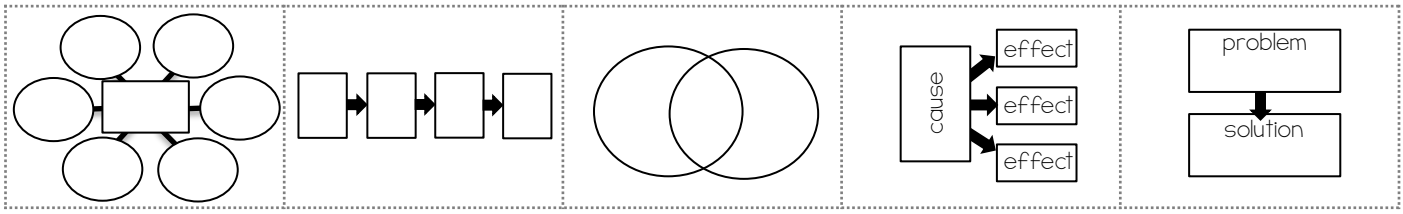
2. Choose one of the following visual diagram types that best matches the text structure in Oil Spill in the Gulf. Draw and complete the diagram in the space provided.



•RESPOND•

Compare: Oil Spill in the Gulf and Spill: What We Did and How to Fix It

NAME:

RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in Spill: What We Did and How to Fix It.

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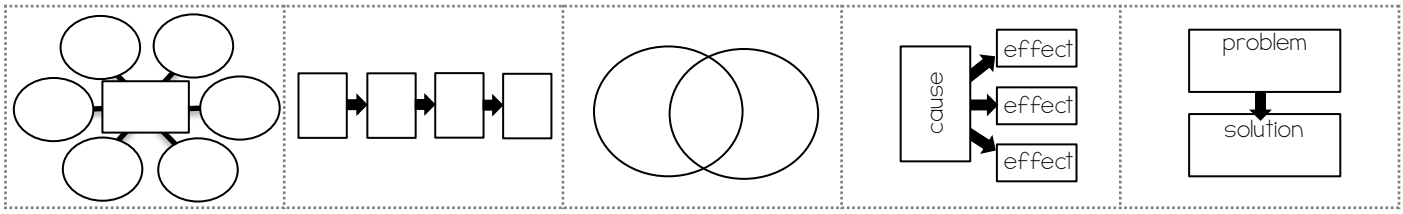
2. Choose one of the following visual diagram types that best matches the text structure in Spill: What We Did and How to Fix It. Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in Spill: What We Did and How to Fix It?

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_____

•RESPOND•

Compare: Oil Spill in the Gulf and Spill: What We Did and How to Fix It

NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

What was the cause and effect of the Deep Horizon oil spill?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

The Year-Round School Debate

There is a debate in the world of schools right now. It is not new, but people are starting to have really strong opinions. Some people think it is better for school to be all year long, with no big break in the summer. Others think we should continue with a traditional school year and a long summer vacation. Both schedules usually have about 180 days of school each year, but vacations are scheduled differently. Instead of 10-12 weeks off in the summer, kids would have shorter three-week breaks throughout the year. Sorry kids, but there is a lot of evidence saying that a year round school is better.

Not all schools in the world have long summer vacations. Many schools in Asia, the Middle East, and Africa go all year round. International test results show that students from Asia's year round schools do much better than Americans in traditional schools. They still get breaks, but they are short breaks, only 2 or 3 weeks. The theory is that students do not forget anything they learned over summer break. Teachers do not have to spend the first few weeks of September reviewing what they learned the year before. A year-round teacher named Paul Anderson from Eugene, Oregon said he used to spend three weeks reviewing after summer break before starting new units. Research at Johns Hopkins University backs this up. They found that most students lose about two months of math skills and reading achievements over the summer months on a traditional calendar.

Summer vacation is not all fun and games. Students love the beginning of summer, with the promise of so much fun free time. At first, summer is great. Kids are free to do whatever they want, but soon they run out of things to do. Surprisingly, most kids get bored. A survey of 2,000 parents in July of 2014 showed that over half of their kids claimed to be bored in the second month of summer vacation. In fact, "I'm bored" was the most common comment parents heard.

In the summer, kids do not get to see their friends every day. Instead, they may be at home with less structured activities. The truth is that most students do not know what to do with such a long stretch of time in the summer.

Evidence shows there is also a burden placed on parents when it comes to summer break. The 2014 survey found that nearly 2/3 of the parents found planning summer vacation the most stressful time of the year. Parents still have to go to work for most of summer, but their kids are at home instead of school. Babysitters and summer camps are expensive. According to the American Camp Association, the average summer day camp cost is $304 per week. Some specialty day camps cost as much as $1,000 per week. For a 12 week summer break, that adds up to a lot of money that families need to spend when their kids are not in school. Trying to figure out what to do with children during summer can be difficult for parents.

Is it time to start looking more at a year round school model? If it benefits kids and families, it might be the best choice.

School's Out For Summer!

Many people believe that the reason many kids have summer vacation is because in earlier days parents needed kids to help with the farm. However, this is not true. Not much farm work is done during the summer months. Most of the work for farming took place during the spring with planting and fall for harvesting. So then, why most do schools have a big summer break?

In the 1800s, kids went to school all year. However, it was not mandatory that they go. There were no punishments for missing school. During the summer, it would get really hot in the school house because there was no air conditioning yet. Those hot classrooms made it very hard for students to listen. Can you imagine trying to listen when you are hot and sweaty? Schools started to notice kids not coming in on the hottest days.

Another reason for kids not coming during the summer was due to the school year being broken up into two terms. There was a winter term and a summer term. The winter term was about the same time period of most school years today. Almost all children attended this one. Not many kids went to summer term. Even though the classrooms were hot, this was not the only reason most kids skipped summer term. It also had to do with who was teaching. Usually a well-educated adult taught during the winter term. A young teenager was usually the teacher in the summer term. Because of the teacher's age, many felt that the quality of education was not as good.

The biggest reason that summer vacation began was because of the city kids and their parents. The city was mostly made up of brick buildings and cement. These materials absorbed the heat from the sun very quickly. This made the whole city feel even hotter than being out in the open air of the country. At this time, working

people were getting more and more vacation time from their jobs. To escape the heat, they would pack up and head out for some summer time fun. This happened so often that schools decided it was time to take some action.

A theory by some people helped this decision along. Many people at this time believed that our brain was a muscle. Like any muscle, it needs rest after being worked out. Schools decided that if children were using their brain muscle all school year long, they needed to give it some time to rest.

After looking at all of the reasons why kids were not showing up to school, officials decided that summer would be a time for students and teachers to relax. It allowed families to enjoy time with one another as they escaped the heat. It saved schools money so that they did not have to pay teachers when very few students were in attendance. And it also gave teachers time to prepare for the following year. We can all guess that the kids did not complain about having to take a break in the summer!

RI.5.5 #4 a

•RESPOND•

Compare: The Year Round School Debate and School's Out For Summer!

NAME:

RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in <u>The Year Round School Debate</u>.

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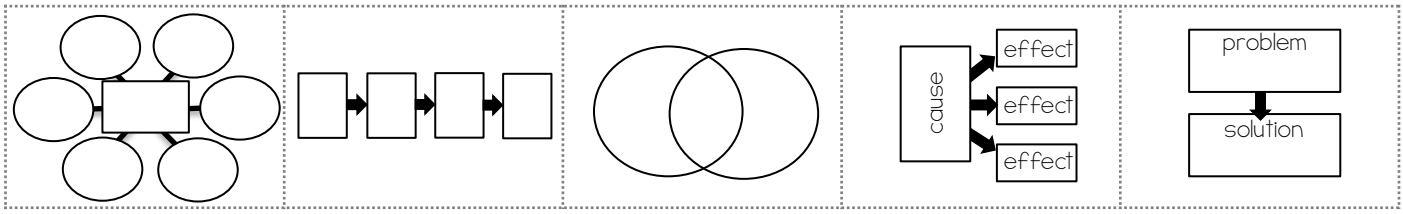
2. Choose one of the following visual diagram types that best matches the text structure in <u>The Year Round School Debate</u>. Draw and complete the diagram in the space provided.



RI.5.5 #4 b

•RESPOND•

Compare: The Year Round School Debate and School's Out For Summer!

NAME:

RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in School's Out For Summer!

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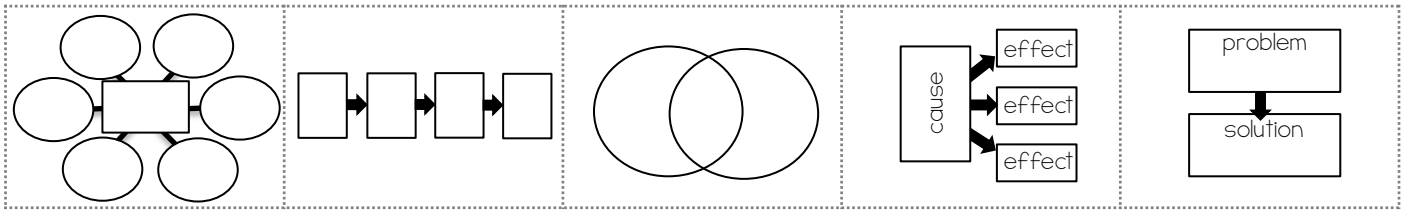
2. Choose one of the following visual diagram types that best matches the text structure in School's Out For Summer! Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in The Year Round School Debate and School's Out For Summer!

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RI.5.5 #4

•RESPOND•

Compare: The Year Round School Debate and School's Out For Summer!

NAME:

RI.5.1 RI.5.7 RI.5.9

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

Do you think schools should be year round? Why or why not?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

How the Potato Conquered the World

Most people know that Christopher Columbus sailed from Spain across the Atlantic Ocean to the Americas. His men were the first Europeans to see the "new world," the continents of North & South America. They were from the 'old world' of Europe, Africa, and Asia. Of course, the new world had millions of Native Americans already living there, but it was new to the Europeans. The people were new, the landscape was new. Many plants and animals were unlike anything they had seen before in the "old world."

One of those plants was the potato. The potato is a starchy tuber. A tuber is a root plant that grows in the ground and kind of looks like a tube. The potato is a very nutritious plant. It is great for people to eat. It has many vitamins and minerals that humans need. Most importantly, it has a lot of energy. It is also very easy to grow. The potato is very adaptable and can grow in many climates. Potatoes today are grown everywhere in the world - from the rainy climate of Ireland, to the dry and arid regions of mountainous Peru.

The potato comes from the Andes, the mountain range on the west coast of South America. In countries like Peru and Bolivia people have grown potatoes for thousands of years. The first potato famers were Native Americans who lived in the Andes Mountains. They probably started planting the potato 10,000 years ago. We don't know the exact date, but we know it was a long time ago.

To the Europeans, the potato was a strange new plant. They saw that Native Americans were eating it, so they ate it too. We don't know if Columbus ever ate a potato, but we do know that some Spanish sailors took the potato back to Europe with them. In 1550, potatoes started to be grown in Spain. By 1590, potatoes began to be grown in Britain and Ireland. They were possibly spread there by British pirates who took Spanish ships full of potatoes back to their homeland.

Soon, other Europeans started growing potatoes too. By the early 1600s, there were potato plants all over Europe. Even in modern times, it is a major part of the European diet. In fact, the potato has been a part of European menus for so long that most Europeans assume it has always been there.

Europe wasn't the only place in the "Old World" that loved the potato. In the 1600s, Spain also traded with China, Japan, and India. Asia had lots of things that Europeans wanted, including spices for their food. Sometime in the 1600s, they brought the potato to Asia. Asians loved the potato for the same reasons Native Americans and Europeans had loved it. It was easy to grow and was full of energy. It also has lots of vitamins and minerals. Soon the potato was planted all over Asia. Today the potato is also a staple crop in most Asian countries.

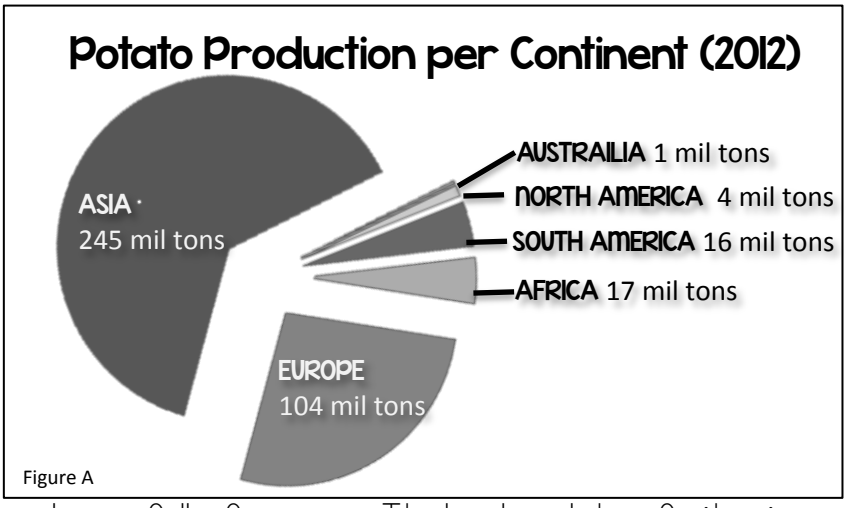

Figure A

The British colonists brought the potato to North America in the 1700s. Even though the potato was from South America, they thought it was a European food. It took longer for the potato to reach Africa and Southern Asia. Most of Africa has a tropical climate, where plants grow easily. The fact that the potato grows in many climates was not so important. Africa also already had tuber plants called yams grown in Africa and Southern Asia. Like potatoes, yams are also nutritious with many vitamins and minerals. In the 1800s, potatoes began to be planted in Africa and Southern Asia.

Now the potato is planted everywhere in the world. It has conquered our menus.

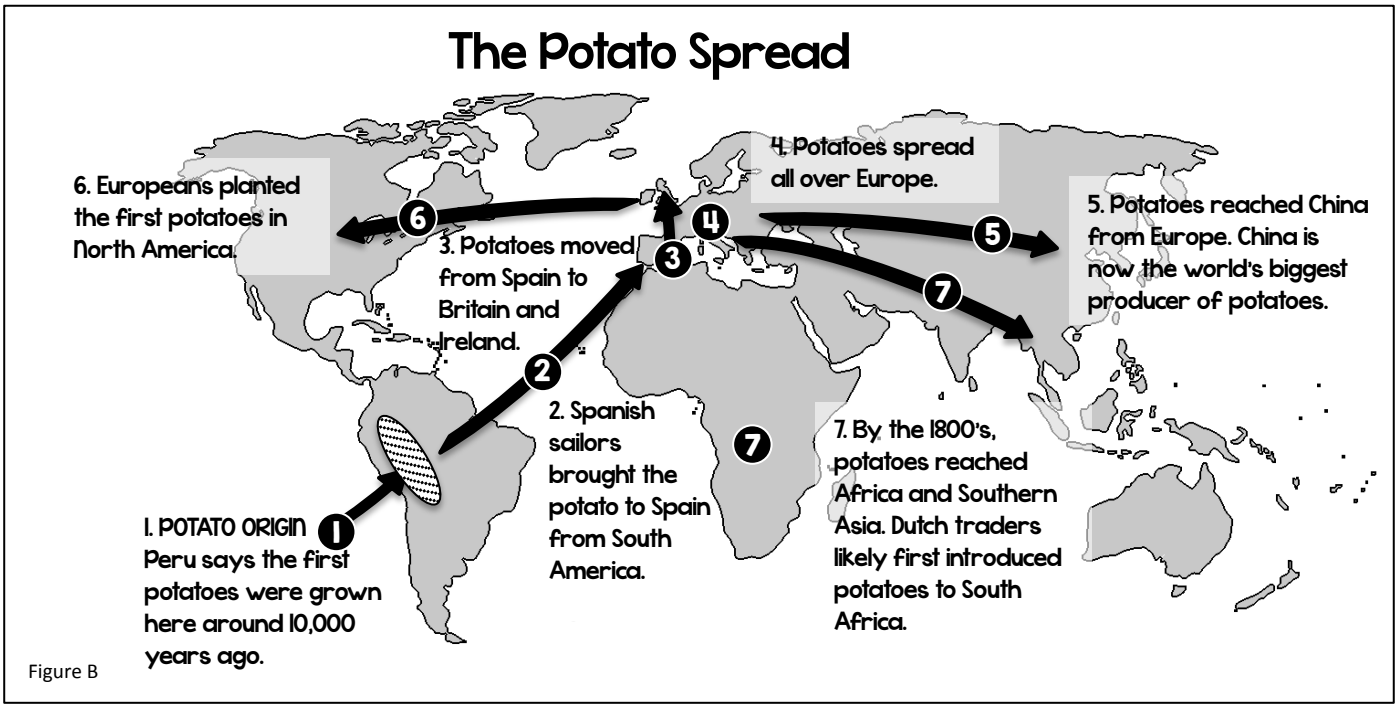

Figure B

The Potato Saves the Day

What do you do when your crops fail? It could mean you don't have enough food to feed your family. This was the problem many people faced in European countries in the 1500's, 1600's, and 1700's. They grew a lot of grain, wheat, and rice. But sometimes, these crops did not turn out like expected. There were droughts, or long periods of time without water. If this happened, then the crops would not grow. Sometimes there were diseases that killed off wheat and grain. Other times, the wheat and rice heads would grow so large that they would fall over and rot. All of these factors could cause a famine which is a period of time with little to no food.

The potato eventually became the super hero for European countries. It was introduced to the European countries by a group of Spanish conquistadors in the late 1500's. Potatoes arrived in Spain first, and were used to feed animals. People did not want to eat them because of how ugly looking they were. They came in very weird shapes and many different colors. They were also pulled from the ground. Other people thought that these potatoes were some sort of creation by witches. They did not become popular for another several decades. The poorest of people even refused to eat them. It took soldiers to come in and convince the people that they were safe to eat. Slowly, potatoes grew in popularity. It was the upper class people who first started to add them to their diet.

Eventually the potato made its way into Ireland. The people of Ireland were very poor and faced famines just like other countries. They also had another problem. The people who farmed land usually were renting the land from wealthier people. So they had to plant and grow crops and give these crops to the landowners as a form of payment. The farmers only had a little section of land to grow crops to feed their own families. Most often there was not enough food to support the entire family. Everything changed for the Irish people when the potato was introduced. This is because potatoes grow in almost any climate. But the cool, moist weather in Ireland was perfect for growing them. This allowed the Irish farmers to

grow a lot of them in a very small section. This made it a perfect crop. The potato provided enough food for a farmer's family and still gave them enough to pay the landowners. Not only was there enough food to eat, but the potato was healthy. Potatoes are packed with a lot of nutrients that people need. As a matter of fact, potatoes provided so many nutrients that when put with milk, not much else was required in their diet. Potatoes gave the people the energy that they needed to work long days. And because they grow underground, it did not matter how big they grew.

The potato became the solution to many problems of the Irish people. It helped them feed their families and still be able to pay rent to the landowners. The population of Ireland increased a lot once the potato was introduced. People were a lot healthier and happier.

The credit goes to the Spanish conquistadors who took these potatoes from people in what is now Peru and Bolivia in South America. Not only did the potato save the people in Ireland from famine and death, but it helped many across the world. The potato now has become a staple food in our diets even to this day.

•RESPOND•

Compare: How the Potato Conquered the World and The Potato Saves the Day

NAME:

1. Describe the **TEXT STRUCTURE** the author used in How The Potato Conquered the World.

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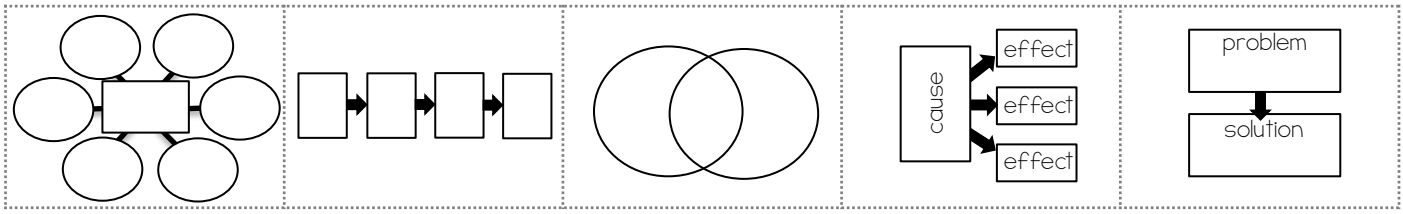
2. Choose one of the following visual diagram types that best matches the text structure in How the Potato Conquered the World. Draw and complete the diagram in the space provided.



RI.5.5 #5 b

•RESPOND•

Compare: How the Potato Conquered the World and The Potato Saves the Day

NAME:

RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in The Potato Saves the Day.

_____

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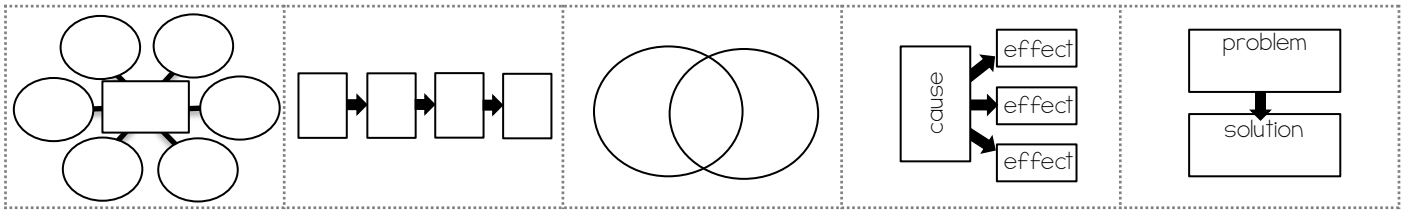
2. Choose one of the following visual diagram types that best matches the text structure in The Potato Saves the Day. Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in How the Potato Conquered the World and The Potato Saves the Day?

_____

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_____

NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

How have potatoes been a helpful crop in history?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

Remembering the Great Depression

By Helen Braff, 83 years old

You can read about The Great Depression in history books, but living through it was an experience that is hard to put in words. I remember the good times and then I remember when it all went bad. It was hard because we never knew if things were going to go back to the way it was.

When I was six years old, my dad began a milk delivery service. Every day, my dad would head to the dairy to pick up his deliveries. He would visit each house in our neighborhood, leaving fresh bottles of milk on porches. The people in the houses loved having the milk delivered each morning. My dad enjoyed making his deliveries each day.

Around the same time my dad began to deliver milk, I remember people talking about the banks. Nothing made much sense to me. I just could not figure out how a "run on the bank" could be so important.

My dad kept delivering milk, but he certainly did not have as many customers. Sometimes he did not get paid at all. No one had as much money as they used to have.

My school closed because no one could pay the teacher. They also could not pay to keep the classrooms warm. Our house was also cold because food was more important than heat. Dad always told us to wear our coats inside. I used to sleep wearing a coat and all of my sweaters. Even with this, my sister and I had to snuggle up while sleeping so we could stay warm.

A lot of my friends had to move away. Some moved so their parents could find work. Other kids had to move in order to live with other relatives. People really got together. We all knew we were in the same boat. If my mother could not pay the grocer, he knew that she would the next time there was a paycheck. Everyone was in the spirit of helping out. That is the only thing that saved us.

The Great Depression

The Great Depression was a financial disaster that spread around the entire world. It lasted for the decade of the 1930s. The Great Depression did not get better until World War II started in 1941.

Several factors led to the Great Depression. During the early 1920s, laws that controlled how banks lent money were weak. The weak laws allowed people to borrow too much money from banks. People owed more money than they could pay back. At the same time, many factories were making things for people to buy. Factories began to make too many goods. People were not able to buy all of the products and factories began to lose money.

The Wall Street Crash of 1929 was when the Great Depression actually began. On October 29, 1929, the stock market in America lost $14 billion dollars in just one day. By the end of that week, the stock market had lost over $30 billion dollars.

As news of the stock market crash spread, ordinary citizens went to their local banks to take the money out of their savings accounts. The rush of people to withdraw their money was called a "run on the bank." The banks did not have enough cash in their vaults to handle the bank runs. Panic started to spread through the country. Many people lost every dollar they had saved in the bank.

As the financial disaster spread, many businesses began to fail. People no longer had cash to buy products. Shops and factories could no longer stay in business. Large numbers of people lost their jobs. America was in the Great Depression. During the 1930s, 1 in 4 people was out of work. Nearly one million farms were abandoned when farmers could no longer pay their debts. Thousands of schools closed due to lack of money needed to run the schools.

By the end of the 1930s, the toughest years of the Great Depression were over. People began to find work again. Banks were growing stronger. As the world headed into World War 2, America was on the way to recovery.

RI.5.6 #1

•RESPOND•
The Great Depression

NAME:

RI.5.6

1. Answer the question below with the information found in three different text sources. You will need to efficiently find a third text source that can help answer the question.

WHAT WAS LIFE LIKE DURING THE GREAT DEPRESSION?

SOURCE #1: Remembering the Great Depression

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

_____

SOURCE #2: The Great Depression

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

_____

RI.5.7

SOURCE #3: _____

_____

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

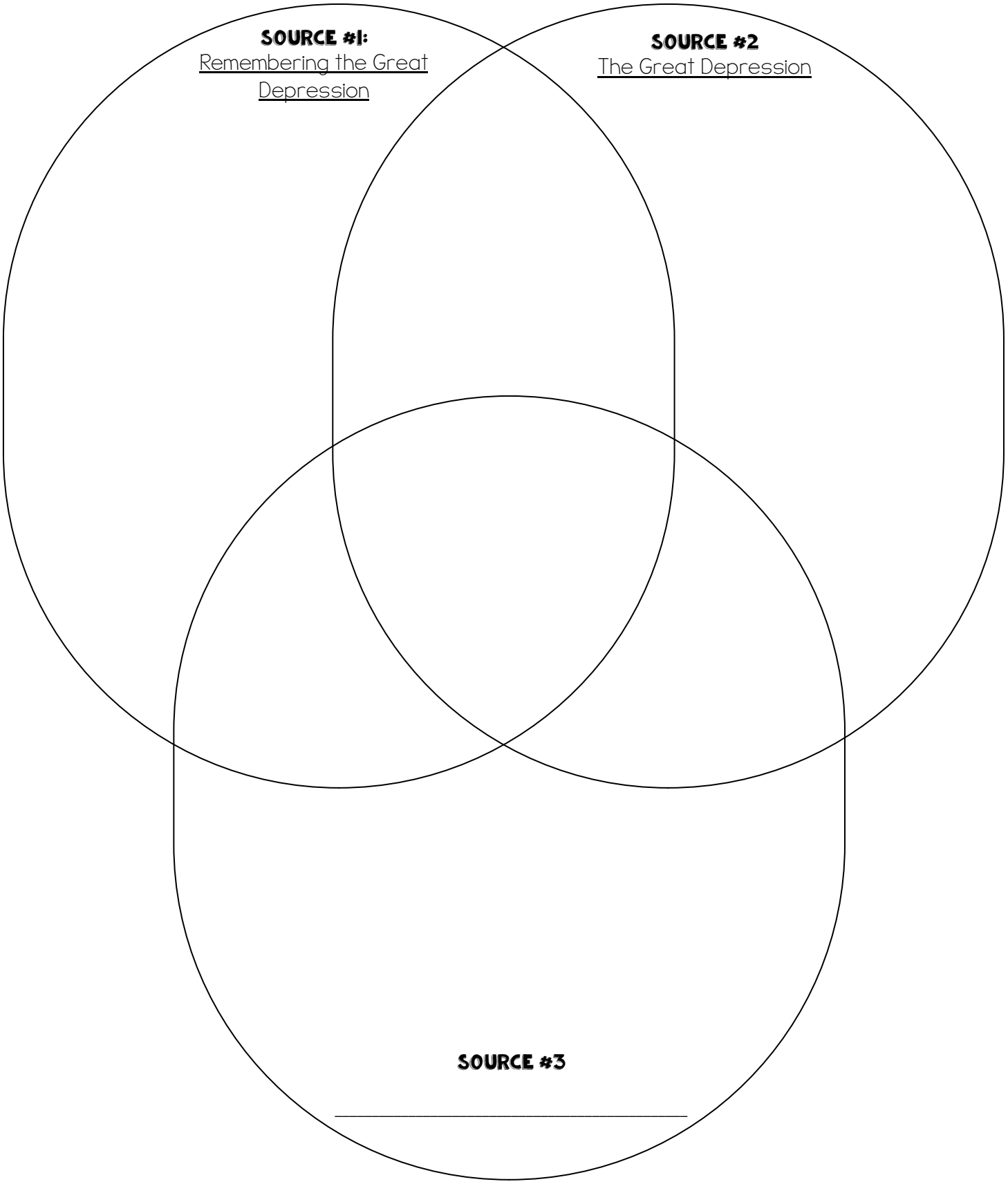
_____

•RESPOND•
The Great Depression

NAME:

RI.5.6

1. Use the Venn diagram to explain the important similarities and differences in the point of view represented by three sources of information related to the Great Depression.



NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

What were the effects of The Great Depression?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the attached articles that you used in your writing.

The Berlin Wall

In 1945, World War II ended and the country of Germany was left defeated by the Allied countries. The Allied Countries were the United States, France, England, and the Soviet Union. After the war, the Allies divided Germany. The United States, France, and England were friends and formed Western Germany. The eastern portion of Germany was given to the Soviet Union and formed East Germany. Germany's capital city was Berlin. When the Allies divided Germany, they also split Berlin into two sides. East Berlin was ruled by the Soviet Union. West Berlin was ruled by the United States, France, and England.

The Soviet Union had a very different way of life than the Western countries. Eventually, the two became so different that they stopped being friendly with each other. The Soviet Union would not allow East Germans to travel to West Germany. In 1948, the Soviet Union even stopped letting food and other supplies come to the capital of Berlin (the city of Berlin was completely inside the border of East Germany). The United States, France, England, and other countries had to fly food to West Berlin. In 1949, East Germany relaxed the restrictions. Life in the two Germanys was different, but people were again able to travel between the sides. A person could live in East Berlin, but travel easily to West Berlin.

By the end of 1950s, the Soviet Union and the western Allies really did not like each other again. The Soviet Union stopped letting people move from East Germany to West Germany. In 1961, several thousand people fled from East to the West. They wanted to live a free life. In August, the leader of the Soviet Union closed the border between East and West Germany. There could be no more travel between the two countries. Within two weeks, East Germany built a wall that divided Berlin in two. The Berlin Wall had become a huge barrier that separated two parts of the city. The Berlin Wall was more than 80 miles long. People on one side of the wall could not cross. Families and friends were divided and forbidden to see each other again.

After the wall was constructed, travel between the two sides stopped. For years, people could only pass from one side to another by visiting special checkpoints. At the checkpoints, an officer could decide if they could go to the other side. Most of the time, they were not allowed to cross the wall.

On November 9, 1989, nearly thirty years after the wall was constructed, East Berlin declared that people could now travel to all parts of Berlin. More than 2 million people from East Berlin visited West Berlin during the first weekend that travel was allowed. People watched the wall being torn down. Germans brought hammers and chisels in order to help bring down the wall by themselves.

Parties were thrown to celebrate the end of the Berlin Wall. Germans sang and danced in the streets. The people of East and West Berlin were reunited once again. East and West Germany were officially reunited on October 1, 1990.

My Side of the Wall
By Jan Acker, 51 years old

I will always remember November 9, 1989. A part of my life changed forever that day. I was 25 years old, and for my entire life, I had been forbidden to travel to East Berlin. Even though I could see houses in East Berlin from my apartment window, I could not go.

My dad's childhood best friend was stuck on the other side. It is crazy to think that everyone in East and West Germany spoke the same language and had the same history, yet we could never see each other. My father could not talk about the wall without tears filling his eyes.

That day, our neighbor knocked on the door and shouted "turn on the radio!" When I did, it was hard to believe what I was hearing. The wall was open! I looked out the window and people were pouring into the streets. People were laughing and crying with joy.

I went to the wall the night I heard the news. I brought a chisel and a hammer. I wanted to help bring the wall down. Part of me was eager to see the other side. The other part of me just wanted it destroyed. I kept a small rock from the wall. It is on my shelf to remind me of that happy day when Germany finally became one country again.

RI.5.6 #2 •RESPOND• The Berlin Wall

NAME:

RI.5.6

RI.5.7

1. Answer the question below with the information found in three different text sources. You will need to efficiently find a third text source that can help answer the question.

WHAT WAS LIFE LIKE IN BERLIN DURING THE TIME OF THE BERLIN WALL?

SOURCE #1: The Berlin Wall

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

_____

SOURCE #2: My Side of the Wall

POINT OF VIEW THIS TEXTREPRESENTS:

_____

_____

_____

SOURCE #3: _____

_____

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

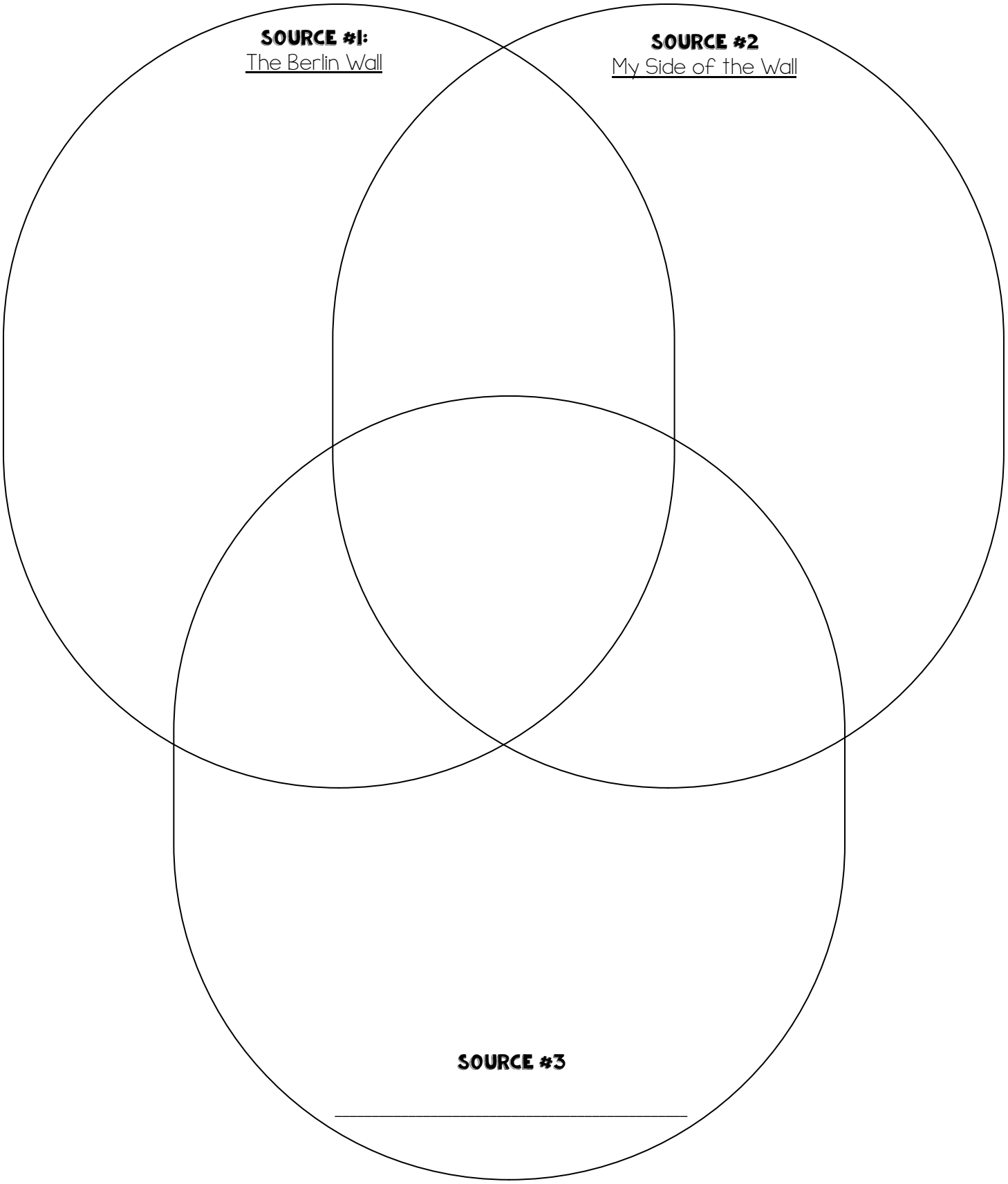
_____

•RESPOND•
The Berlin Wall

NAME:

RI.5.6

1. Use the Venn diagram to explain the important similarities and differences in the point of view represented by three sources of information related to the Berlin Wall.



NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

What was life like in Berlin during the time of the Berlin wall?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the attached articles that you used in your writing.

American Explorers: Lewis and Clark

For nearly a century, France owned the land that is located in the middle of the United States. In 1803, however, American President Thomas Jefferson bought the land from France. This real estate deal was known as the Louisiana Purchase.

After the deal was finished, President Jefferson wanted to know what all this new land looked like. He also wanted to know if one single river flowed all the way from the Atlantic Ocean to the Pacific Ocean. To find out the answers to his questions, the President decided to send a team of explorers into the new land.

President Jefferson chose Meriwether Lewis and William Clark to lead a team that would travel to the Pacific Ocean. Thirty-three men joined them on their journey. One woman, known as Sacagawea, also traveled with Lewis and Clark. She delivered a baby, a boy nicknamed Pompy, while on the trip. A large black Newfoundland dog named Seaman also joined the Lewis and Clark Expedition.

Lewis and Clark's trip was known as the Corps of Discovery Expedition. President Jefferson asked the explorers to write down everything they saw on the journey. He wanted them to write about any new mountains, rivers, and lakes that they found in the West. The President also wanted the Corp of Discovery members to journal about every new plant, animal, reptile, and bird that the team found as well.

The Corps of Discovery team set out on their trek in May of 1804. They traveled the entire distance by canoe and by foot. Among the items the team took with them was food, rifles, and clothing for a harsh winter. They carried items such as beads and medals with them that they could trade with Native Americans. They also packed science equipment they would need in order to journal about what they found.
The Corps of Discovery Expedition faced many hard times on their trip. The team dealt with dangerous rivers, hunger, cold weather, and illness.

Eventually though, the team arrived at the Pacific Ocean on November 7, 1805. This was nearly one and half years after they had left on their trip. The team had done what President Jefferson had asked them to do. The Corps of Discovery had found a way to cross the entire country.

After arriving at the Pacific Ocean, Lewis and Clark's group decided to stay. They camped there for the winter of 1805-1806. They built log cabins in Oregon and called their winter home Fort Clatsop.

In March of 1806, the Corps of Discovery team began their return trek. Again, they traveled the entire distance by canoe and by walking. Lewis and Clark and their team arrived in St. Louis, Missouri on September 23, 1806. The expedition had finally arrived back home.

During their trip, the team met more than 70 Native American nations. They also wrote about more than 200 unknown plants and nearly 170 animals, fish, and birds. A few of the animals identified by the Corps of Discovery include the grizzly bear and the prairie dog. Along their journey, Lewis and Clark created more than 140 maps that explained the location of many new rivers, lakes, and prairie land.

The entire Corps of Discovery Expedition covered more than 8,000 miles in less than two and half years. Lewis and Clark were among the first Americans to ever cross the continent by land.

Figure A

LEWIS AND CLARK EXPEDITION 1804-1806

Original Journal Excerpts

(Note: These are direct excerpts from the Lewis and Clark Journals so spelling and grammatical errors are authentic and made by the original authors.)

May 14, 1804

a Cloudy morning fixing for a Start Some provisions on examination is found to be wet rain at 9 oClock many of the neighbours Came from the Countrey mail and freemail rained the greater part of the day, I set out at 4 oClock to the head of the first Island in the Missouri 6 Miles and incamped, on the Island rained.

Unspecified Date in May, 1804

The Country about the Mouth of Missouri is pleasent rich and partially Settled. On the East Side of the Mississippi a leavel rich bottom extends back about 3 miles, and rises by Several elevations to the high Country, which is thinly timbered with Oake &. On the lower Side of the Missouri, at about 2 miles back the Country rises graduilly, to a high plesent thinly timberd Country, the lands are generally fine on the River bottoms and well Calculating for farming on the upper Country.

February 11, 1805

The party that were ordered last evening set out early this morning. the weather was fair and could wind N. W. about five oclock this evening one of the wives of Charbono was delivered of a fine boy. it is worthy of remark that this was the first child which this woman had boarn and as is common in such cases her labour was tedious and the pain violent; Mr. Jessome informed me that he had freequently adminstered a small portion of the rattle of the rattle-snake, which he assured me had never failed to produce the desired effect, that of hastening the birth of the child; having the rattle of a snake by me I gave it to him and he administered two rings of it to the woman broken in small pieces with the fingers and added to a small quantity of water. Whether this medicine was truly the cause or not I shall not undertake to determine, but I was informed that she had not taken it more than ten minutes before she brought forth perhaps this remedy may be worthy of future experiments, but I must confess that I want faith as to it's efficacy.

November 7, 1805

A cloudy foggey morning Some rain. we Set out early proceeded under the Stard Shore under a high rugid hills with Steep assent the Shore boalt and rockey,

the fog So thick we could not See across the river, two Canos of Indians met and returned with us to their village which is Situated on the Stard Side behind a cluster of Marshey Islands, on a narrow chanl. of the river through which we passed to the Village of 4 Houses, they gave us to eate Some fish, and Sold us, fish. Wap pa to roots three dogs and 2 otter Skins for which we gave fish hooks principally of which they were verry fond.

Those people call themselves War-ci-â-cum and Speake a language different from the nativs above with whome they trade for the Wapato roots of which they make great use of as food. their houses differently built, raised entirely above ground eaves about 5 feet from the ground Supported and covered in the same way of those above, dores about the Same size but in the Side of the house in one Corner, one fire place and that near the opposit end; around which they have their beads raised about 4 feet from the flore which is of earth, under their beads they Store away baskets of dried fish Berries & wappato, over the fire they hang the flesh as they take them and which they do not make immediate use.

Great joy in camp we are in View of the Ocian. in the morning when fog cleared off just below last village just on leaving the village of Warkiacum, this great Pacific Octean which we been So long anxious to See. and the roreing or noise made by the waves brakeing on the rockey Shores (as I Suppose) may be heard distictly.

September 23, 1806

a wet disagreeable morning. we Set out after breakfast and procd. on Soon arived at the Mouth of the Missourie entered the Mississippi River and landed at River deboise where we wintered in 1804. here we found a widdow woman who we left here & has a plantation under tollarable good way Since we have been on the Expedition we delayed a Short time and about 12 oClock we arived in Site of St. Louis fired three Rounds as we approached the Town and landed oppocit the center of the Town, the people gathred on the Shore and Huzzared three cheers. we unloaded the canoes and carried the baggage all up to a Store house in Town. drew out the canoes then the party all considerable much rejoiced that we have the Expedition Completed and now we look for boarding in Town and wait for our Settlement and then we entend to return to our native homes to See our parents once more as we have been So long from them.

RI.5.6 #3

•RESPOND•
Lewis and Clark

NAME:

RI.5.6

RI.5.7

1. Answer the question below with the information found in three different text sources. You will need to efficiently find a third text source that can help answer the question.

WHAT DID THE MEMBERS OF THE CORPS OF DISCOVERY DO DURING THE EXPEDITION?

SOURCE #1: American Explorers: Lewis and Clark

POINT OF VIEW THIS TEXT REPRESENTS:

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SOURCE #2: Original Journal Excerpts

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

_____

SOURCE #3: _____

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POINT OF VIEW THIS TEXT REPRESENTS:

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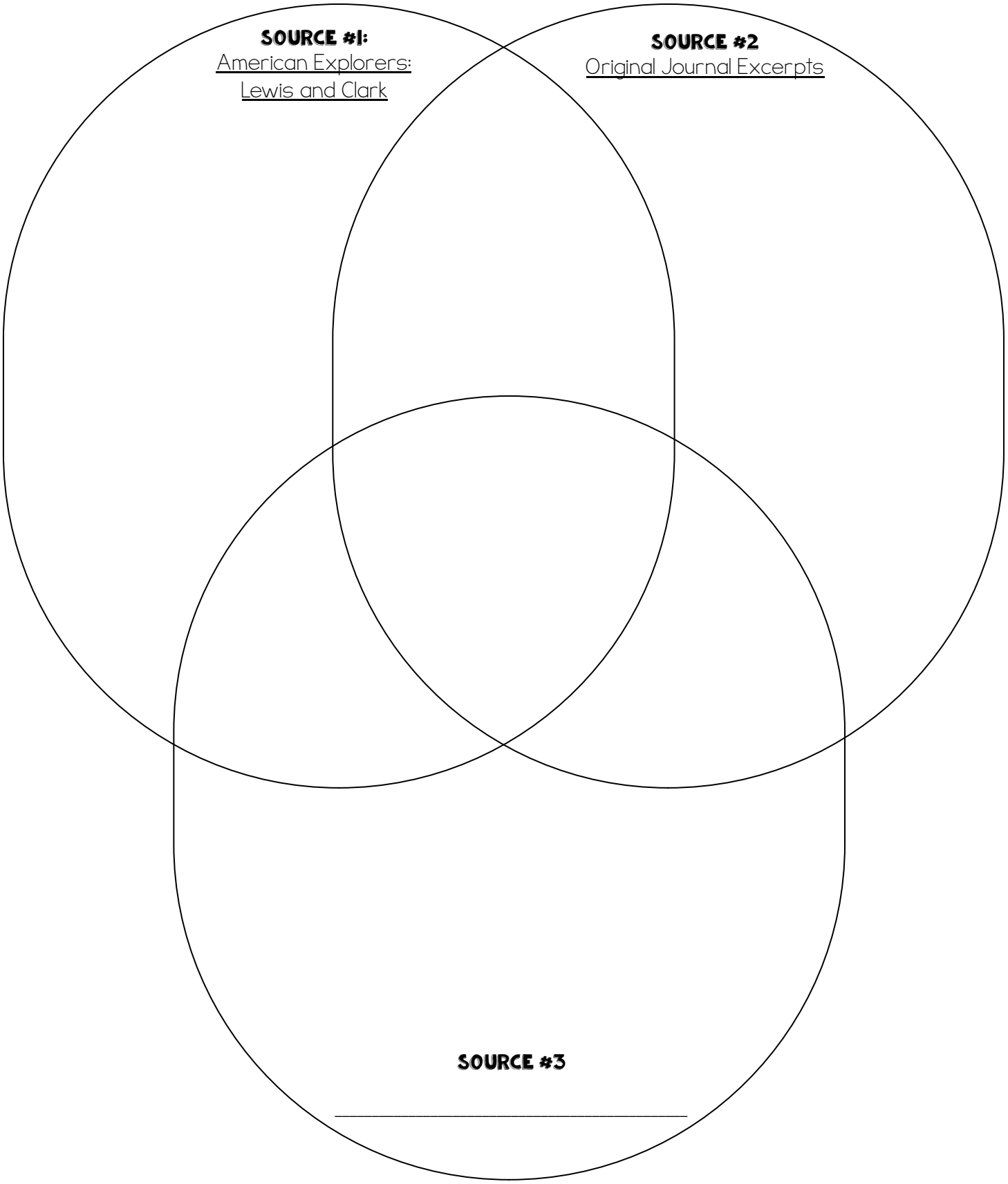
•RESPOND•
Lewis and Clark

NAME:

RI.5.6

1. Use the Venn diagram to explain the important similarities and differences in the point of view represented by three sources of information related to the Corps of Discovery.



NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

What was life like for the Corps of Discovery members during the expedition?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the attached articles that you used in your writing.

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The Unsinkable Ship

The claim was made that the great Titanic ship that took three years to build, was unsinkable. Making such a claim made superstitious people feel that it was doomed from the beginning. Others felt completely safe. There are many theories as to what actually caused the massive ship to go under, for those who didn't believe that an iceberg was really the cause. But no matter the feelings, theories, or opinions, a ship that held thousands of people sank into frigid dark waters on the night of April 14, 1912.

Just before midnight, guests aboard the Titanic heard a noise. None were sure of what the cause could be and not many worried. After all, this ship was unsinkable. Others began to stir in their rooms. Soon, the hallways filled with people asking questions. Crew members assured the passengers that everything was fine. In reality, the bottom of the ship had a 300 foot gash that was quickly filling with water. The Titanic had struck an iceberg.

Up in the wheelhouse, men were gazing out into the dark waters acting as a look out. It was slightly foggy and something appeared in the distance. It was sticking out of the water. Once it was realized that it was an iceberg, the alarms were sounded. The ship was turned and the crew thought they were in the clear as they missed the ice chunk sticking out of the water. But they were unaware that the chunk of ice sticking out of the water was just a small portion of the massive piece that rested below. The bottom of the boat had been ripped open.

The builders of the Titanic had made preparations for such an event such as a tear in the boat. They had 20 compartments that were built to contain water that might leak in so that the rest of the ship would not fill up. But there was a flaw in this design. The walls of these compartments were not tall enough. Water spilled over and the boat quickly filled. It would only take hours for the unsinkable ship to sink.

In the meantime, passengers were boarding the lifeboats. The women and children were first since the number of lifeboats was limited. This meant that husbands and wives, fathers and children were separated, never to be reunited. This was another downfall to the design. The builders were so confident in their creation that they assumed the lifeboats would not be needed. In fact, they only stored them onboard so that they could rescue other sinking boats.

The 20 lifeboats not even filled to capacity were lowered to the water and sent adrift. Most of the passengers and crew were left behind to fight for survival in which they stood no chance. Some accepted their fate and dressed in their evening attire to go down in a civilized manner. Others went back to their cabins to spend their final hours. Many scrambled to the top of the ship's bow as it pointed into the air while the back end sank below. Soon the entire ship would go under.

Those in the lifeboats did not hold much hope either. They had no food or water. They only had paddles to help them fight the currents. No one knew how long it would take to be rescued or if they even would. It would not be until dawn, when a light in the distance appeared. The R.M.S. Carpathia would only rescue 705 of the more than 2,000 passengers and crew.

The Titanic Sinking

By Rose Amélie Icard

(Miss Rose Amélie Icard boarded the Titanic as a maid to Mrs. Nelson Stone. This firsthand account was originally written in French 43 years after the event. This account is an unofficial translation.)

My most tragic memory of my trip around the world is the Titanic sinking. I'm 83 years old, but it is an hour of my life that I will never forget. I was in Paris when I met, through a friend interpreter, Mrs. George Stone, who was looking for a person who enjoys travelling to accompany her. My lifelong dream was about to be fulfilled. I decided to go with her to America.

We boarded the Titanic on April 10, 1912. It was Mrs. Stone who got the tickets in London, and told me, delighted, that we would board on the nicest liner. The nights before, I had dreamed about death. It may have been a premonition.

Commander Smith was chosen by the White Star Line to drive this floating palace for its first travel. I can still see him. He was a handsome old man with a white beard. It was he who helped me to get in the lifeboat.

During the four days on this splendid liner, it was all about celebrations and dinners of royal luxury. The dresses were sumptuous. It was a display of shining jewels and of rivers of diamonds worthy of an oriental splendor.

Towards eleven o'clock, Mrs. Stone and I went to bed. Three quarters of an hour later, as the liner was cruising at full speed, a terrifying shock threw us out of bed. We were intending to find out what was happening when a passing officer told us, "It is nothing, return to your cabin". I answered, "Listen to that loud noise, it sounds like water is flowing into the ship." Upon our return to the cabin I saw that our neighbor across the passageway had gone back to bed. Her daughter arrived in a panic, yelling, "Mommy, quick, get up. It's serious."

I helped Mrs. Stone dress. She took her life jacket and told me, "Come quickly." I was trembling, and still in my dressing gown. I took a coat, my lifebelt, and followed her on deck. There I found my travel blanket and my fur coat left on my lounge chair. They would miraculously preserve me as revealed later.

At this moment we witnessed unforgettable scenes of horror mixed with the most sublime heroism. Women, still in evening gowns, some just out of bed, barely clothed, disheveled, distraught, scrambled for the boats.

Commander Smith yelled, "Women and children first."

Firm and calm, in the throng, officers and sailors were taking the women and children by the arm and directing them towards the lifeboats. Near me were two handsome elderly people, Mr. and Mrs. Straus, proprietors of the great store Macy's of New-York. She refused to go into the boat after having helped in her maid. She put her arms around the neck of her husband, telling him, "We have been married 50 years. We have never left each other. I want to die with you."

The lifeboats were quickly brought down. By miracle, Mrs. Stone and I found ourselves in the same boat, where we were about thirty people. The officer said, "Row strongly, you only have twenty-five minutes to save your life".

I took the oars and rowed with so much energy that my hands were bleeding and my wrists were paralyzed because we had to hurry to escape the huge chasm that was going to be opened when the Titanic would sink.

As we were receding in a calm sea, weakly lit by the lantern that the officer was holding, I didn't take my eyes off the shining Titanic. Suddenly, there was darkness. There were shouts, horrible yells, and creaks of the boat. Then, that was it.

Sometimes, 43 years after the tragedy, I still dream about it. From the 2,229 passengers and crew, only 745 were saved.

After that night of terror, at first light, before the arrival of the Carpathia, which would collect us dazed, completely exhausted, our boat went back to the scene of the tragedy. The waters were calm and bare. Nothing could suggest that the sea giant was engulfed there. Alone, in front of us, two cathedrals of ice floating under the first sunlight, offered a spectacle of rare beauty.

When we were gathered in the dining room of the Carpathia, very painful scenes happened. The young women were there without their husbands. Mothers were without their sons. Some survivors told the story of the horrific moments during which all human feelings were opposed.

There had been sublime gestures. A stranger undid his safety belt to give it to an old woman who couldn't find a spot in any boat, and told her, "You'll pray for me".
The billionaire Benjamin Guggenheim, after having helped the rescue of women and children, got dressed in his finest suit, to die.

RI.5.6 #4 **•RESPOND•** *The Titanic*

NAME:

RI.5.6

1. Answer the question below with the information found in three different text sources. You will need to efficiently find a third text source that can help answer the question.

WHAT HAPPENED AFTER THE TITANIC HIT AN ICEBERG?

SOURCE #1: The Unsinkable Ship

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

_____

SOURCE #2: The Titanic Sinking

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

_____

RI.5.7

SOURCE #3: _____

_____

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

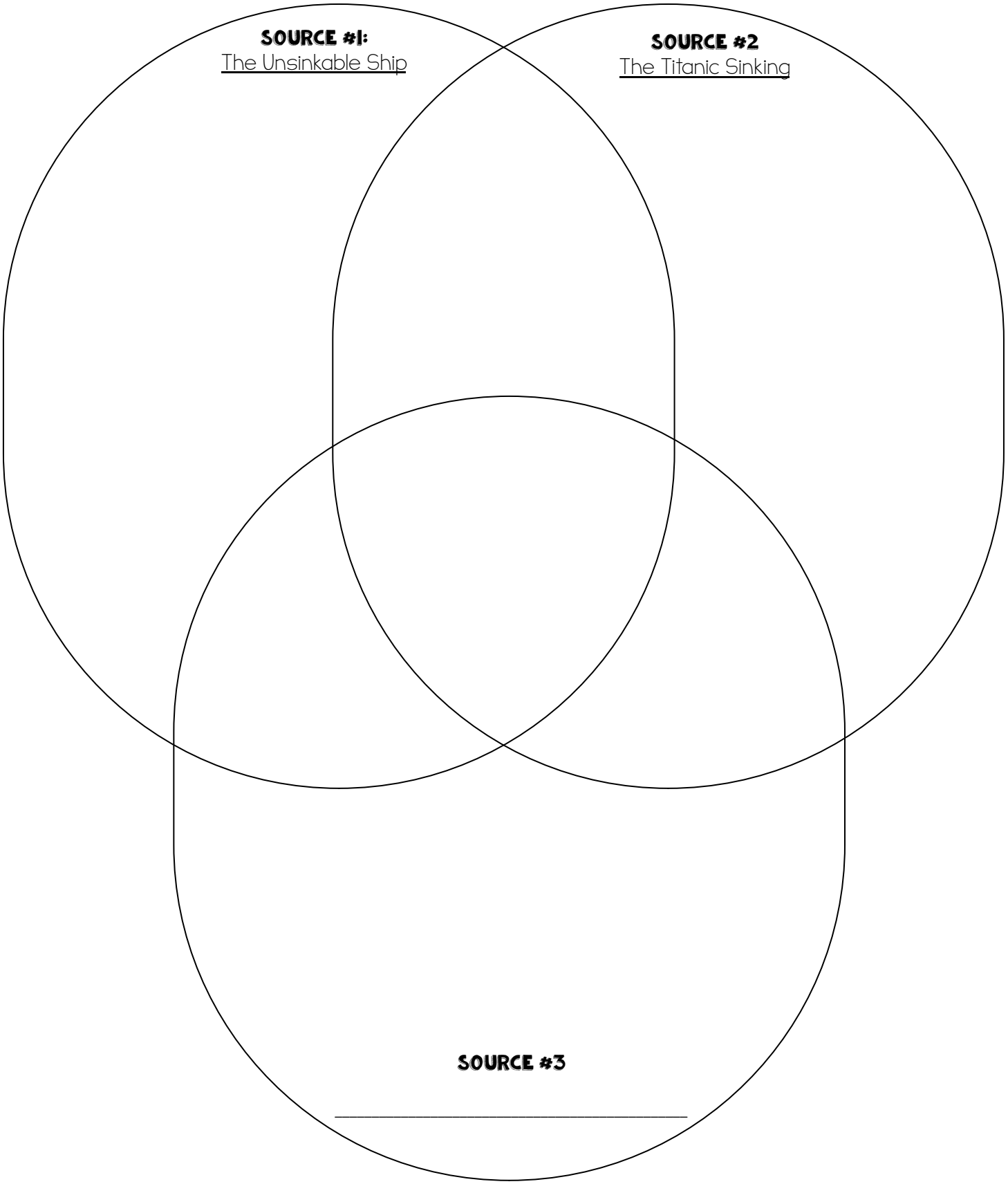
_____

•RESPOND• The Titanic

NAME:

RI.5.6

1. Use the Venn diagram to explain the important similarities and differences in the point of view represented by three sources of information related to the Titanic.



NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

What happened during the sinking of The Titanic?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the attached articles that you used in your writing.

Man on the Moon!

In 1961, President John F. Kennedy wanted the United States to work together toward a common goal. President Kennedy wanted America to put a man on the moon by the end of that decade. Many scientists and astronauts worked hard towards the goal. The American space agency known as NASA was in charge of planning the many missions into outer space.

NASA wanted to be sure that the spaceships were safe. The first spaceships that NASA built were sent into space without people on board. After a few setbacks and changes in designs, NASA was ready to send people into space. The first Americans orbited the Earth in October 1968. Two months later, three astronauts traveled to the dark side of the moon and back, but they did not land on the moon. Three more astronauts traveled to the moon and back in May 1969. However, they also did not land on the moon.

Three astronauts took off from Kennedy Space Center in Florida on July 16, 1969. Their NASA mission was to land on the moon. After traveling 240,000 miles in 76 hours, the Apollo 11 spaceship arrived at the moon. The main spaceship remained in orbit around the moon while a smaller lunar module traveled down to the surface. The smaller lunar module was called The Eagle. At 4:17 on July 20, 1969, the lunar module touched down on the moon. Astronauts on board reported back to Earth with the words, "The Eagle has landed."

Six hours later, astronaut Neil Armstrong opened the hatch of the lunar module. Television cameras recorded Armstrong as he gently made his way down the ladder. At 10:56 on July 20, 1969, Neil Armstrong became the first human ever to step foot on the moon. As he placed his foot on the powdery surface, he reported, "That's one small step for man, one giant leap for mankind."

Astronaut Buzz Aldrin joined Neil Armstrong on the moon 19 minutes later. Together, the two astronauts took photographs, ran scientific tests, planted a U.S. flag, and spoke to then President Richard Nixon.

After a few hours, the astronauts made their way back into the lunar module and closed the hatch. The two astronauts slept in the lunar module that night on the surface of the moon. On the afternoon of July 21, 1969, the lunar module began its journey back to the Apollo spaceship that had been orbiting the moon. The Eagle docked with the Apollo spaceship shortly after midnight on July 22, 1969. The astronauts then began their trip back to Earth. The crew of the Apollo 11 spaceship mission to the moon returned to Earth safely on July 24, 1969.

The Steps That Changed Us All

By Michael Smith, 57 years old

I was outside playing football with my friends when I heard my dad call my name. I knew that the time was finally here. We were going to watch history in the making. We all dropped what were doing. Once we got inside, we scrambled to find a place to sit. The adults were already there, gathered around the TV set. No one wanted to miss a second of the event.

The images we were seeing on TV were in black and white, but no one seemed to mind. We were witnessing the greatest scientific thing humans had ever done! American astronauts were going to land on the moon.

We watched the surface of the moon get closer and closer to the camera. Finally, we heard Neil Armstrong say "The Eagle has landed." Just a few minutes later, we watched Armstrong climb down a ladder. Everyone in the room held their breath. We listened to the TV for any words that would be spoken from the moon. As Armstrong stepped off the ladder, we heard him say "That's one small step for man, one giant leap for mankind."

I can clearly remember looking at my dad and seeing tears running down his face. The whole thing was a memory I will never forget. It was one of those times in life that seemed like it couldn't be real. It felt like all of the limits of reality just disappeared. Walking on the moon seemed as crazy as the idea of talking animals. It seemed like a fantasy, but it was very real. It is fair to say that my life changed a little on that day. Maybe it made me a little more willing to try things that I had never done before. If people could walk on the moon, then anything is possible, right?

RI.5.6 #5

•RESPOND• Man on the Moon

NAME:

RI.5.6

1. Answer the question below with the information found in three different text sources. You will need to efficiently find a third text source that can help answer the question.

WHAT HAPPENED WHEN MAN WALKED ON THE MOON THE FIRST TIME?

SOURCE #1: Man on The Moon

POINT OF VIEW THIS TEXT REPRESENTS:

_____

_____

_____

SOURCE #2: The Steps That Changed Us All

POINT OF VIEW THIS TEXT REPRESENTS:

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RI.5.7

SOURCE #3: _____

_____

POINT OF VIEW THIS TEXT REPRESENTS:

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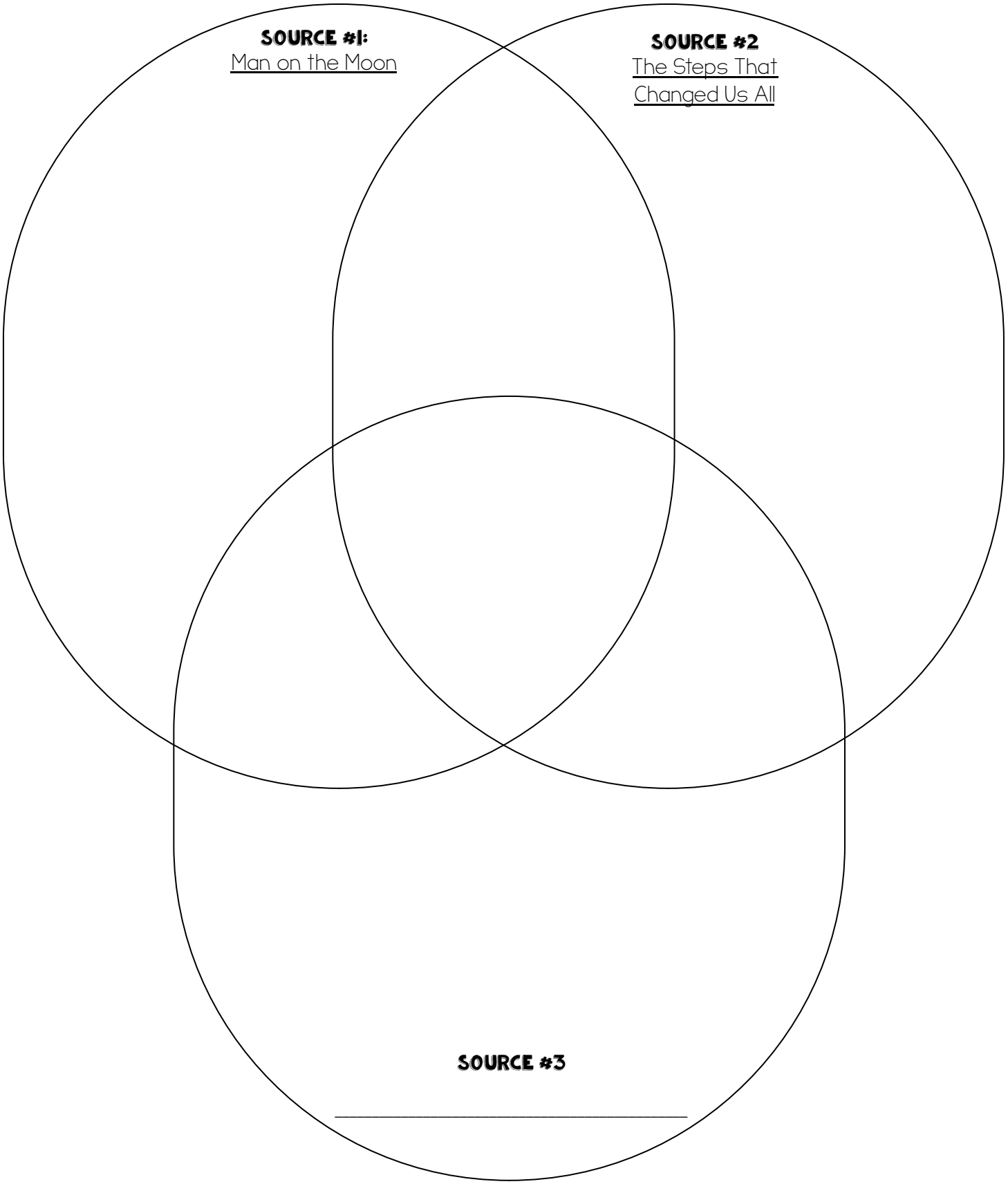
•RESPOND•
Man on the Moon

NAME:

RI.5.6

1. Use the Venn diagram to explain the important similarities and differences in the point of view represented by three sources of information related humans landing on the moon.



NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own. Include direct quotes from the attached articles in your response.

What do you think Neil Armstrong meant when he said, "That's one small step for man, one giant leap for mankind."

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the attached articles that you used in your writing.

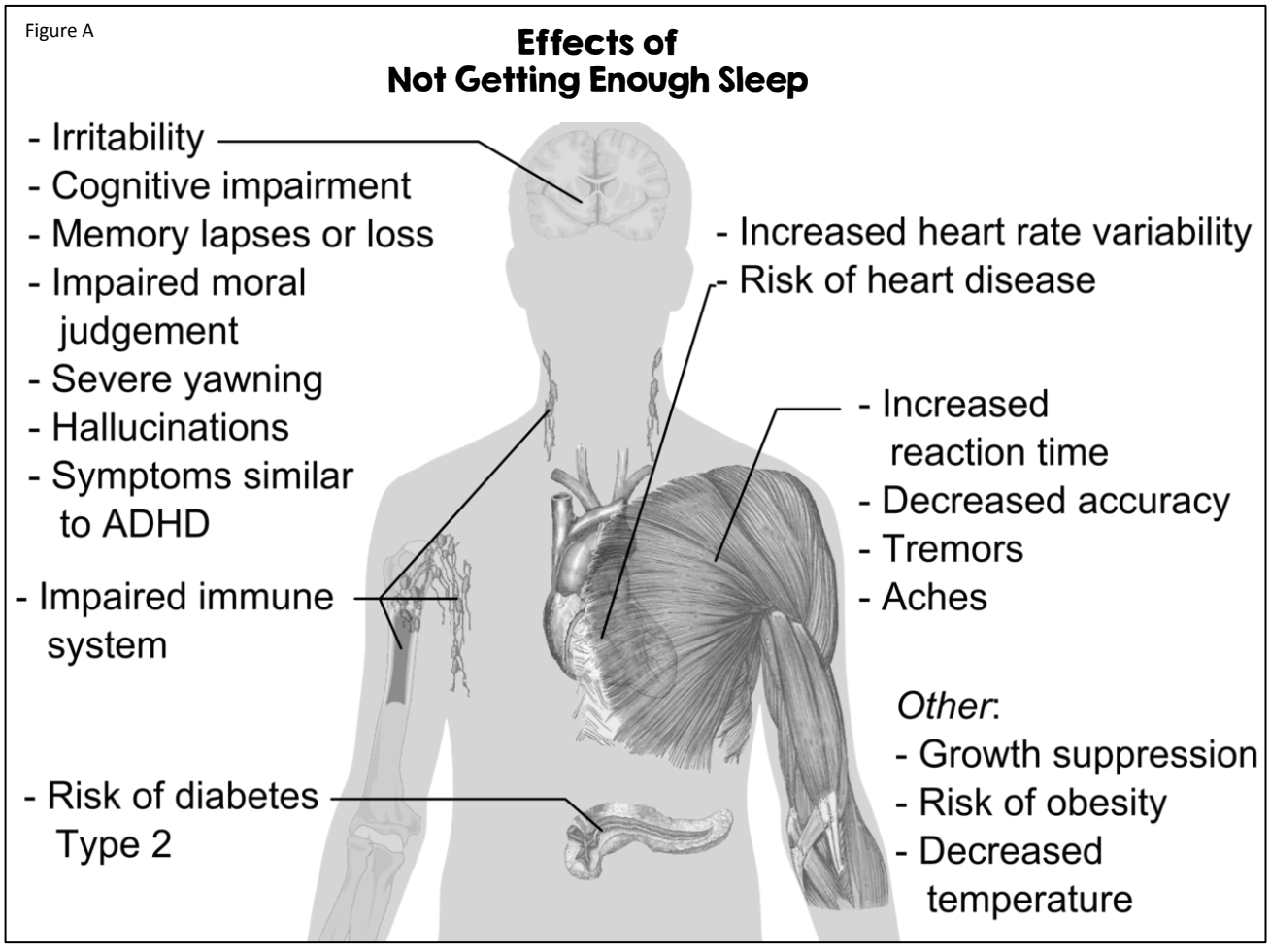
Do You Get Enough Sleep?

Humans should sleep up to one-third of each day. However, many people do not get enough sleep. A healthy lifestyle starts with getting plenty of sleep. How a person acts, thinks, and feels can all be affected by the quality of their sleep.

The National Sleep Foundation studied how much sleep each person needs. They found that children and adults need different amounts. When it comes to the number of sleeping hours needed, preschoolers need 11-13 hours each night. Kids in elementary school should sleep 9-11 hours each night. Teenagers need 8-10 hours of sleep. Adults need 7-9 hours of sleep.

The human body is designed to rest and renew during sleep. The brain gets ready for the next day as the body sleeps. The body's immune system does a better

Figure A



job fighting sickness after a restful night of sleep. The heart and other vital organs also rest and recover during sleep.

People who do not get enough sleep can be at risk for heart disease and other medical problems. They can have mood swings that affect how they act. Sleepy kids can have problems listening in class. Not enough sleep can create other problems in school, too. For example, tired students may struggle to even stay awake.

Often poor habits lead to not enough sleep. Making small changes can help a person have a good night of sleep. For example, it is important that everyone in the family has a sleep schedule. Homework and activities should be finished long before bedtime. Staying up too late to work can harm the body's chances of a good night's sleep. Going to bed and getting up at the same time each day helps the body stay in a good sleep pattern. It is helpful to have a bedtime routine. The same routine each night can help you relax before bed. A restful evening can help a person fall asleep more easily. For a truly good night's sleep, screens such as computers and phones should be taken out of bedroom. Technology is great during the day. However, at night, the lights and sounds from screens can make it harder to fall asleep. Finally, for the best sleep, it is important to watch what you eat in the evening. People who want to have a good night of sleep should avoid eating big meals. It is also important to avoid caffeine and sugar at night.

Every person should be concerned about the hours spent sleeping. Getting a good night's sleep is more than just the hours spent dreaming. A person might have problems falling asleep, staying asleep, or even getting a restful sleep. It is vital to have a restful night of sleep or a person's health can begin to suffer. Sleep is vitally important to every human being.

RI.5.8 #1

•RESPOND• Do You Get Enough Sleep?

NAME:

RI.5.8

1. What is the **MAIN TOPIC** of the text? _____

2. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

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A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

NAME:

RI.5.5

3. Describe the **TEXT STRUCTURE** the author used in Do You Get Enough Sleep?.

_____

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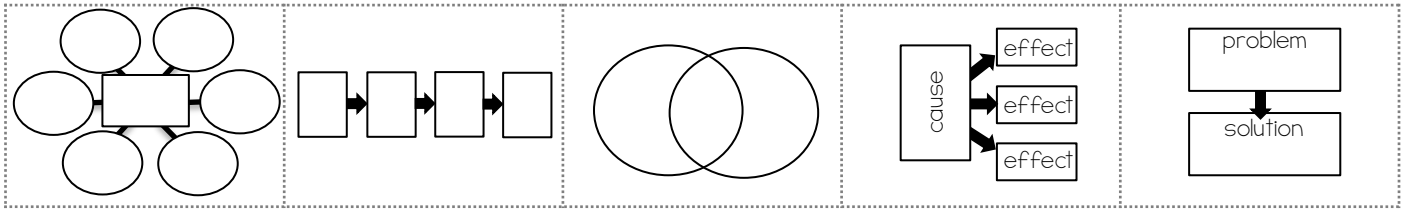
4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.1

5. After reading the article, do you believe you get enough sleep? Include quotes from the text that support your response.

Color the text you have quoted.

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Do Forests Need Fires?

When you think of a forest fire, you probably think that the forest is destroyed and all hope is lost. Fires can sometimes start on their own. This might happen during a very hot and dry season. If an area experiences a drought, or a long time without water, then fires are more likely to happen naturally. Other times, humans are the reason fires start. Most times people start fires by accident. However, there are a few times when fires are started on purpose by firefighters and foresters. The reason for this is to help a forest survive.

Have you ever heard the term 'spring cleaning'? This usually happens when the weather gets warmer and your parents are tired of tripping over old things that have been sitting around the house for way too long. So they get rid of stuff that is unneeded. Nature goes through the same thing. Over time, weeds shoot up and bushes become overgrown in a forest. Leaves, branches, and even trees fall to the ground. Soon, the ground becomes so covered that nothing new can grow. Even as plants, trees, and bushes die, they still keep the ground covered. This is where fires can actually be useful. Fires clean up the area, much like your parents clean up the house. The fire will burn up all the old, dead brush so that the new life gets a fresh start. This is called a surface fire. Foresters have found that one of the best ways to prevent out of control fires is to set controlled fires. Controlled fires are set on purpose to clean out flammable old brush that can easily catch on fire. In fact, a controlled fire can reduce the chances of wildfire in a forest by half for the next five years.

A second way that fires help a forest is by getting rid of unwanted plants and trees. Plants and trees that naturally grow in an area are called native species. Plants and trees that are not supposed to grow in an area are called invasive species. Sometimes these invasive species can find their way into a forest. They usually cause problems for the native plants. This is because the unwanted plants

begin to take all the nutrients in the soil that the native plants need to grow. Without the nutrients, the plants will die. A forest fire can destroy all of these plants and only the native ones grow back. In fact, foresters have found a fire usually kills invasive species for 3-15 years. Sometimes it kills the invasive species forever. This cycle gives the forest a chance for a fresh start.

Change is important to a healthy forest. Some species of trees have seeds that rely on the heat from the fire. In fact, scientists say some species must have fire every 3-25 years in order to stay alive. Some trees have fire resistant bark. They need heat to open up their seeds. Plants like Manzanita and Scrub Oak also need intense heat from a fire to open their seeds. Their seeds fall to the ground and work their way into the soil. They will stay this way until enough heat allows them to break out of their shell. Once this happens, new plants will begin to grow. Scientists have even found that the leaves of these kinds of plants are coated with flammable oil. This flammable oil catches fire easily to encourage regular burning.

Even though we may think fires only destroy forests, we now see that they can be helpful. In many ways, forests need fires to survive.

RI.5.8 #2 **•RESPOND•** *Do Forests Need Fires?*

NAME:

RI.5.8

1. What is the **MAIN TOPIC** of the text? _____

2. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

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A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

NAME:

RI.5.5

RI.5.4

3. Describe the **TEXT STRUCTURE** the author used in Do Forests Need Fires?.

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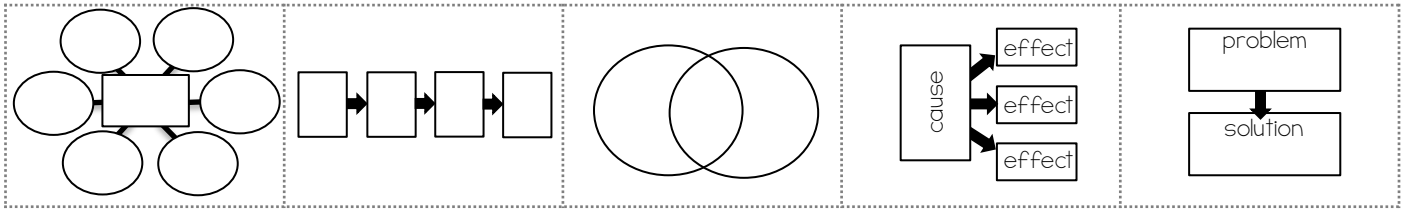
4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



5. Find the underlined words, surface fire in the text. Use the **CONTEXT CLUES** to explain what these words mean. Circle the words in the text that are a clue to the meaning of the word.

_____

_____

6. Find the underlined words, invasive species in the text. Use the **CONTEXT CLUES** to explain what these words mean. Circle the words in the text that are a clue to the meaning of the word.

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Phones in Schools?

If you go into a high school, you would probably see a lot of students with cell phones. Most high school kids have one. In fact, nine out of ten 17 year olds have one. Many of these students have cell phones for safety and to stay in touch with their parents. But they also use them for texting friends, listening to music, or watching videos. You would see a lot of phones in use in the hallways when kids are not in class. But are cell phones a good thing in schools?

Most schools do not officially let their students use cell phones during class. However, when the teacher is busy helping other students, students often pull their phones out. Students sometimes use their phone when the teacher is not looking. In fact, a study from the University of Michigan found that six out of ten students send text messages during class. This study was in schools that do NOT allow phones in class. This is evidence that students are using cell phones when they are not supposed to. High school teachers complain that they constantly have to tell students to put phones away. It is clear that phones are a distraction to learning.

Some high school teachers let students listen to music on phones using headphones during quiet class time. Nick Allen, a high school student in Merced, California says, "I can think better when I listen to music". Many students agree with this statement. Some teachers also feel like they are doing something good for their students when letting them listen to music. Doing two things at once, like listening to music and reading, is called multitasking. Research has found that multitasking is not helpful and not good for thinking clearly. In fact, a study by Harvard University found that multitasking reduces the amount of work someone can do nearly in half. The study found that multitasking also raises stress levels. So even if students say they can think better when listening to music, science says they do not.

Cell phones are a big part of life for teenagers. One study found that teen girls send about 100 text messages each day. They use their phones all the time. Teens

are also looking at other screens such as computers, TVs, and tablets. The American Heart Association found that most teenagers spend an average of 20 hours per week in front of TV and computer screens. One third of teens spend closer to 40 hours a week in font of screens. To compare, most teens are in school for only 35 hours per week. So much screen time is not a good thing. Research shows that teens who have too much screen time have a harder time concentrating. Perhaps taking a break from screens at school is a good thing.

Students sometimes cheat with their cell phones when the teacher is not looking. A cell phone has a calculator. It also has access to the Internet. It is tempting to open a calculator to find the answer to the problem instead of studying and thinking. In fact, a study in 2012 found that one third of teens admit to cheating with cell phones. More than half those students admit using the Internet to look up answers during tests.

Cell phones are a problem in schools. Is the best solution to ban them? When you are a student in a classroom, there is no need for a phone. Students are there to learn. Allowing phones is a distraction to the lesson. The facts show that teens are not able to control their use of phones. The best solution to not allow phones on campus at all. A phone-free school limits learning distractions. By making a policy of "no-phones", teachers have the power to teach in their classrooms.

RI.5.8 #3 **•RESPOND•** *Phones in Schools?*

NAME:

RI.5.8

1. What is the **MAIN TOPIC** of the text? _____

2. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

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A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

NAME:

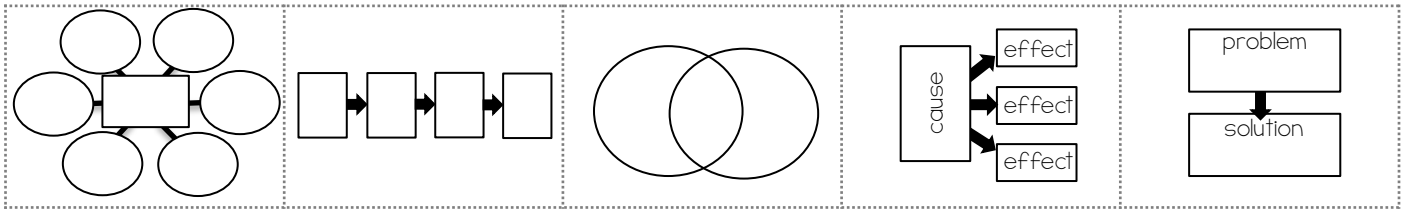
RI.5.5

3. Describe the **TEXT STRUCTURE** the author used in Phones in Schools.

_____

_____

4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.1

5. According to the article, is multitasking with technology helpful? Include quotes from the text that support your response.

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Give Them Phones!

Attitudes towards cell phones in school are beginning to change. Instead of banning phones in schools, now they are being welcomed in some schools. Teachers have discovered that banning cell phones is impossible. As a result, a few schools have started using phones as part of the learning process.

Many parents want to know where their kids are at all times. As a result, they expect their teens to have their phones all the time, even at school. In fact, one out of five parents say it is important for their teen to have a phone. Pew Research has studied teen use of cell phones. They found that nearly all (98%) teens with phones, say their parents bought it for them so they can be in touch all the time.

Teens began to have cell phones about 15 years ago. According to the Yankee Group, about one in 50 teens had a cell phone in 2000. Back then, they were usually taken away by the teachers. According to a Pew Research study in 2010, nearly 38 out of 50 teens owned cell phones. The number of students with a phone has grown since then. In 2014, 45 out of 50 teens own a cell phone. As a result, many schools have discovered that it is impossible to keep phones out of the classrooms.

Kids are quick to like the technology of smart phones. Cell phones have replaced face-to-face talking for many students. The Pew Research study reports that 2/3 of teens are more likely to use their cell phone to text their friends than talk to them. Today's students use their phones to keep in touch with friends, teachers, and parents. It is clear that phones are a great way to communicate. Teachers can start to use phones in the classroom. Some teachers allow phones for group work and the students seem excited by this change.

Smart phones with internet access can be used to enhance learning. Students with cell phones can plan after-school activities. Kids can work on homework together

with programs like Skype. Students can use phones to record the teacher's lessons. Then the lessons can be reviewed at home. Cell phones can help kids complete the research needed for their homework. Apps can send text messages to students when homework is due. Other apps allow students to organize paperwork, store pictures, and save internet links.

Smart phones are replacing computers. Wired Magazine predicts that "the shift away from the desktop computer is accelerating." The magazine says this is because new phones have more processing power and better batteries. Faster speeds and larger screens on phones are also noted by Wired Magazine. This trend has already been seen in the classroom. The Director of the American Association of School Administrators says, "Most people are now coming to school with a computer in their pocket." As a result, many school districts are implementing a Bring-Your-Own-Device (BYOD) policy. A Bradford Networks survey found that nearly ¾ of students use their personal mobile devices for class assignments. The survey also noted that more than half of U.S. teachers are using smart devices in the classroom. This is huge! It shows that there is a place for this new technology in learning. Since teens are used to using their phones, maybe they can help them learn.

The debate about cell phones in schools is likely to go on for a while. What is clear is that technology is increasing. Cell phones will become even more important than they are today. Schools should be ready with a clear answer and policy when a student wants to use a cell phone in class.

RI.5.8 #4 **•RESPOND•** *Give Them Phones!*

NAME:

RI.5.8

1. What is the **MAIN TOPIC** of the text? _____

2. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

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A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

•RESPOND•
Give Them Phones!

NAME:

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the Phones in Schools and Give Them Phones! AS WELL AS A THIRD SOURCE you find on your own. Include direct quotes from the attached articles in your response.

Do you believe students should be able to bring phones to school? Why or why not?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

Conserve Helium

Have you ever thought about why some balloons are able to float in the air and some just drop to the ground. Balloons that float are filled with a special gas called helium. Balloons that just drop are usually filled with the air we breathe out which is carbon dioxide. Helium is a very light gas. It is lighter than gases like oxygen and carbon dioxide. When you put it in a balloon, it tries to float above the heavier oxygen and carbon dioxide

Helium is found throughout the entire universe. On Earth, however, it floats up into the atmosphere and then out into space. Fill a party balloon with helium and the balloon acts as if it is suspended in air. If the balloon pops, then the helium is released and floats up into outer space. This means that helium is continually being used up. The problem is that the processing of helium is not keeping up with the need for it. A shortage has resulted.

C Helium is not made by humans. It is found in the ground as a part of natural gas. We use natural gas as a form of energy to make electricity. Refineries separate helium from natural gases used for energy. The helium is then stored in special facilities. The United States processes ¾ of the world's helium. Half of that is stored in the United States Federal Helium Reserve in Texas. The amount of helium in storage at the Texas facility is getting smaller each year. A world shortage of helium has resulted. Like other natural resources, when they run out, they are gone forever. That is quickly happening to the helium in the U.S. Federal Helium Reserve. The U.S. Senate Energy Committee has said this reserve will only last until 2018 or maybe 2020.

It is important to find ways to conserve helium here on Earth. We need helium for more than just filling balloons. It is critical for scientists. Liquid helium keeps important scientific equipment at an extremely cooled temperature. For example, nuclear reactors use helium as a critical coolant. Because a reactor can be very hot, scientists need something very cool to keep everything under control. We use

nuclear reactors to make electricity. As of January 2015, there are 437 nuclear reactors in the world. They provide more than 1/10 of the world's electricity. Without helium to cool the reactors, they would not be able to run. This would result in an electricity shortage.

A nuclear reactor is far from the only thing that relies on helium to stay cool. A giant research lab in Switzerland called CERN is famous for studying physics. It relies on liquid helium to keep it's main experiment (a particle accelerator) cool. The accelerator must be kept cooler than -455 degrees F. That is colder than outer space! There have been many scientific discoveries at CERN. Without helium, this center is at risk for closing.

A helium shortage would have the greatest effect on health care. In hospitals, helium helps treat patients with asthma and other breathing problems. Even more critically, doctors rely on helium to run MRI machines. MRI machines are strong magnets that take detailed pictures of your insides. They are similar to an X-ray, only much, much stronger. MRI's are critical for doctors to help find out what is wrong with patients. Without helium as a coolant, MRI's get too hot to function.

Conserving helium is a world priority. A ban on party balloons and other trivial needs is one idea that researchers have proposed. However, balloons account for only less than 1/10 of the world's consumption. A few researchers have argued that increasing the number of helium storage facilities could help reduce a shortage of helium. Many natural gas refineries are not currently capturing helium. The helium is being allowed to be released into the atmosphere.

The world is currently using more helium than it produces. Helium is more than just a gas that can be used to fill fun party balloons. A shortage of helium could soon be a serious crisis for the world. Many scientists and doctors rely on helium for a variety of important functions. Without new facilities and conservation efforts, the world's shortage of helium is a problem that is not likely to "float" away soon.

RI.5.8 #5 **•RESPOND•** *Conserve Helium*

NAME:

RI.5.8

1. What is the **MAIN TOPIC** of the text? _____

2. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

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A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

A **POINT** the author makes is:	**REASONS OR EVIDENCE** to support this point:
	 Color the evidence that supports this reason.

NAME:

RI.5.5

3. Describe the **TEXT STRUCTURE** the author used in Conserve Helium.

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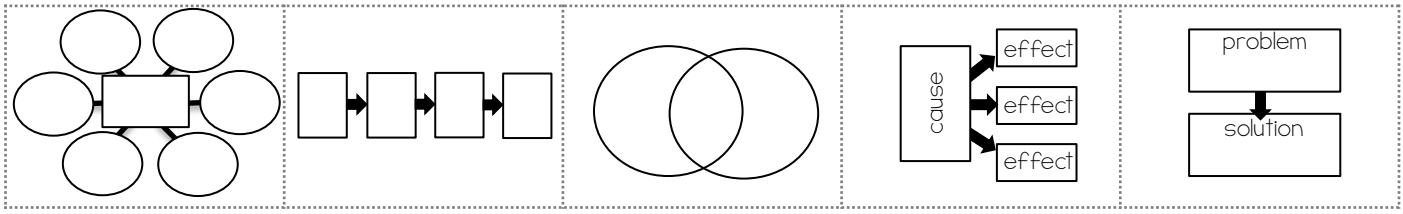
4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



RI.5.1

5. In paragraph C, the text says, "The U.S. Senate Energy Committee has said this reserve will only last until 2018 or maybe 2020." What can you **INFER** about this statement.

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_____

Nature's Little Helpers

Bees are very important to our ecosystem because they are great helpers. You probably have seen them hovering over flowers, quickly moving from one to another. Most people understand that this is helpful to the flowers themselves as this helps them reproduce. But bees are very helpful to other organisms too. These little workers improve the lives of animals and humans in ways that go unnoticed by many. How do they do it? It is all through a process called pollination.

A honeybee on a plum blossom. Honeybees are especially good at collecting and moving pollen.

Let's begin with a closer look at pollination. As bees are doing what nature intended, they do not even realize how much help they are to other living things. Bees have little hairs on their legs and body. As they go from one flower to the next collecting nectar, the sugary substance made by plants, pollen sticks to the hairs. The bees then move on to the next flower and the pollen is shaken off. This process is called pollination. Bees, as well as animals such as birds, bats, beetles, and butterflies are all pollinators. Pollinators spread pollen so that plants are able to reproduce. Without this process of pollination, there would not be as many plants and flowers in nature. While wind does the same thing by blowing the pollen around, the number of flowers that are actually pollinated is not as many. In fact, pollinators help at least 1/3 of the world's crops (food grown on farms) and almost all wild plants. Without the help of pollinators to spread seeds, many plants would die off.

Having bees pollinate flowers is helpful to many insects and animals. Tall flowers and plants can provide a safe place for smaller animals to hide from things that might eat them. In addition, plants are a tasty meal to many different insects and animals. For example, a caterpillar munches on leaves until they can barely move anymore. They also use the plants for protection as it gives them a place to hide. Then, when the caterpillar is ready to make its transformation into a butterfly, it will create its cocoon on the plant. Without these plants and flowers, this would not be possible. There are other animals that benefit from these plants and flowers, too. Deer and rabbit's main food source are plants. Mice and snakes find coverage in taller grasses to stay hidden from larger predators looking for an easy meal. Thanks to bees, these plants grow tall and all of these habitats are possible!

While people tend to be afraid of bees and smack at them as the little insects buzz around their heads, they probably gain the most from them. Have you ever tasted honey? This is the result of bee's busy work as they gather nectar from plants. We use honey to put in our drinks, to help our sore throats, and for other food sources. More importantly, bees help farmers grow our food. Many of the fruits and vegetables that are grown on farms are a result of the pollinating process taken care of by bees. More than 1/3 of our fruits and vegetables are a result of bees doing what bees do.

Bees may be small in size, but they have a huge impact on the lives of many living things. They are sort of like nature's little hero. They help with the making of food for insects, animals, and people. They also help provide a home or hiding place for others. Life would look very different if it were not for these amazing little critters!

The Honeybee

Earth has more than 25,000 types of bees. They are classified as insects because they have six legs, three body segments, antennae, and an exoskeleton. Bees also have five eyes and two pairs of wings. They are closely related to ants and wasps.

The most famous of all of the bee species is the honeybee. Honeybees are the only living thing that can produce honey. In fact, honeybees are the only insects that make food for humans. Honeybees are also the only bees that make beeswax. Beeswax is used by people for candles, medicine, and make-up.

Honeybees live in a hive. More than 60,000 honeybees can live in a typical beehive. A hive is an organized society. It has three types of honeybees. There are the workers, the drones, and the one queen bee. Each type of honeybee has specific jobs. The worker bees care for the baby bees, keep the hive clean, make beeswax, and make honey. The drones' job is to mate with the queen so she can produce many eggs. The queen bee's only job is to lay eggs. She can lay about 200 eggs in one day. This is more than her own bodyweight in eggs. She is often the mother of all the bees in the hive. Yep, she can be the mother of 60,000 bees!

Bees are extremely important to life on Earth because they are vital to plant pollination. Pollination happens when bees and other insects fly from flower to flower. As bees travel around flowers, pollen from one plant is transferred to another plant. The mixing of the pollen is what allows many plants to produce fruits and vegetables. Without pollination, a plant cannot produce any fruits or vegetables. Many types of bees pollinate, but honeybees are responsible for 4/5 of all insect pollination.

Each spring, as the weather warms, bees forage in the gardens and forests around the hive. Honeybees may fly up to four miles from the hive. The bees are

searching for blossoming flowers that are loaded with nectar. Nectar is a form of sugar water that is found deep inside a flower blossom. Bees drink the sweet, sugary nectar as they stop by the flower. They need lots of this nectar to rear their young.

If a honeybee finds a good location of flowering plants, they can share that information with the other bees at the hive. They do this using a special dance, called a waggle dance. The honeybee moves in a figure-eight pattern through a series of waggle dance steps. The waggle dance tells the other honeybees where the flowering plants are in relation to the sun. The dance also tells the other honeybees how far away the flowering plants are located.

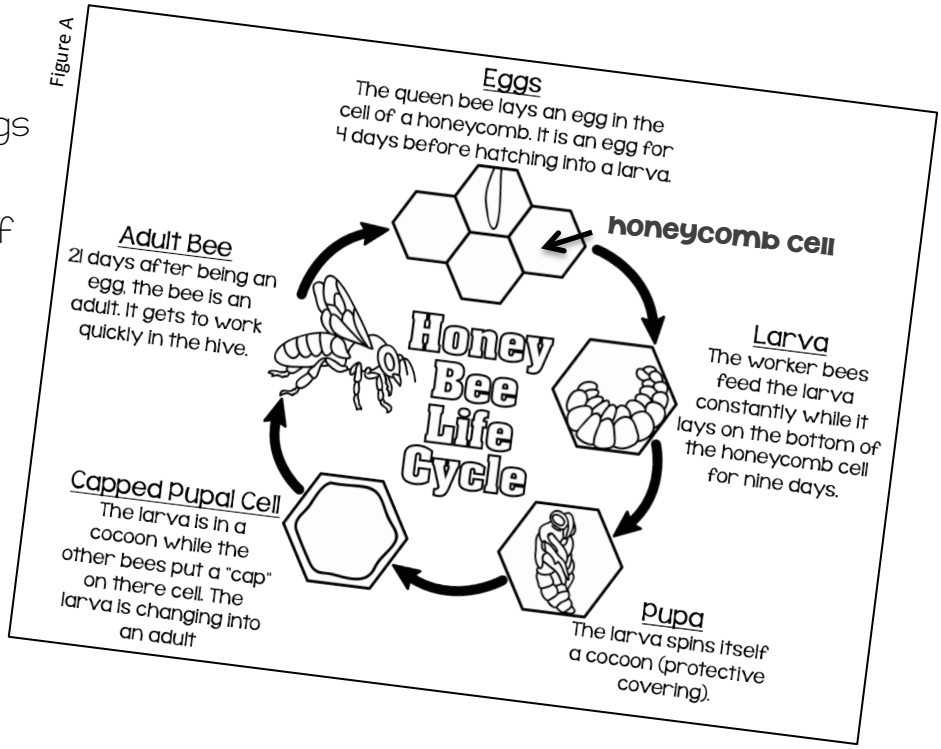
Each honeybee actually only produces 1/12 of a teaspoon of honey in its lifetime. In order to produce one pound of honey, bees typically must visit 2 million flowers. Honey can be found in many different flavors. Each flavor depends on which flowering plant the honeybees visited to collect nectar.

The honeybee is the most famous of the bee family. However, a few other bee species include bumblebees and leafcutter bees. Bumblebees are much larger than typical honeybees and are usually gentle if left alone. Bumblebees don't live in hives like honeybees. They live in underground holes usually left behind by mice and other small mammals. Leafcutter bees are hardworking pollinators of flowers. One leafcutter bee can do the job of 20 honeybees. Leafcutter bees cut small perfect circles into the leaves of plants. They carry the leaf circles back to the nest. The small leaf circles are then used by the bees to make tiny cell caverns that can hold the queen bee's eggs.

What Do You Know About Honeybees?

Honeybees start their lives as eggs in winter. The queen bee lays all of the eggs in the hive. There is only one egg in each cell, or section of the honeycomb. Once the eggs hatch, they become small, white, worms called larva. Larva live in the honeycomb and eat as much as they can. The other worker bees feed honey to the larva all day long.

Figure A



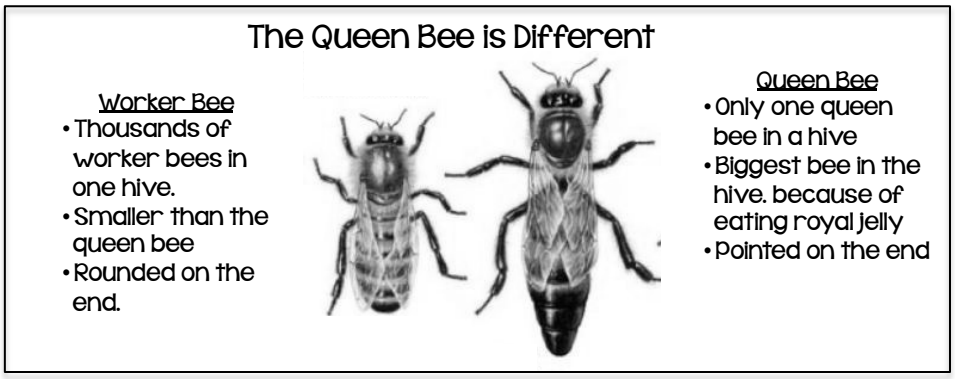
After the larva stage, the honeybees spin themselves a cocoon. This is when they enter the pupa phase. They don't eat any food during this stage because they ate so much while they were a larva.

While they are in their cocoon, their body starts to go through many changes. They grow legs and wings and start to look like a bee. The other bees in the hive protect the pupa by creating a safe capped pupal cell. The other bees know when the pupa is ready to come out so they crack open the pupal cell. The honeybee is now ready to come out of the cocoon.

When the honeybee comes out of the cocoon, it is now an adult. Its body is now large, thick, and fuzzy. Most adult honeybees have black and yellow stripes. However, honeybees can also be bright green or very fuzzy and all black. For the rest of their lives, they will work in groups called colonies with a queen bee as their boss.

The queen bee is the boss of the whole hive. She directs the worker bees. She also controls how the bees act by making sure they do what they need to do. The queen bee lays all of the eggs. Sometimes she can lay as many as 2,000 eggs in one day!

Figure B



There are three ways for a honeybee to become the special queen bee. Since the queen bee can lay up to 2,000 eggs a day, space in the hive can get tight. If it gets too crowded, the worker bees can swarm, or fly frantically, in the hive. As a result, the queen leaves with half of her workers to create a new colony and hive. The other half of her workers stay with a new queen. Another way the queen bee can be replaced is when she is no longer laying as many eggs. This may be because she is getting too old. When this happens, the worker bees start her replacement, or supersedure. The aging queen is killed after the supersedure process. A third scenario is when the queen bee dies suddenly. The worker bees quickly choose several larvae that are in the proper age range and begin to condition them to become queens. The only difference between a honeybee worker and a queen bee is the food they were fed while growing. Possible queens are fed royal jelly for their entire lives. Regular worker bees are only fed royal jelly during the first two days of the larval stage.

Sadly, honeybee populations have been declining in the past few years and now we have fewer. Some people think this is because their habitats are being affected by human beings. This is unfortunate because without bees helping with pollination, many plants will not flower or produce food. This is important for humans because we need fruits and vegetables to eat. About 1/3 of U.S. crops depend on honeybees for pollination. Honeybees are very important to humans!

NAME:

1. After reading all of the articles, **WRITE** a response to the question. Include information from both articles as well as at least <u>two facts</u> from <u>each</u> article.

What makes the queen bee special?

Color the information or facts from the articles that you used in your writing.

NAME:

1. After reading all of the articles, **WRITE** a response to the question. Include information from both articles as well as at least <u>two facts</u> from <u>each</u> article.

Why are bees important for humans?

Color the information or facts from the articles that you used in your writing.

RI.5.9 #1

•RESPOND•
Nature's Little Helpers

NAME:

NOTE: The questions on this page all refer to Nature's Little Helper

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

_____

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RI.5.4

6. Find the underlined word, nectar in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

_____

_____

7. Find the underlined word, pollinators in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

_____

_____

RI.5.9 #1

•RESPOND• The Honeybee

NAME:

NOTE: The questions on this page all refer to <u>The Honeybee</u> Passage

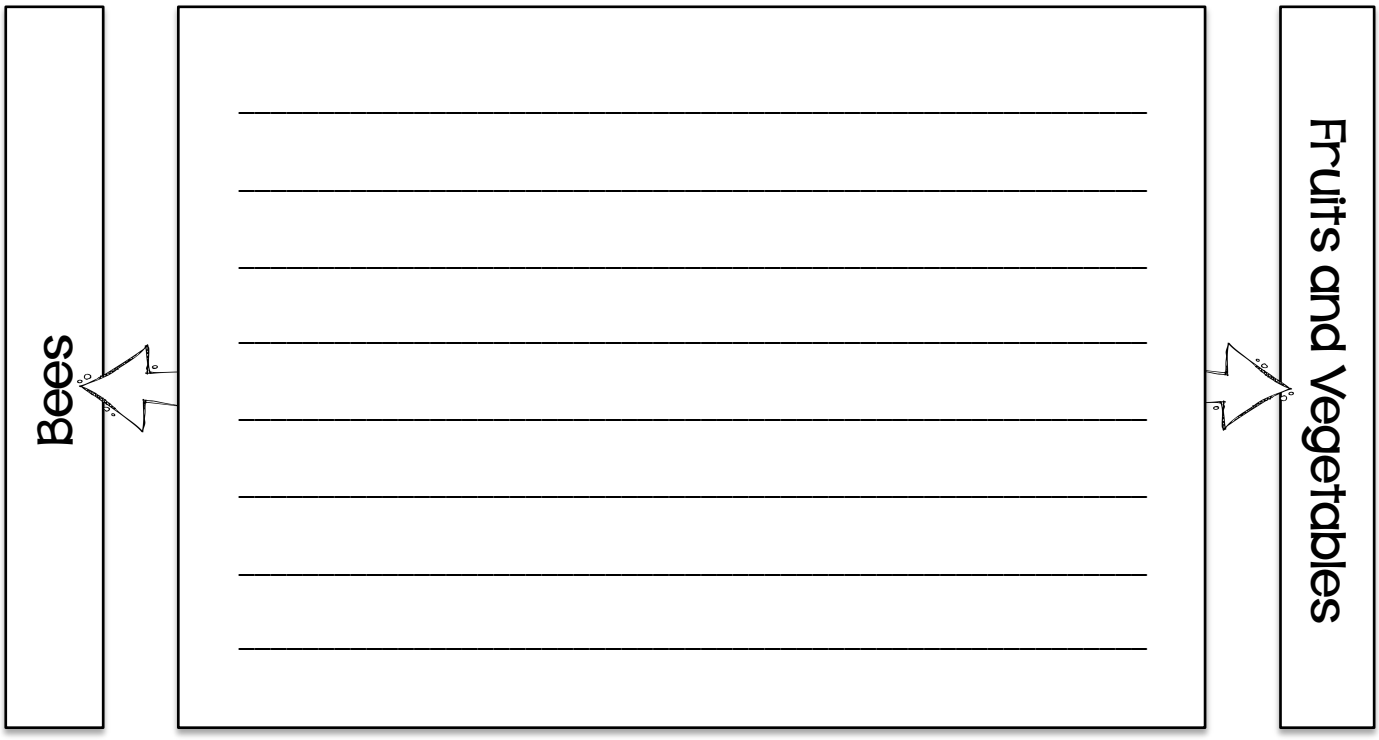
RI.5.1

1. **EXPLAIN** in your own words **HOW** bees can communicate with each other. Include quotes from the text that support your response.

2. **WHAT** other types of bees are there besides honeybees?

RI.5.3

3. Explain how bees are **CONNECTED** to fruits and vegetables.



RI.5.9 #1

•RESPOND•

What Do You Know About Honeybees?

NAME:

NOTE: The questions on this page all refer to <u>What Do You Know About Honeybees?</u>

RI.5.4

1. Find the underlined word, <u>cell</u> in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

_____

_____

2. Find the underlined word, <u>supersedure</u> in the text. Use the **CONTEXT CLUES** to explain what this word means. (Circle) the words in the text that are a clue to the meaning of the word.

_____

_____

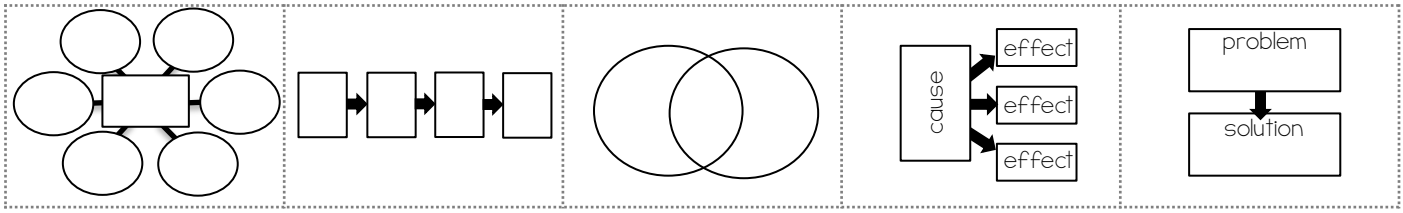
RI.5.5

3. Describe the **TEXT STRUCTURE** the author used in <u>What Do You Know About Honeybees?</u>

_____

_____

4. Choose one of the following visual diagram types that best matches the text structure. Draw and complete the diagram in the space provided (or use another page if needed).



Yes to Second Languages!

The world is changing! Thirty years ago, it was rare for Americans to move to other countries for school or jobs. Now, living, working, or studying abroad is much more common. This is a trend that seems to be continuing. The State Department estimates that more than six million Americans live abroad in over 160 countries. Many of these people move abroad for jobs and opportunities they could not have in America. Many companies need their employees to move abroad. In order to do this, they often need to speak a second language.

American students need to be prepared. Less than one out of five Americans speak a language other than English. According to the U.S. Secretary of Education, Americans need to read, speak, and understand other languages in order to keep up with the jobs in the world. Right now, our schools do not always require students to learn a second language. In 2008, about one in four U.S. elementary schools and about half of U.S. middle schools have a language program. Helping students learn a new language should be a priority. It would open up the world for them. It could also give students an advantage when applying for college or jobs.

Some say American students are being left behind. Many countries of the world require their students to learn languages. The *Guardian* newspaper reports that over half of Europeans are able to hold a conversation in at least one additional language. One fourth are able to speak at least two additional languages. One in ten can speak at least three. In fact, Sweden is considering requiring quadrilingualism. This means that Sweden may require students to learn four languages.

Learning a new language has been proven to help the brain. Studies have shown

that studying a second language aids creativity and critical thinking skills. The National Education Association reports that math skills improve if a student studies a foreign language. In addition, the University of New Brunswick found that people who learn a second language have a better memory. This is likely from learning the new rules and words. In addition, they found that second language learners are better at focusing on the important information and skipping over stuff on which they do not need to focus.

Studying languages is important to colleges. Stanford requires high school students to study a foreign language for three years. Harvard University requires four years spent studying a second language. Auburn University states "Analytical skills improve when students study a foreign language. Creativity is increased with the study of foreign languages." It is clear that colleges respect second language learning. Teaching a second language gives students the best chances of going to the college of their choice.

More Than One Language?

We need to stop wasting time teaching languages. Schools do not have the money to teach extra subjects. Budgets are shrinking. Forbes reports "The percentage of elementary schools offering foreign languages decreased from 31% to 25% from 1997 to 2008. The percentage of all middle schools offering foreign languages decreased from 75% to 58%."

Few schools at all levels are teaching foreign languages. Forbes reports, "In 2009-2010, only 50 percent of colleges required foreign language study. This is down from 67 percent in 1994-1995. Many colleges and universities have reduced classes in "less popular" languages."

Students work too hard in school. They need to focus more on math, reading, and science. Michigan State Representative Phil Potvin introduced a bill in 2013 that would make studying a foreign language optional. According to Potvin, the reason to do this is that our kids have such a tight curriculum. He believes making foreign language an option would free up space in their schedules. He thinks the added time could let students choose classes in which they have the most interest.

Many believe that English is the only language you need to know. About 6,900 languages are spoken in the world. Europe alone has 23 official languages. A study conducted by the European Union found that eight out of ten Europeans learn English as their second language. They begin studying English in elementary school. Some Americans argue that students can already communicate with the world if other kids are taught English.

Foreign language classes have not proven to be effective. Bryan Caplan of the Library of Economics and Liberty did a study of students who have studied foreign languages in American schools. He found that one in four graduating students speak a language other than English. Only 3% of these students learned this language in school. Caplan concluded that the "years of pain and suffering" is not worth less than one in a hundred that becomes fluent.

So what do you think? Is it really necessary to force kids to learn another language? If someone really wants to, can they just go to private lessons outside of school? With students already so busy, there is not enough time in the day for this extra class.

RI.5.9 #2

•RESPOND•
Integrate: Languages

NAME:

RI5.9

RI5.7

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own.

Do you think kids should be REQUIRED to learn foreign languages in schools. Why or why not?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

RI.5.9 •RESPOND• #2 Compare Structure: Languages

NAME:

RI.5.5

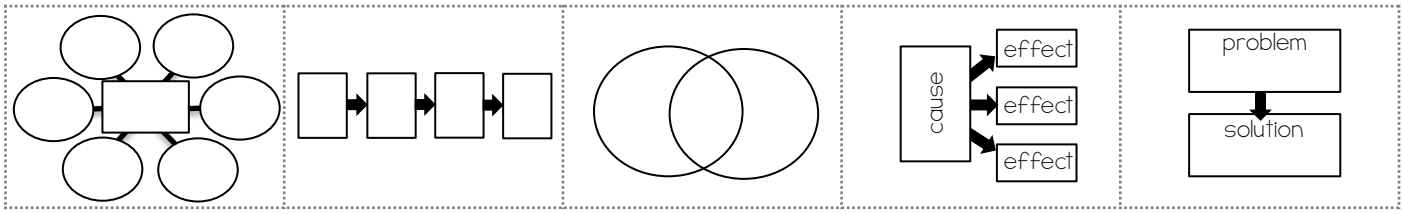
1. Describe the **TEXT STRUCTURE** the author used in Yes to Second Languages.

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Yes to Second Languages. Draw and complete the diagram in the space provided.



RI.5.9 •RESPOND• #2 Compare Structure: Languages

NAME:

RI.5.5

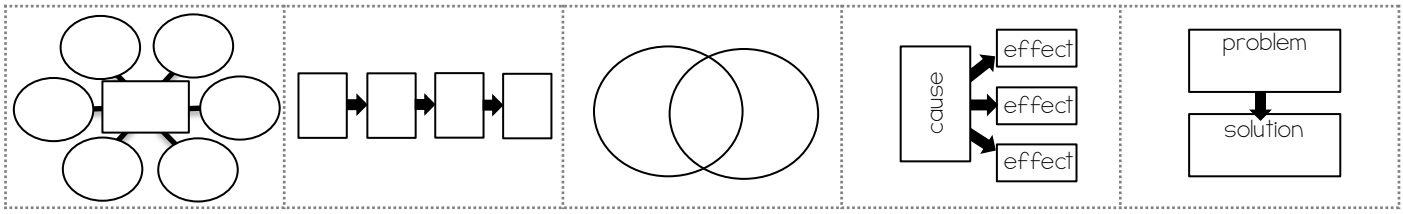
1. Describe the **TEXT STRUCTURE** the author used in More Than One Language?

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in More Than One Language? Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in Yes to Second Languages and More Than One Language?

_____

_____

_____

RI.5.9 #2 •RESPOND• Yes to Second Languages!

NAME:

NOTE: The questions on this page all refer to Yes to Second Languages!

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

RI.5.9 #2 •RESPOND• More Than One Language?

NAME:

NOTE: The questions on this page all refer to <u>More Than One Language?</u>

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____
3. **KEY DETAIL #2:** _____
4. **KEY DETAIL #3:** _____
5. Write a **SUMMARY** of this text. _____

_____

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RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

Sporting Pride!

College sports are a proud tradition. Student athletes love to play sports, and they love to play for their colleges. There has been much talk recently about paying college athletes money for their efforts. Currently, college athletes play for free but they get many other benefits. There is no need to pay students to play sports, because they do them for fun. Most student athletes want to carry on the tradition of playing for their schools. It makes them proud.

Many students love to play sports. All children love playing games with their friends. Sports have always been part of schools. In fact, the National Federation of State Schools says that more than half of all high school students play a sport. For many kids, recess and playing sports with friends is the best part of going to school. Young adults in college are no different. Playing football in front of friends, classmates, and families can be the highlight of any young football player's life. Watch any college sport and you will see it is very exciting.

The idea of the student athlete goes back to ancient Greece. It was the time of the first Olympic games. The ancient Greeks believed that the body and the mind were both important. One did not work without the other. The Greeks started some of the first schools, and the first gyms for the students to exercise. Students would learn and then go out to compete on the field. Today's colleges owe much to the ancient Greeks. Many student athletes believe that exercise is just as important as learning at school. In fact, the NCAA says that 8 out of 10 student athletes graduate college. This is more graduates than non student athletes.

Another reason that student athletes should not be paid money is that they already are paid in a different way. College is not free. In fact, it costs thousands of dollars each year. Many student athletes are given scholarships, or gifts of money to pay for school, so that they can attend for less. They receive free places to stay and free places to exercise. They get free coaching and free training. More than 150,000 student athletes get almost $3 billion in athletic scholarships each year from

NCAA. In fact, the average NCAA scholarship gives student athletes $10,409 to pay for school each year. However, most athletes would still play sports even if they did not get any scholarships. They do it because they love to play sports.

For students who do not play sports, college is expensive. The average cost for one year at a public college is almost $17,000. It is expensive to have big buildings, professors, cafeterias, science labs, sports stadiums, and everything else. If student athletes are paid, it would have to be the colleges that give them more money. This would make college more expensive for students who are not athletes. Schools should try to be cheaper, not more expensive.

College athletes follow a proud tradition. Like the ancient Greeks, they know that exercise is important to their bodies and brains. We cannot learn if we are not healthy first. Student athletes love sports. They love to play sports and especially love the excitement of playing in front of a crowd. They do not do it for money. These athletes are proud to play for their schools. There is no need to pay them money for doing something they love - playing sports!

Pay Your Athletes

If you go to a college football or basketball game, you might see thousands of fans cheering their team. People like to watch college sports. They are big fans. Those fans all spend a lot of money to watch. They buy expensive tickets. They buy expensive food and drinks at the stadium. People like college sports so much that they even pay to watch college sports on television. These sports make colleges a lot of money. For example, the University of Texas earns $104 million per year from their sports teams. However, the athletes who play the games do not make any money at all. It is not fair. These athletes deserve to be paid.

College athletes work hard. They play sports full time but they also are full time students. Most must still pay to go to the universities that they play for. They exercise and practice every day. They work out in the gym, run on the track, and swim laps. They train very hard every day, even in rainy weather. According to Forbes, the typical top level college football player gives 43 hours per week to the sport. This is more than most adults spend at their job each week. The only day athletes are not working hard is game day. On game day many people pay to watch athletes play but the athletes play for free.

Some people say that college athletes already get paid. They say that athletes receive "scholarships". A scholarship is money that pays for school. For some athletes, that is true. But many athletes do not get scholarships. According to Forbes, only two out of a hundred college athletes get a scholarship. For those students who do receive the scholarship money, it goes straight to the college. The athletes do not get any cash at all. However, these athletes still have to pay for food to eat, a place to live, and even a car to drive. They must eat and sleep a lot because they are exercising so much. They need to drive to practice every day. These things cost money. But athletes do not get any money.

College athletes are too busy to have a job. They have things to pay for but many cannot earn money outside of school. That is because they are already full-time students, and full-time athletes. They are working so hard training that they do not have time to get a job. Then, they have to travel to compete. It takes a long time to get from one city to another city. If an athlete did try to work at a job, some athletic divisions have rules saying they cannot earn too much money. In fact, student athletes at colleges such as Stanford have a rule that they cannot earn more than $2,000 per year. This limit is barely enough to pay for dinner with friends one time per week.

Today's college athletic departments are big businesses. They make billions of dollars on tickets, food, television, and clothing. They also make money on every jacket or sweatshirt that they sell. These clothes are popular because of the student athletes that play the game. Those athletes don't make any money. Their coaches make a lot of money. The school makes a lot of money. The stadium makes a lot of money. The only people who do not make any money are the student athletes who work the hardest.

RI.5.9 #3

•RESPOND•
Integrate: Paying Athletes

NAME:

RI5.9

RI5.7

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own.

Do you think college athletes should be paid money? Why or why not?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

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RI.5.9 #3 •RESPOND• Integrate: Sporting Pride!

NAME:

RI.5.5

1. Describe the **TEXT STRUCTURE** the author used in Sporting Pride!

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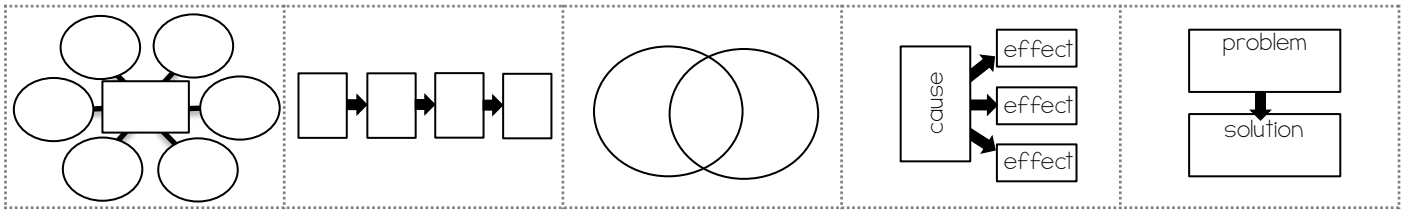
2. Choose one of the following visual diagram types that best matches the text structure in Sporting Pride! Draw and complete the diagram in the space provided.



RI.5.9 #3 **•RESPOND•** *Integrate: Pay Your Athletes*

NAME:

RI.5.5

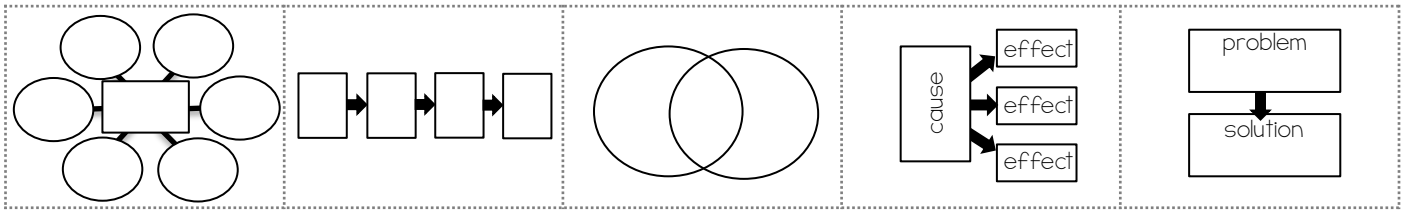
1. Describe the **TEXT STRUCTURE** the author used in Pay Your Athletes!

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Pay Your Athletes! Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in Sporting Pride and Pay Your Athletes!

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_____

_____

RI.5.9 #3 **•RESPOND•** *Sporting Pride*

NAME:

NOTE: The questions on this page all refer to <u>Sporting Pride</u>

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

_____

_____

_____

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_____

RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

RI.5.9 #3 **•RESPOND•** *Pay Your Athletes!*

NAME:

NOTE: The questions on this page all refer to <u>Pay Your Athletes!</u>

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

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RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

We Need Nature Reserves

A nature reserve is an area of land that is protected. Laws save the land from certain uses and activities. For example, reserves must usually stay as close to nature as possible without buildings or engine noise. Usually, reserves are made to protect special plants and animals. In addition, they can protect habitats and special landmarks.

Most of the time, reserves are set aside for nature, not for people. However, tourists can usually visit reserves to see nature. Yellowstone National Park has more than 3 million visitors each year. The park is also home to an endangered species called the gray wolf. One hundred years ago, the gray wolf was nearly extinct in America. Today, nearly 450 gray wolves live in the protected area of Yellowstone National Park. More than 6,000 gray wolves roam the Western states of the United States. A big reason they have been saved is that there are now reserves that protect them and their habitat.

The United States' Endangered Species Act started in 1973. It aims to protect nearly 2,000 species on the list. However, scientists say that worldwide, nearly 20,000 plants and animals are at risk of extinction. These species are not protected by the United States Endangered Species List. Most of these species are in danger because of the actions of people. For example, many animals in Africa have gone down a lot over the past 30 years. More than half of Africa's habitats have been lost due to farming and logging. In addition, illegal hunting is a big threat. Animals that may disappear from Africa include the mountain gorilla and the black rhino. Many African countries have set up reserves to allow these animals to roam free without threats from humans. Setting up more reserves would help protect these animals and many more. It would also protect the habitats these animals need to survive.

These groups set up nature reserves and teach kids on the dangers that many species are facing. Programs such as Eco-Schools are designed to create awareness in schools and local areas. The Eco-Schools Program is an international program sponsored by the Foundation for Environmental Education. It was started in 2003 in South Africa. Now it is in 1,200 schools and 51 countries around the world.

Nature reserves can bring money to areas with eco-tourism. Eco-tourism is a form of tourism for people who chose to spend time in nature as a vacation. They enjoy seeing wildlife and natural plants in the native habitats. Most nature reserves allow low-impact human activities such as biking, hiking, or canoeing. The eco-tourists stay in hotels and eat at local restaurants. Examples of eco-tourism include safaris in Africa and bird watching in Central America. In America, the National Park Service found that businesses near National Parks earn $10 for every $1 spent by the Park Service. This is evidence that having protected reserves can benefit the entire community.

Reserves do so much more than protect species that need our help. Yet this reason alone is enough to support the efforts to create them. They also offer enjoyment and learning opportunities. The benefits to nearby communities are huge. Getting rid of reserves should never be an option.

Just Say No to Reserves

Nature reserves are often set up to protect entire ecosystems. The purpose of reserves is not to protect one or two specific endangered species. Therefore, the goal of reserves is too broad and expensive to maintain.

Reserves are not an efficient system of protection. Frequently only small pockets of habitat are preserved. These pockets can isolate the plants and animals inside. This is especially a problem in small reserves. The isolation can lead to health problems for the few animals living there. Without new natural threats in an area for too long, animal populations get bigger than they are supposed to. There is not enough diversity in such small sites. Health concerns are especially a problem with lions in Africa.

Not every endangered species is protected with a system of small game reserves. The US Fish and Wildlife Service estimates that about half of the animals on the Endangered Species List actually have most of their habitat on private land anyway. This private land is usually not part of a reserve. This is where many animals choose their habitat. Since private land cannot be regulated, the current game reserves may not protect species in the future.

Nature reserves are often too small to be effective. Often the habitats in the areas surrounding the outside of reserves have been destroyed. The World Wildlife Federation studied the pandas living in China. There are less than 2,000 of these animals left in the world. Panda habitat is currently broken into 20 different reserves. The World Wildlife Federation discovered that pandas cannot easily move between the reserves. Farming and logging destroyed the natural habitat between the nature reserves. The Chinese government saw this problem. In response, they banned logging in 1998 in the areas surrounding the panda reserves. However, new threats are now in the area. Those threats to pandas include mining and dams being

built on rivers. Pandas do not reproduce often so it is hard for their population to recover. In a lifetime, a female panda has between 6-8 babies. In the animal world, this is not very many. When they are separated by roads or lose their habitat, they cannot mate as easily. Reserves have not helped but have hurt their populations. The solution is to educate people, not create reserves. Education is more helpful than small chunks of land.

Keeping endangered animals in small areas is also dangerous for another reason. Although tourists can go see the animals, so can hunters. Many countries in Asia believe some of these animals have medical powers. For example, in Vietnam and China, many people believe that the rhino horn can make you live longer. Doctors know that these ideas are not true. However, that does not stop hunters from going to shoot the rhinos and take their horns. They then sell the horns in Asia. Game reserves are very small, so hunters know exactly where the animals are. In 2014 alone, 1,215 rhinos were poached, or killed illegally, in South Africa. Those deaths were on game reserves. It is not just rhinos. Scientists say that Asian elephant populations have been cut in half in the last 60 years because of poaching.

Local people may need to use the reserve land for farming or fishing. Corporations might cut down trees or set up mines. These businesses can provide jobs. As reported in The Oxford Journal, the population of people in the area near the Serengeti National Park in Tanzania nearly doubled in 10 years during the 1980s. During that same time frame, the population of Cape Buffalo was cut in half. It is easy to guess how these two events could be related.

Nature reserves exist in many countries around the world. These reserves might not actually be helping the species, though. Endangered Species International reports that in 2006 the number of extinct species was 784. Today the number of species that are extinct is 905. Protected species are still becoming extinct despite the numerous nature reserves of the world.

NAME:

RI5.9

RI5.7

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached as well as a third source you find on your own.

Do you think more public land should be given to nature reserves? Why or why not?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

RI.5.9 #4 •RESPOND• Compare Structure: Reserves

NAME:

RI.5.5

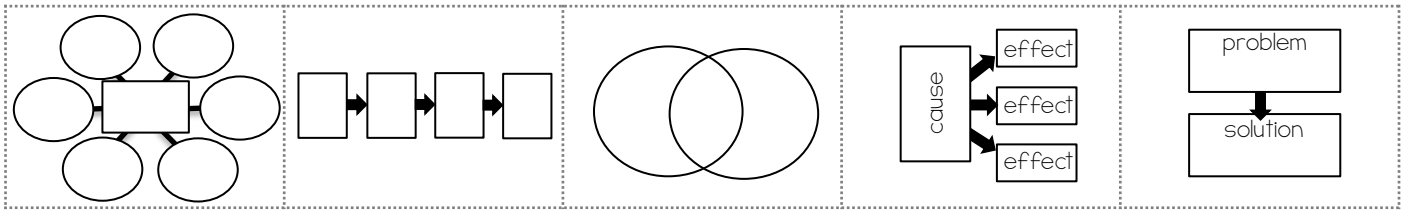
1. Describe the **TEXT STRUCTURE** the author used in We Need Nature Reserves

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in We Need Nature Reserves. Draw and complete the diagram in the space provided.



NAME:

RI.5.5

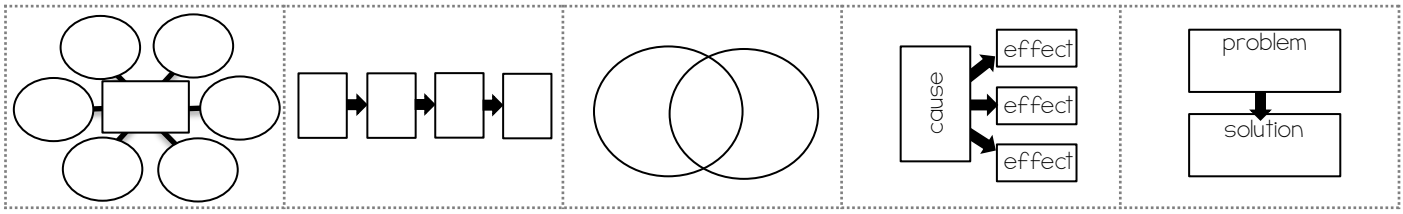
1. Describe the **TEXT STRUCTURE** the author used in Just Say No to Reserves

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Just Say No to Reserves. Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in We Need Nature Reserves and Just Say No to Reserves?

_____

_____

_____

RI.5.9 #4 **•RESPOND•** *We Need Nature Reserves*

NAME:

NOTE: The questions on this page all refer to <u>We Need Nature Reserves</u>

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

_____

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RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

RI.5.9 #4

•RESPOND• Just Say No to Reserves

NAME:

NOTE: The questions on this page all refer to Just Say No to Reserves

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

_____

_____

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RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

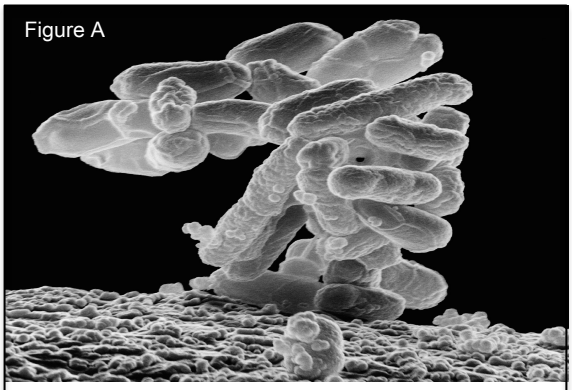
Louis Pasteur and Germ Theory

Have you ever wondered why adults are always telling you to wash your hands? There are signs in bathrooms at school, at restaurants, parks, and hospitals. But why? Adults say that if you do not wash your hands, you might get sick. Washing your hands kills germs. But what are germs?

Germs cause disease and sicknesses. They are so small that they cannot be seen without a microscope. For most of human history, people did not know what germs were. Instead, people thought that diseases came from "bad air." Disease just appeared when bad air was around. No one knew what bad air was, but when it was around, diseases just "spontaneously generated," or appeared from nothing.

Spontaneous generation was an idea that new life and diseases just appeared suddenly. However, some scientists did not think this was a very good theory. They thought there must be a cause and that new things could not just appear out of nowhere.

Figure A



Germs can be bacteria, viruses and fungi. This is a picture of E. Coli (bacteria) under a microscope.

Louis Pasteur was a scientist that thought that "spontaneous generation" was wrong. Pasteur believed something must be causing diseases to appear. He did not think that bad air could make someone sick. Instead he thought it might be something in the air that caused disease.

Pasteur knew that there were small particles of dust in the air. That is why we have to clean our houses regularly. When scientists look at dust under the microscope, they can often see small organisms moving. These organisms are germs. He thought that maybe it was the dust particles in the air that caused disease. But he had to find a way to prove it.

Generation - the creation or production of something.

Microscope - A device used to produce a much larger view of very small objects so that they can be seen clearly.

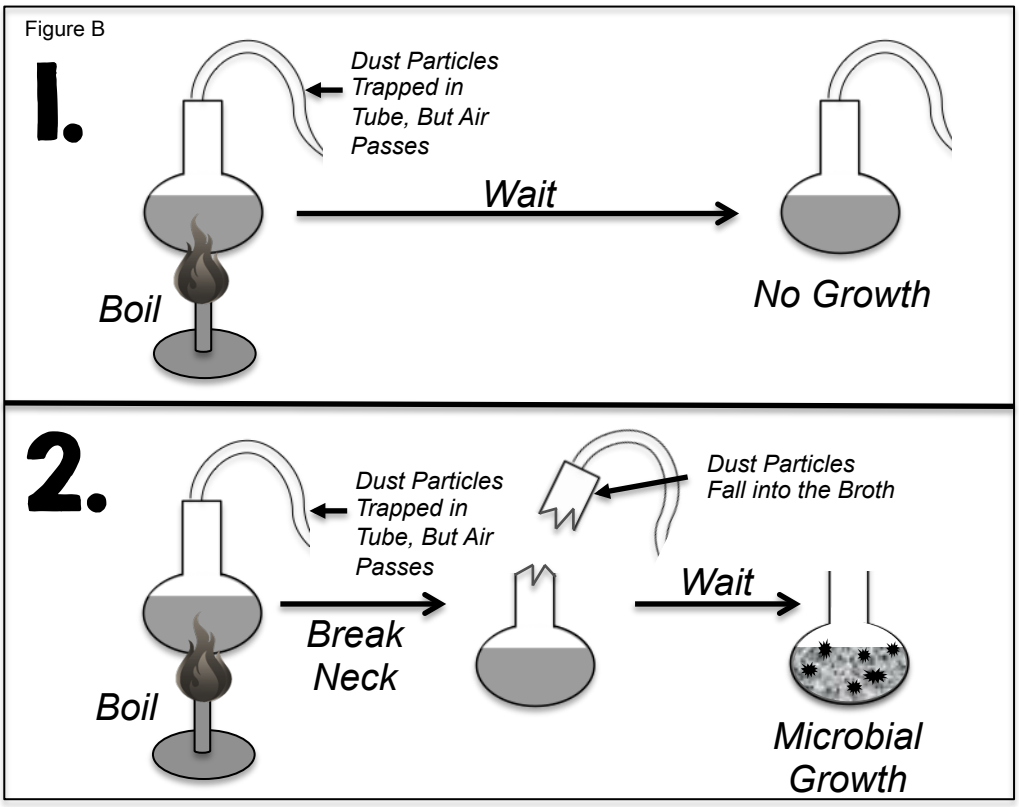
Particle -a very small piece of something.

Spontaneous - Suddenly and without cause.

Theory -an idea that explains how something came to be.

Louis Pasteur decided to do an experiment. He took two glass flasks with long swan necks and he filled them with a clear liquid broth. Then he boiled the broth. Boiling the broth kills every living thing inside them. This is how he knew that there was nothing alive inside the flasks.

Next, he broke one of the swan necks off the glass flasks. Now he had one flask with a long swan neck, and one without any neck at all. Air could enter both flasks, but germs and dust particles would be trapped in the long swan neck of the first flask and not reach the broth. This is because gravity keeps the germs and dust from moving up the tube. In the broken flask, germs floating in the air on dust particles could drop and land in the broth. It did not take very long for the second flask to become cloudy. There was life appearing in it. The first flask with the swan neck remained clear.



This experiment proved that life did not just appear. It showed new life came from germs floating on dust particles in the air. With this experiment, Louis Pasteur proved the spontaneous generation theory was wrong. Instead, he proposed that germs are what cause disease. Today we know that Louis Pasteur is correct and that is why we wash our hands. We do not want to get sick from the germs all around us!

Germs, Germs Everywhere!

Have you ever been sick? Have you ever wondered how you got that way? It was most likely due to germs that you picked up from someone or something. There are many different ways that you can get these germs. You are probably aware of some ways, but may be surprised by others. We will take a look at how they are passed along.

One way that germs can be passed on is through the air. This is called airborne transmission. People who cough or sneeze can infect others who are standing within three feet of them. I think of this as the "splash zone". People in the splash zone might breathe in the germs or the germs can fall on them directly. Sneezes can send germs flying out of the nose at speeds up to 80 miles per hour. Germs can also be spread when people talk. Whether you know it or not, most people have at least a little bit of saliva come out of their mouths when they talk; some just more than others. This too, spreads germs.

Have you ever given someone a high five before? If so, then you have exchanged germs. We call this direct contact and this is another way that germs can be passed on. If someone sneezes or coughs into their hand, they can pass germs on directly to someone else. By touching your eyes, nose, or mouth you can ingest the germs into your own body. There are many ways germs can be spread by direct contact. Other ways include hugging, kissing, shaking hands, or even bumping into one another.

Another way to get germs from someone is by indirect contact. You don't have to actually come into contact with someone to get their germs. A person can cough or sneeze and then touch an object like a door handle, pencil, or table. Once you touch that object, then you pick up the germs. If you eat at a restaurant or in the school cafeteria, the person preparing your food can spread their germs onto your tray, plate, or eating utensils. This is why it's important to wash your hands often. If you

don't wash your hands after touching another germ infested object, you are at risk of getting those germs inside your body.

Swimming is an activity where people probably don't fear or think about germs much. But the reality is, the pool, lakes, and other bodies of water are filled with germs. Think back to your own swimming experiences. A lot of people spit the water out of their mouths when they come up. Many people sneeze, wipe their faces, and then put their hands back into the water. Water goes into your nose and back out. People blow bubbles. Let's not forget the germs that were on people's hands and faces before getting into the water. It is a huge germ swamp!

Remember, germs are everywhere. Some germs can live on surfaces of objects for several hours while others can hitch rides on dust particles and travel longer distances. They can't be avoided. However, you can do some things to prevent getting sick from them. After going into public places and areas with a lot of people, make sure to wash your hands often. If you know someone is sick, avoid direct contact or touching the things they have touched. Keep your hands away from your nose, eyes, and mouth to keep germs that may be on your hands from entering your body.

RI.5.9 #5

•RESPOND•
Integrate: Germs

NAME:

RI5.9

RI5.7

1. Write a knowledgeable response to the question below. **INTEGRATE** information and facts from the two attached <u>as well as a third source</u> you find on your own.

How do germs spread? How do you know?

Title of your third source: _____

Location of the third source: _____

Color the information or facts from the two attached articles that you used in your writing.

_____

_____

_____

_____

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NAME:

RI.5.5

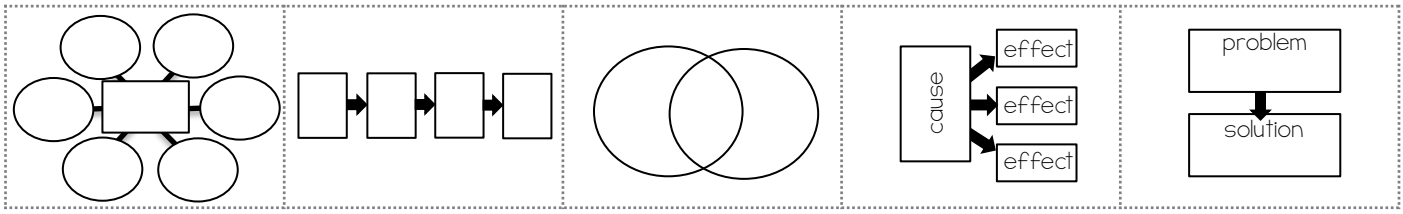
1. Describe the **TEXT STRUCTURE** the author used in Louis Pasteur and Germ Theory.

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Louis Pasteur and Germ Theory. Draw and complete the diagram in the space provided.



RI.5.9 #5 •RESPOND• Compare Structure: Germs

NAME:

RI.5.5

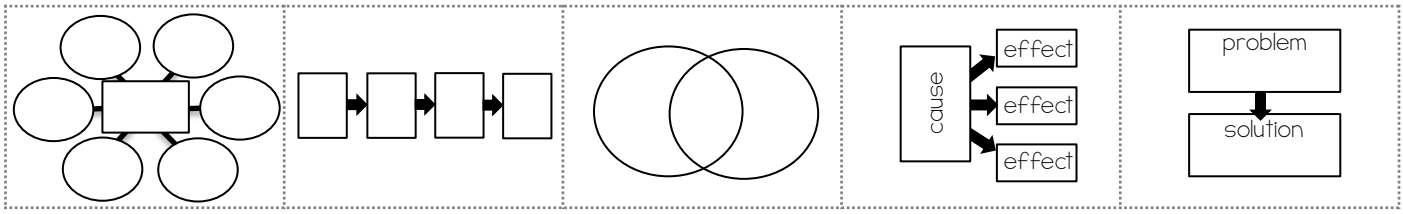
1. Describe the **TEXT STRUCTURE** the author used in Germs, Germs Everywhere.

_____

_____

_____

2. Choose one of the following visual diagram types that best matches the text structure in Germs, Germs Everywhere. Draw and complete the diagram in the space provided.



3. How is the **TEXT STRUCTURE** similar or different in Louis Pasteur and Germ Theory and Germs, Germs Everywhere

_____

_____

_____

RI.5.9 •RESPOND• #5 Louis Pasteur and Germ Theory

NAME:

NOTE: The questions on this page all refer to Louis Pasteur and Germ Theory

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

_____

_____

_____

_____

_____

RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

RI.5.9 #5 •RESPOND• Germs, Germs Everywhere

NAME:

NOTE: The questions on this page all refer to Germs, Germs Everywhere

RI.5.2

1. What is the **MAIN IDEA** of this text.

MAIN IDEA =
Topic + What the author says about the topic

_____

_____

2. **KEY DETAIL #1:** _____

3. **KEY DETAIL #2:** _____

4. **KEY DETAIL #3:** _____

5. Write a **SUMMARY** of this text. _____

_____

_____

_____

_____

_____

RI.5.8

A **POINT** the author makes is:

REASONS OR EVIDENCE to support this point:

Color the evidence that supports this reason.

What Levels Are Here?

		Lexile Level	Number of Words
RI.3.1	The Ring of Fire	770	318
	Do Mountains Really Grow?	780	570
	Why Do Leaves Change Colors?	800	543
	Egypt: History and Mystery	880	567
	Talking Plants?	950	522
RI.3.2	The World at Night	790	645
	Body Advantage?	860	736
	Can We Float Like a Duck?	840	709
	Can Heart Attacks Be Prevented?	900	582
	Saving Daylight	950	670
RI.3.3	Brontosaurus: The Mixed Up Dinosaur	770	675
	The Clean Up Crew	800	591
	Healing Power of Wolves	860	743
	Cacao to Chocolate	870	539
	Sharks: The Ecosystem Needs Them	880	614
RI.3.4	Can We Drink Salt Water?	770	516
	Bats	770	574
	How Much Do You Know About Water?	780	457
	The World's Oceans	810	612
	Dinosaurs: Warm Blooded or Cold Blooded?	810	514
RI.3.5	Rise to the Challenge: Helen Keller	840	552
	Steps of Inspiration	890	624
	What's Erasing the Polar Bears?	830	721
	Saving the Polar Bears	950	586
	Oil Spill in the Gulf	890	621
	Spill! What We Did and How to Fix It	980	872
	The Year Round School Debate	910	554
	School's Out For Summer!	820	508
	How the Potato Conquered the World	820	629
	The Potato Saves the Day	800	580

What Levels Are Here?

		Lexile Level	Number of Words
RI.5.6	Remembering the Great Depression	780	687
	The Great Depression		
	The Berlin Wall	820	733
	My Side of the Wall		
	American Explorers: Lewis and Clark	940	560
	Original Journal Excerpts		
	The Unsinkable Ship	830	583
	The Titanic Sinking	900	806
	Man on the Moon!	990	751
	The Steps That Changed Us All		
RI.5.8	Do You Get Enough Sleep?	810	477
	Do Forests Need Fires?	860	623
	Phones in Schools?	900	638
	Give Them Phones!	960	604
	Conserve Helium	980	718
RI.5.9	Brontosaurus: The Mixed Up Dinosaur	770	675
	The Clean Up Crew	800	591
	Healing Power of Wolves	860	743
	Cacao to Chocolate	870	539
	Sharks: The Ecosystem Needs Them	880	614
RI.5.9	Nature's Little Helpers	920	604
	The Honeybee	910	621
	What Do You Know About Honeybees?	880	569
	Yes to Second Languages!	870	451
	More Than One Language?	950	372
	Sporting Pride!	800	573
	Pay Your Athletes!	780	567
	We Need Nature Reserves	890	538
	Just Say No to Reserves	860	670
	Louis Pastuer and Germ Theory	820	494
	Germs, Germs Everywhere!	860	595

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