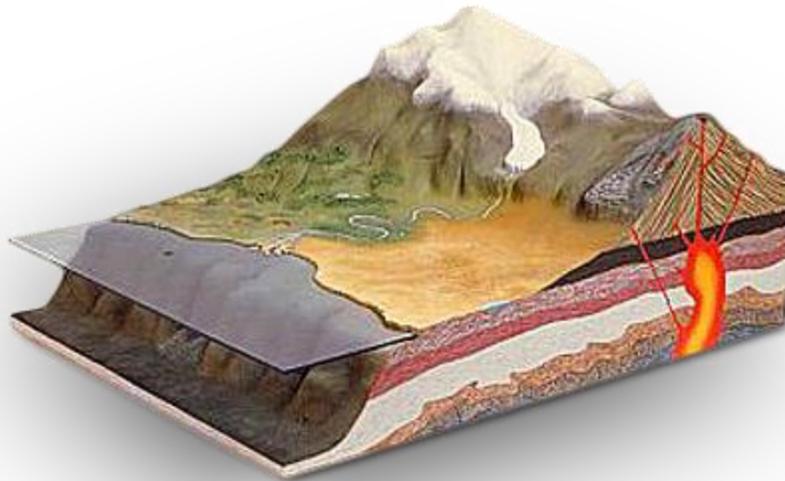
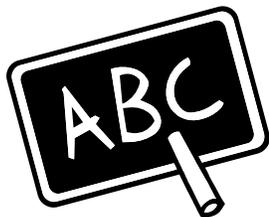


Landforms



Print Partner Title / First Line	Skill
Summer Vacation (Beach and Mountains)	Comparing and Contrasting and Connecting Themes
The Fat Sand Rat (Desert)	Retelling the Main Idea
Deserts and Mountains	Compare and Contrast
Desert Night Life	Determining Meaning of Multiple-Meaning Words: Homographs
The Lion and the Mouse (Jungle)	Recognizing Elements of Plot
Life in the Everglades	Categorizing Words
Protecting the Florida Everglades	Identifying Meanings Using Root Words
Grand Problems (Grand Canyon)	Answering Inferential and Evaluative Questions
Grand Adventure (Grand Canyon)	Drawing Conclusions
A Walk in the Rain Forest	Reading Fluently
Saving the Wetlands	Categorizing Words and Identifying Meanings of Words
Uncle Coffee's Nephew (Canyons)	Understanding Metaphorical and Symbolic Words
Desert Rain	Determining Meanings of Words
Mount Everest	Using Information from Tables and Charts
Making a Mountain	Distinguishing Fact and Opinion
Mount St. Helens	Identifying Cause-and-Effect Relationships
The Land of Strange Vegetation	Identifying the Main Idea and Supporting Details
Deforestation Perspectives	Differentiating between Fact, Opinion, and Bias
Endangered Wetlands	Using Cause and Effect to Gain Meaning

- Print Partners are bundled by theme only. Grade level bundles are available.
- Each Print Partner is a stand-alone worksheet. Pagination on the bottom of each page denotes numbering designed for individual worksheets.



Comparing and Contrasting and Connecting Themes

Directions: Read the passage. Then answer the questions.

Summer Vacation

Maria was happy. It was the first day of summer. She and her family gathered around the kitchen table. They wanted to decide on their vacation trip. Maria's family liked the beach, but they were thinking about going to the mountains.

First, they talked about the mountains. "There is a lake where we can water-ski," said Maria.

"We can also bike and hike through the mountains," said her mother.

Next, they talked about the things they could do at the beach. "We can make sandcastles," said her little sister.

"We can ride our bikes on the paths by the ocean," her father said.

The family agreed that both the beach and the mountains can be fun. They both have water for swimming and paths for bike riding. It was a hard decision to make.

Maria's parents were glad they had talked about the two places. In the end, they had a great time in the mountains.

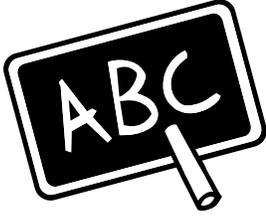
1. The theme of this story is ____
 - A. always be nice to other people.
 - B. think before making decisions.
 - C. forgive other people.
 - D. always do your best.

2. The story compares and contrasts ____
 - A. Maria and her sister.
 - B. Maria's mother and father.
 - C. sand and water.
 - D. the beach and the mountains.

3. To compare and contrast means to look for things that are ____
 - A. the same and different.
 - B. very big and very small.
 - C. right and wrong.
 - D. hard and easy.

4. How does Maria's family find a solution?
 - A. They let her sister decide.
 - B. They compare and contrast.
 - C. They change their minds.
 - D. They choose both places.

5. List the things you need when you go to the beach and to the mountains. Circle the ones that are the same.



Comparing and Contrasting and Connecting Themes

Directions: Read the passage. Then answer the questions.

Summer Vacation

Maria was happy. It was the first day of summer. She and her family gathered around the kitchen table. They wanted to decide on their vacation trip. Maria's family liked the beach, but they were thinking about going to the mountains.

First, they talked about the mountains. "There is a lake where we can water-ski," said Maria.

"We can also bike and hike through the mountains," said her mother.

Next, they talked about the things they could do at the beach. "We can make sandcastles," said her little sister.

"We can ride our bikes on the paths by the ocean," her father said.

The family agreed that both the beach and the mountains can be fun. They both have water for swimming and paths for bike riding. It was a hard decision to make.

Maria's parents were glad they had talked about the two places. In the end, they had a great time in the mountains.

1. The theme of this story is ____
 - A. always be nice to other people.
 - B. think before making decisions.**
 - C. forgive other people.
 - D. always do your best.

2. The story compares and contrasts ____
 - A. Maria and her sister.
 - B. Maria's mother and father.
 - C. sand and water.
 - D. the beach and the mountains.**

3. To compare and contrast means to look for things that are ____
 - A. the same and different.**
 - B. very big and very small.
 - C. right and wrong.
 - D. hard and easy.

4. How does Maria's family find a solution?
 - A. They let her sister decide.
 - B. They compare and contrast.**
 - C. They change their minds.
 - D. They choose both places.

5. List the things you need when you go to the beach and to the mountains. Circle the ones that are the same. **Answers will vary.**

Possible response: Items for the beach include sunglasses, towels, swimming suit, a hat, and sandals. Items for the mountains include sunglasses, walking stick, pants and shirts, a hat, and hiking boots.



Retelling the Main Idea

Directions:

Read each paragraph. Then use complete sentences to retell the main idea.

What You Need to Know

What is the main idea of a text?

The main idea is what the text is mostly about.

The Fat Sand Rat

The desert is a very hot place. The sun shines many hours in a desert. Big trees do not grow there. Shade is hard to find. There might be some caves to hide in. Some big rocks might give some shade. Food is hard to find sometimes too.

Retell the main idea.

It is hard for people to live in a desert. They need water. They need food. They need a place to hide from the sun. It is hard for animals to live in the desert too. Animals need water and food. They need shade too.

Retell the main idea.

Some desert animals are special. They do not need to drink water. One of these animals is the fat sand rat. This animal gets water from the plants it eats. The fat sand rat lives under the ground. It makes tunnels. Its home is dark and cool.

Retell the main idea.

During the day, the fat sand rat looks for food. It finds seeds on the ground. It finds plants. The fat sand rat takes the food back to its home. The rat eats a lot of food. It gets a layer of fat. The rat lives off the fat when it cannot find food.

It is not easy for people to live in the desert. But the fat sand rat can live there just fine.

Retell the main idea.



Retelling the Main Idea

Directions:

Read each paragraph. Then use complete sentences to retell the main idea.

What You Need to Know

What is the main idea of a text?

The main idea is what the text is mostly about.

The Fat Sand Rat

The desert is a very hot place. The sun shines many hours in a desert. Big trees do not grow there. Shade is hard to find. There might be some caves to hide in. Some big rocks might give some shade. Food is hard to find sometimes too.

Retell the main idea.

The desert is a dry place. It is hard to find water, food, and shade.

It is hard for people to live in a desert. They need water. They need food. They need a place to hide from the sun. It is hard for animals to live in the desert too. Animals need water and food. They need shade too.

Retell the main idea.

It is hard for people and animals to live in the desert.

Some desert animals are special. They do not need to drink water. One of these animals is the fat sand rat. This animal gets water from the plants it eats. The fat sand rat lives under the ground. It makes tunnels. Its home is dark and cool.

Retell the main idea.

The fat sand rat does not
drink water. It gets water
from the plants it eats. The
rat lives under the ground.

During the day, the fat sand rat looks for food. It finds seeds on the ground. It finds plants. The fat sand rat takes the food back to its home. The rat eats a lot of food. It gets a layer of fat. The rat lives off the fat when it cannot find food.

Retell the main idea.

The rat comes out during
the day to find food. It eats
lots of food and gets fat.
The fat helps the rat when
there is no food.

It is not easy for people to live in the desert. But the fat sand rat can live there just fine.



Compare and Contrast

Directions: Read the passage. Then complete the activities that follow.

Deserts and Mountains

Would you rather go to the desert or the mountains? At first glance, the two places may seem very different. But they actually share many similarities. Both the desert and the mountains have extreme weather, a variety of plants and trees, and many kinds of animals.

Desert weather is extremely hot and dry. Deserts get less than 10 inches of rain each year. It is often over 100 degrees during the day. Although deserts can get cold at night, they are known for their intense heat.

Several plants, trees, and animals call the desert their home. They all have ways to survive in the dry heat. The trees and bushes that grow in the desert store water in their roots and stems. Many desert plants, such as the cactus, have spines instead of leaves. The spines collect water, provide shade, and protect the plant from animals. In fact, many desert animals get their water from eating plants. A lot of desert animals also escape the heat by living under the ground. Many search for food at night. Snakes, lizards, birds, ground squirrels, and bobcats all live in the desert.

Mountains also have extreme weather. The weather in the mountains is often cool and wet. The higher you go, the colder it

gets. The snow never melts on some mountain peaks. The weather can also change very fast. On even the warmest days, a cold thunderstorm can roll in at any moment.

Many plants, trees, and animals grow and live in the mountains. The bottom and middle parts of mountains are covered in forests. Mountain trees have many leaves or needles. Bears, deer, squirrels, and birds all live at the bottom or in the middle of the mountain. In these areas, it is easy for them to find food and shelter. But the tops of mountains are usually too cold for plants and animals. Most mountaintops are covered in ice instead of plants and animals. Only animals with thick, wooly fur can live there. Mountain goats live at the top of many mountains.

1. Underline words or phrases that tell about weather in the desert and in the mountains.
2. Circle words or phrases that tell about plants and animals in the desert and in the mountains.

Directions: Review the words and phrases you underlined and circled in the passage. Now complete the graphic organizer below.

Compare	In a few sentences, summarize how the desert and the mountains are similar.
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black;"/>	

Contrast	Write a list of how deserts and mountains are different. Two have been done for you.	
Features	Desert	Mountains
Weather		cold and wet
Plants and Trees	Plants store water.	
Animals		



Compare and Contrast

Directions: Read the passage. Then complete the activities that follow.

Deserts and Mountains

Would you rather go to the desert or the mountains? At first glance, the two places may seem very different. But they actually share many similarities. Both the desert and the mountains have extreme weather, a variety of plants and trees, and many kinds of animals.

Desert weather is extremely hot and dry. Deserts get less than 10 inches of rain each year. It is often over 100 degrees during the day. Although deserts can get cold at night, they are known for their intense heat.

Several plants, trees, and animals call the desert their home. They all have ways to survive in the dry heat. The trees and bushes that grow in the desert store water in their roots and stems. Many desert plants, such as the cactus, have spines instead of leaves. The spines collect water, provide shade, and protect the plant from animals. In fact, many desert animals get their water from eating plants. A lot of desert animals also escape the heat by living under the ground. Many search for food at night. Snakes, lizards, birds, ground squirrels, and bobcats all live in the desert.

Mountains also have extreme weather. The weather in the mountains is often cool and wet. The higher you go, the colder it

gets. The snow never melts on some mountain peaks. The weather can also change very fast. On even the warmest days, a cold thunderstorm can roll in at any moment.

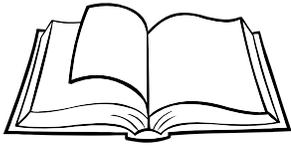
(Many plants, trees, and animals) grow and live in the mountains. The bottom and middle parts of mountains are covered (in forests). Mountain trees have (many leaves or needles). (Bears, deer, squirrels, and birds) all live at the bottom or in the middle of the mountain. In these areas, it is (easy for them to find food and shelter). But the tops of mountains are usually too cold for plants and animals. Most mountaintops are covered in ice instead of plants and animals. Only (animals with thick, wooly fur) can live there. (Mountain goats) live at the top of many mountains.

1. Underline words or phrases that tell about weather in the desert and in the mountains.
2. Circle words or phrases that tell about plants and animals in the desert and in the mountains.

Directions: Review the words and phrases you underlined and circled in the passage. Now complete the graphic organizer below.

Compare	In a few sentences, summarize how the desert and the mountains are similar.
<p>Possible response: Both the desert and the mountains have extreme weather. Plants, trees, and animals also live in both places. Both the desert and mountains are fun places to visit.</p>	

Contrast	Write a list of how deserts and mountains are different. Two have been done for you.	
Features	Desert	Mountains
Weather	dry and hot little rain	cold and wet snow, rain The weather changes quickly.
Plants and Trees	few plants or trees Plants store water. Plants and trees do not have leaves; they have spines.	forests many plants and trees Plants and trees have leaves or needles.
Animals	Animals eat plants for water. Animals escape the heat by living under the ground. Many animals hunt at night. Snakes, lizards, ground squirrels, and bobcats live in the desert.	It is easy to find food and shelter on the bottom and in the middle of a mountain. Animals need thick, wooly fur to live at top of mountain. Bears, deer, squirrels, and goats live in the mountains.



Determining Meaning of Multiple-Meaning Words: Homographs

Directions: Read the Web page below.



Back



Address:

Desert Night Life

Desert Night Life

Deserts are very hot places that appear empty of any living thing. However, many animals make the desert their home. These animals are adapted to the desert. They have learned how to live in harsh conditions. Some birds stay in the desert during the cooler months. They fly to other places when it gets hot. Other animals are active at night or in the early morning when it is cooler. They sleep during the day when it is too hot to be active. They search for food and hunt at night.

One of these animals is the *pocket mouse*. The pocket mouse avoids the heat by only coming out at night. It digs under the ground to make a nest. The dirt is cooler there. At night, it goes outside in search of food. The pocket mouse fills its cheek pockets with seeds to take home. It almost never has to drink water. It gets water from the food it eats.

Another desert animal that is adapted to the desert is the *ringtail cat*. It has seven to eight circular bands of white along its tail. During the day, the ringtail cat hides in a den. At night, it goes out to look for food. The ringtail cat uses its lean body and fast legs to move quickly along rocky ledges. It eats small prey, insects, and fruit. Like the pocket mouse, the ringtail cat can go without water for days.



Internet

Directions: Draw a line to match each word on the left with its meaning on the right.

band

quick

long

conceal

ground

earth

fast

not fat

hide

stripe

lean

lengthy

Directions: Read the question. Then write your answer on the lines below.

1. How do the pocket mouse and ringtail cat survive the desert heat? List at least three examples.



Determining Meaning of Multiple-Meaning Words: Homographs

Directions: Read the Web page below.



Back



Address:

Desert Night Life

Desert Night Life

Deserts are very hot places that appear empty of any living thing. However, many animals make the desert their home. These animals are adapted to the desert. They have learned how to live in harsh conditions. Some birds stay in the desert during the cooler months. They fly to other places when it gets hot. Other animals are active at night or in the early morning when it is cooler. They sleep during the day when it is too hot to be active. They search for food and hunt at night.

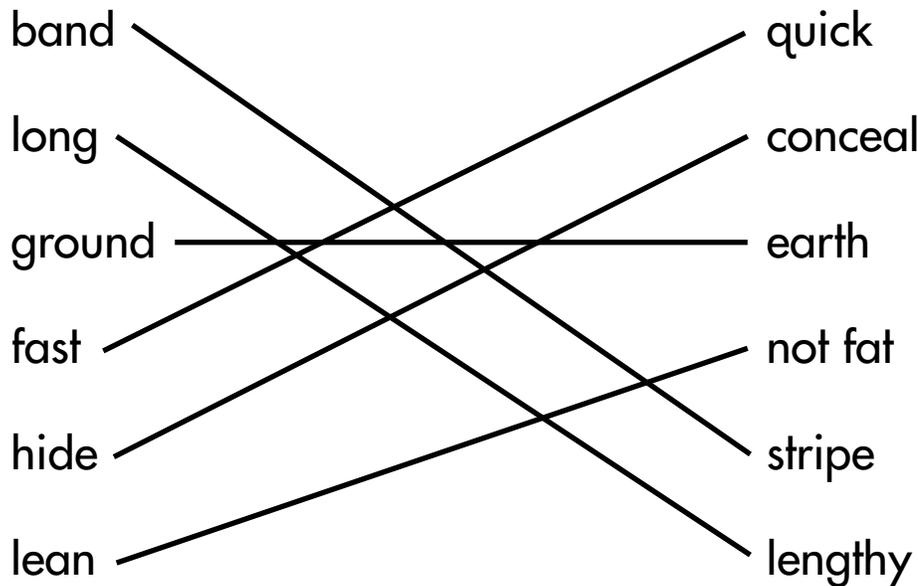
One of these animals is the *pocket mouse*. The pocket mouse avoids the heat by only coming out at night. It digs under the ground to make a nest. The dirt is cooler there. At night, it goes outside in search of food. The pocket mouse fills its cheek pockets with seeds to take home. It almost never has to drink water. It gets water from the food it eats.

Another desert animal that is adapted to the desert is the *ringtail cat*. It has seven to eight circular bands of white along its tail. During the day, the ringtail cat hides in a den. At night, it goes out to look for food. The ringtail cat uses its lean body and fast legs to move quickly along rocky ledges. It eats small prey, insects, and fruit. Like the pocket mouse, the ringtail cat can go without water for days.



Internet

Directions: Draw a line to match each word on the left with its meaning on the right.



Directions: Read the question. Then write your answer on the lines below.

1. How do the pocket mouse and ringtail cat survive the desert heat? List at least three examples. **Answers will vary.**

Possible response: Both the pocket mouse and ringtail cat hunt for food at night. The pocket mouse lives in the cool dirt. The pocket mouse gets water from the food it eats. The ringtail cat hides in its den during the day. The ringtail cat can go for days without water.



Recognizing Elements of Plot

Directions: Read the passage. Then draw a line matching the correct plot element to the correct part of the story.

The Lion and the Mouse

A little brown mouse scurried along the jungle floor. He soon discovered a warm and soft place to sleep. Little did he know that his new bed lay on a lion's head. The lion felt the little mouse in his fur and roared fiercely.

“Please don't eat me, Mr. Lion!” the mouse begged. “I know I am small. But if you spare my life, I promise I will help you one day.” The mighty lion laughed at the silly idea. Such a tiny animal could never do anything for him! But the lion also knew that the mouse was too little to fill his belly. He decided to let him go.

The very next day, the mouse heard the lion's roars echo through the jungle. These roars were not fierce, but rather, sad and worried. The mouse followed the lion's cries for help through the jungle and into a clearing. There, the mouse found the weeping lion bound in a hunter's net. The lion thrashed at the net with his sharp claws, struggling hard to get free before the hunter returned. The mouse remembered his promise to help the lion. He quickly jumped onto the net and chewed through the ropes. Within minutes, the lion was free.

With the promise complete, the proud mouse and the grateful lion ran back into the jungle. There, they lived as friends for the rest of their long lives.

conflict

The mouse hears the lion's roars for help. He finds the lion caught in a net, struggling to get free.

rising action

The mouse frees the lion. The two live as friends for the rest of their lives.

climax

The mouse remembers his promise to help the lion. He chews through the net.

resolution

The lion catches the mouse. The mouse begs for his life and promises to help the lion one day.

Directions: Read the questions. Then write your answers in complete sentences on the lines provided.

1. What is the main problem in this story?

2. How is the problem solved?



Recognizing Elements of Plot

Directions: Read the passage. Then draw a line matching the correct plot element to the correct part of the story.

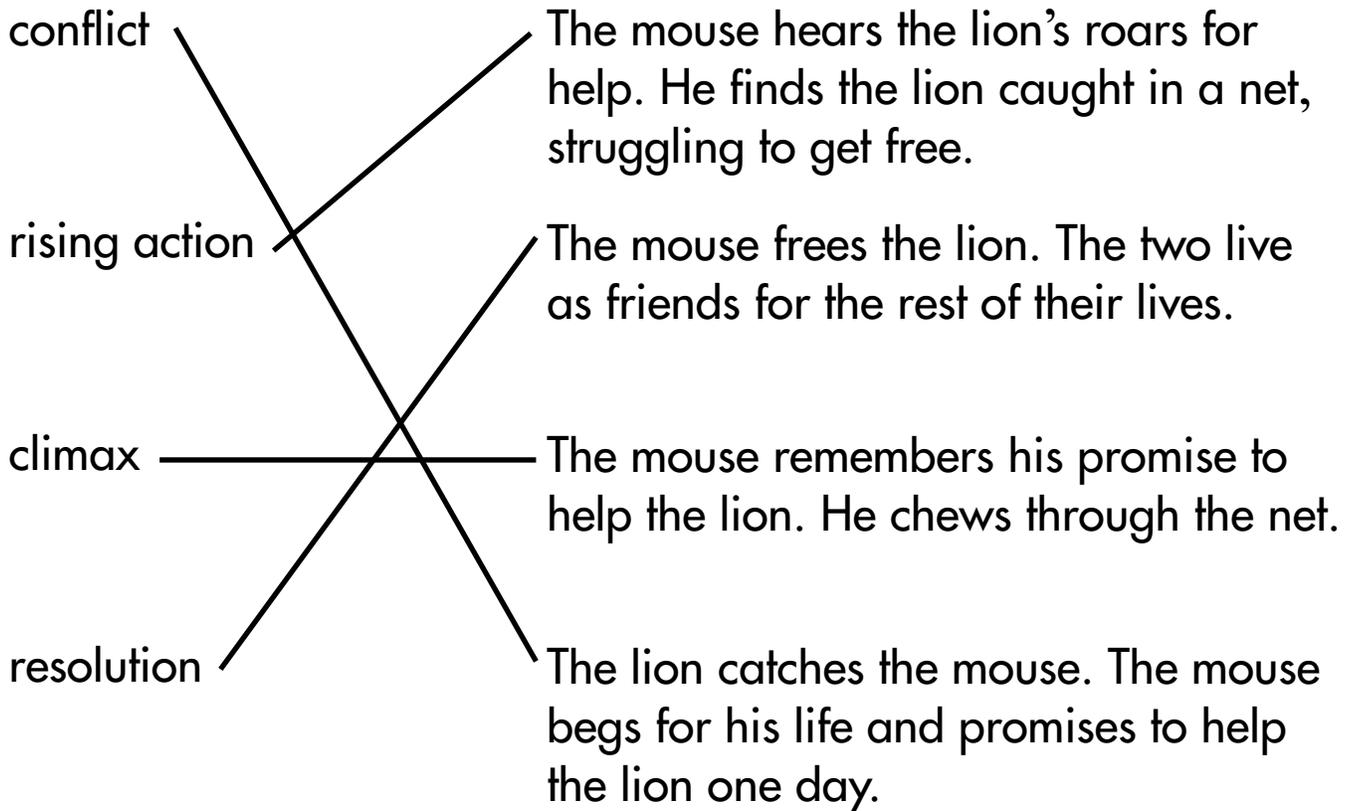
The Lion and the Mouse

A little brown mouse scurried along the jungle floor. He soon discovered a warm and soft place to sleep. Little did he know that his new bed lay on a lion's head. The lion felt the little mouse in his fur and roared fiercely.

"Please don't eat me, Mr. Lion!" the mouse begged. "I know I am small. But if you spare my life, I promise I will help you one day." The mighty lion laughed at the silly idea. Such a tiny animal could never do anything for him! But the lion also knew that the mouse was too little to fill his belly. He decided to let him go.

The very next day, the mouse heard the lion's roars echo through the jungle. These roars were not fierce, but rather, sad and worried. The mouse followed the lion's cries for help through the jungle and into a clearing. There, the mouse found the weeping lion bound in a hunter's net. The lion thrashed at the net with his sharp claws, struggling hard to get free before the hunter returned. The mouse remembered his promise to help the lion. He quickly jumped onto the net and chewed through the ropes. Within minutes, the lion was free.

With the promise complete, the proud mouse and the grateful lion ran back into the jungle. There, they lived as friends for the rest of their long lives.



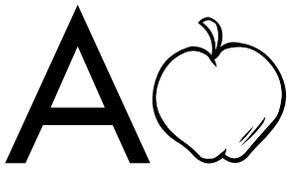
Directions: Read the questions. Then write your answers in complete sentences on the lines provided.

1. What is the main problem in this story?

The mouse must keep his promise to help the lion one day.

2. How is the problem solved?

The mouse chews through the net and sets the lion free.



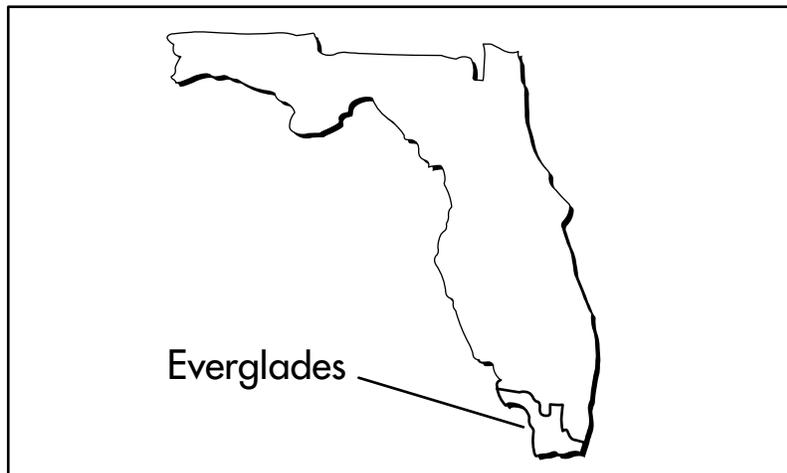
Categorizing Words

Directions: Read the Web page. Then answer the questions that follow.

Life in the Everglades

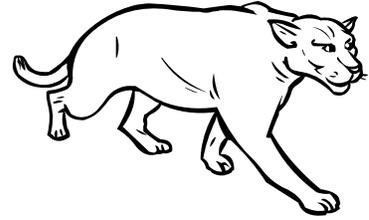
Someone flying in a jet to Miami, Florida, might pass over the Everglades. To this passenger, the Everglades look like a big, muddy puddle of water. A closer look tells a much bigger story.

Many different plants and animals make homes in the Florida Everglades. These living things are all a part of this delicate ecosystem. The survival of so many different species depends on the survival of these plants and animals.



American Alligator This reptile grows to be five to thirteen feet in length. The alligator's size and length depend on the amount of food they can find. Food becomes scarce in drought conditions. It also becomes scarce if the water is polluted or disturbed in other ways. Lack of food limits growth and breeding among the alligators. These large reptiles are one of the Everglades fiercest animals.

Florida Panther This special cat became Florida's state mammal in 1983. The size of the panther can range from six to eight feet from head to tail. For its diet, the panther eats deer, wild hogs, rabbits, and raccoons. Like some other big cats, the panthers are skillful swimmers and will often cross through water to reach food. Construction and changes to the Everglades have caused panthers to become endangered.



Mangroves The mangrove is a shrub that grows along tidal areas. Scientists call areas with mangroves "the vital zone." It is a place surrounded by saw grass and algae. Coastal mangroves are adapted to the brackish water they live in. Brackish water is a mixture of salt and fresh

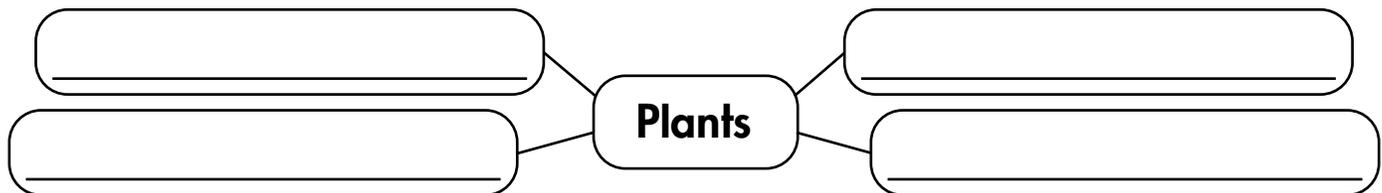
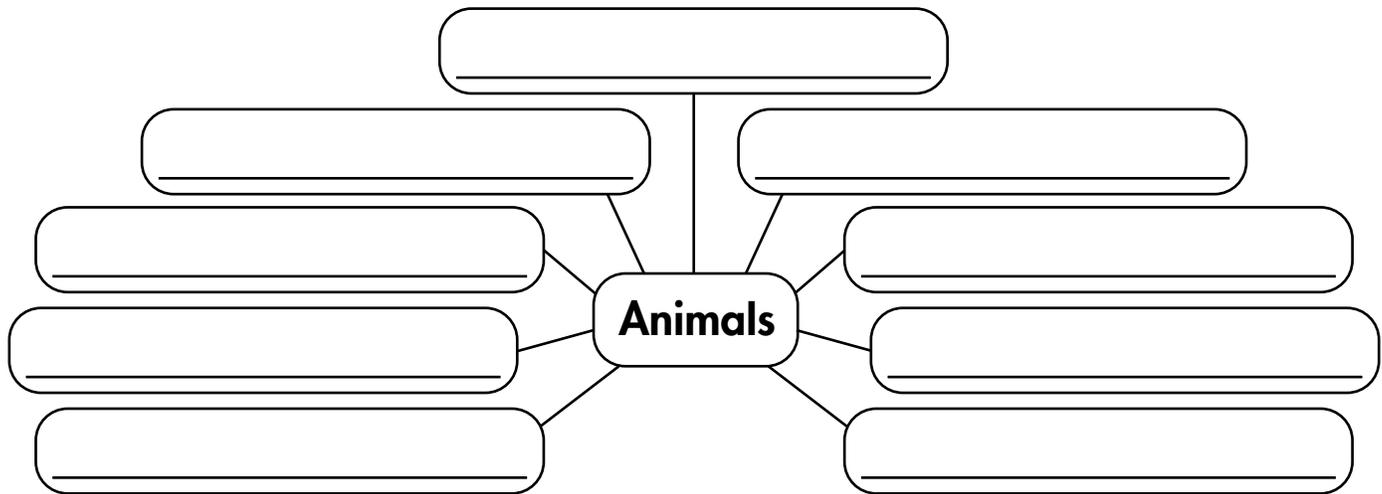
water. Large fish are unable to survive here. But the plants and grasses form a safe area for new marine life. It is a nursery for the babies to grow before heading to sea. They also act as a natural wall to the land during hurricanes. It is against the law to harm the mangroves.

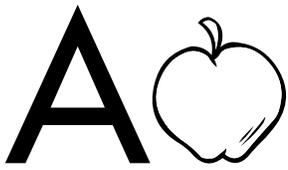
The alligator, panther, and mangroves are a few of the living things worth protecting in the Everglades. The tiny algae plants and young fish are just as important. The blue herons fly in and lay eggs there as well. Preserving the Everglades can help keep many species of plants and animals from extinction.

1. Reread the Web page. Then circle the names of all animals and plants on the Web page.

2. Write the names of the animals and plants in the circles under the correct headings. You will need to add more circles after these are filled.

Living Things in the Everglades





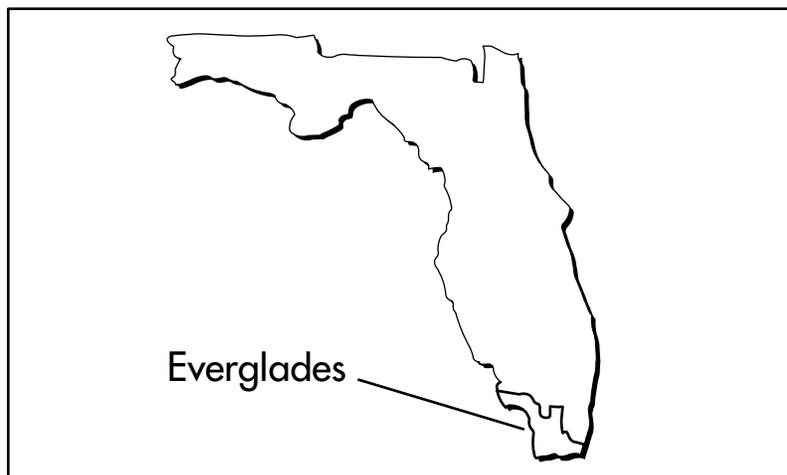
Categorizing Words

Directions: Read the Web page. Then answer the questions that follow.

Life in the Everglades

Someone flying in a jet to Miami, Florida, might pass over the Everglades. To this passenger, the Everglades look like a big, muddy puddle of water. A closer look tells a much bigger story.

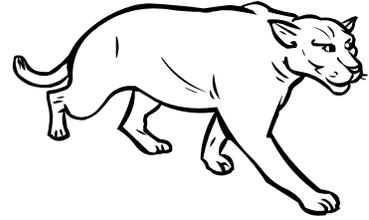
Many different plants and animals make homes in the Florida Everglades. These living things are all a part of this delicate ecosystem. The survival of so many different species depends on the survival of these plants and animals.



American Alligator This reptile grows to be five to thirteen feet in length. The alligator's size and length depend on the amount of food they can find. Food becomes scarce in drought conditions. It also becomes scarce if the water is polluted or disturbed

in other ways. Lack of food limits growth and breeding among the alligators. These large reptiles are one of the Everglades fiercest animals.

Florida Panther This special cat became Florida's state mammal in 1983. The size of the panther can range from six to eight feet from head to tail.



For its diet, the panther eats **deer**, **wild hogs**, **rabbits** and **raccoons**. Like some other big **cats**,

the panthers are skillful swimmers and will often cross through water to reach food. Construction and changes to the Everglades have caused panthers to become endangered.



Mangroves The mangrove is a shrub that grows along tidal areas. Scientists call areas with mangroves "the vital zone."

It is a place surrounded by **saw grass** and **algae**. Coastal mangroves are adapted to the brackish water they live in. Brackish water is a mixture of salt and fresh

water. Large **fish** are unable to survive here. But the plants and **grasses** form a safe area for new marine life. It is a nursery for the babies to grow before heading to sea. They also act as a natural wall to the land during hurricanes. It is against the law to harm the mangroves.

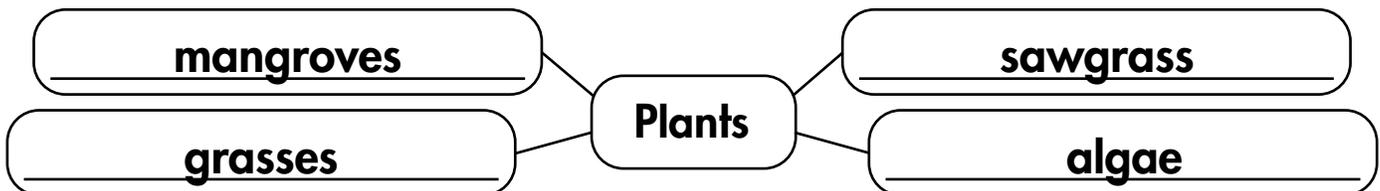
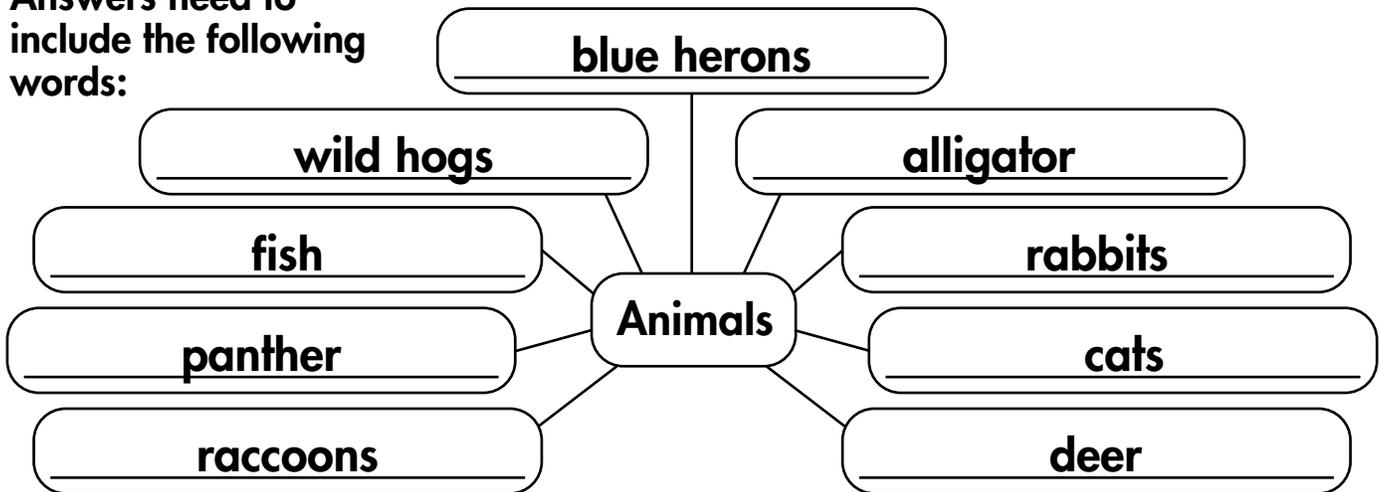
The alligator, panther, and mangroves are a few of the living things worth protecting in the Everglades. The tiny algae plants and young fish are just as important. The **blue herons** fly in and lay eggs there as well. Preserving the Everglades can help keep many species of plants and animals from extinction.

1. Reread the Web page. Then circle the names of all animals and plants on the Web page.

2. Write the names of the animals and plants in the circles under the correct headings. You will need to add more circles after these are filled.

Living Things in the Everglades

Answers need to include the following words:





Identifying Meanings Using Root Words

Directions: Read the article. Then complete the activities that follow.

Protecting the Florida Everglades

Protecting the Florida Everglades is important for many reasons. One reason is that they are the only everglades in the entire world. Another reason to preserve the everglades is that they are home to many unique animal and plant life. Some ecologists say that many plants and animals living in the Everglades are in danger of extinction. They are in trouble because of how people are treating this delicate ecosystem.

The Everglades seem to be very large. But it is really decreasing in size. They used to cover over one thousand square miles. Now they are less than half that size. Because the wetlands are decreasing in size, many plants and animals are losing their homes. Microscopic bacteria are an important life form to the Everglades. They make their home in the water. The bacteria actually make the water cleaner. Now they no longer thrive there. Humans dump things into the water that pollute it, making the water unsafe for animals and humans to drink, and for bacteria to live in.

Human activities, such as farming and construction, are causing the Everglades to become polluted. Run-off from human activities leaves dangerous things in the water. Ecologists, or scientists who study living things and their environments, have found dangerous levels of toxins in the wetlands. Mercury, a liquid metal, has been found there. They discovered toxins in the water, plants, and animals. Scientists have found high levels of mercury in the bodies of Florida panthers. This animal is almost extinct. It is thought that there are fewer than 30 panthers in all of Florida and less than ten in the Everglades National Park.

But scientists believe that there are ways to help the Everglades. They have carefully studied this habitat using binoculars and telescopes to watch

the plants and animals. They also test the water quality and take lots of notes. Through their observations and tests they offer us ideas on how to preserve this amazing land.

One idea they have is to improve how the water supply in the wetlands is used. If the water remains at natural levels, plant and animal life will not be bothered. Another idea they have is to reduce the amount of toxic materials being dumped into the water supply. Also, the national park system and the government are working together on several projects to preserve the Everglades. One project will extend the park boundaries. With a larger park, the unique plants and animals of this area will continue to have a home.

As the population in Florida continues to grow, it will become more difficult to protect the wetlands. But there are lots of ways people can help preserve this amazing area. Visitors can follow park rules carefully. Concerned citizens can donate money to research. Everyone can help. Saving the Everglades is important so that generations to come will be able to enjoy this wonderful place.

1. Many words in English have Greek or Latin roots. Read the following list of word parts. Then reread the article and underline words that contain the Greek or Latin roots.

- A. *bi-* the Latin root meaning “twice”
- B. *bio-* the Greek root meaning “life”
- C. *eco-* the Greek root meaning “house”
- D. *-logy* the Latin root meaning “science of”
- E. *-logist* the Latin root meaning “someone who studies the science of”
- F. *micro-* the Greek root meaning “small”
- G. *-scope* the Latin root meaning “to see”
- H. *tele-* the Greek root meaning “at a distance”

2. Write the words you underlined in the article on the lines below.

3. Match the Greek or Latin roots from the box above to the words below. Write the letter or letters of the root next to the word. The first one has been done for you.

- | | |
|-------|------------|
| _____ | biology |
| _____ | microscope |
| _____ | telescope |
| _____ | ecologist |

4. Complete each sentence using words from Question 2. Each word can only be used once.

Scientists use a(n) _____ to see things that are far away.

Someone who studies live animals and plants is called a(n)

_____ .

The Everglades is a unique _____ of plants and animals.

A(n) _____ is an instrument used to make tiny things appear larger.



Identifying Meanings Using Root Words

Directions: Read the article. Then complete the activities that follow.

Protecting the Florida Everglades

Protecting the Florida Everglades is important for many reasons. One reason is that they are the only everglades in the entire world. Another reason to preserve the everglades is that they are home to many unique animal and plant life. Some ecologists say that many plants and animals living in the Everglades are in danger of extinction. They are in trouble because of how people are treating this delicate ecosystem.

The Everglades seem to be very large. But it is really decreasing in size. They used to cover over one thousand square miles. Now they are less than half that size. Because the wetlands are decreasing in size, many plants and animals are losing their homes. Microscopic bacteria are an important life form to the Everglades. They make their home in the water. The bacteria actually make the water cleaner. Now they no longer thrive there. Humans dump things into the water that pollute it, making the water unsafe for animals and humans to drink, and for bacteria to live in.

Human activities, such as farming and construction, are causing the Everglades to become polluted. Run-off from human activities leaves dangerous things in the water. Ecologists, or scientists who study living things and their environments, have found dangerous levels of toxins in the wetlands. Mercury, a liquid metal, has been found there. They discovered toxins in the water, plants, and animals. Scientists have found high levels of mercury in the bodies of Florida panthers. This animal is almost extinct. It is thought that there are fewer than 30 panthers in all of Florida and less than ten in the Everglades National Park.

But scientists believe that there are ways to help the Everglades. They have carefully studied this habitat using binoculars and telescopes to watch

the plants and animals. They also test the water quality and take lots of notes. Through their observations and tests they offer us ideas on how to preserve this amazing land.

One idea they have is to improve how the water supply in the wetlands is used. If the water remains at natural levels, plant and animal life will not be bothered. Another idea they have is to reduce the amount of toxic materials being dumped into the water supply. Also, the national park system and the government are working together on several projects to preserve the Everglades. One project will extend the park boundaries. With a larger park, the unique plants and animals of this area will continue to have a home.

As the population in Florida continues to grow, it will become more difficult to protect the wetlands. But there are lots of ways people can help preserve this amazing area. Visitors can follow park rules carefully. Concerned citizens can donate money to research. Everyone can help. Saving the Everglades is important so that generations to come will be able to enjoy this wonderful place.

1. Many words in English have Greek or Latin roots. Read the following list of word parts. Then reread the article and underline words that contain the Greek or Latin roots.

- A. *bi-* the Latin root meaning “twice”
- B. *bio-* the Greek root meaning “life”
- C. *eco-* the Greek root meaning “house”
- D. *-logy* the Latin root meaning “science of”
- E. *-logist* the Latin root meaning “someone who studies the science of”
- F. *micro-* the Greek root meaning “small”
- G. *-scope* the Latin root meaning “to see”
- H. *tele-* the Greek root meaning “at a distance”

2. Write the words you underlined in the article on the lines below.

ecologists, ecosystem, microscopic, binoculars, telescopes

3. Match the Greek or Latin roots from the box above to the words below. Write the letter or letters of the root next to the word. The first one has been done for you.

_____ B, D _____	biology
_____ F, G _____	microscope
_____ H, G _____	telescope
_____ C, E _____	ecologist

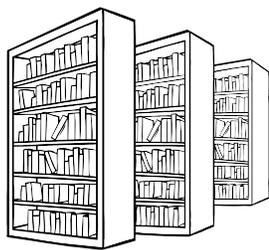
4. Complete each sentence using words from Question 2. Each word can only be used once.

Scientists use a(n) _____ **telescope** _____ to see things that are far away.

Someone who studies live animals and plants is called a(n) _____ **ecologist** _____ .

The Everglades is a unique _____ **ecosystem** _____ of plants and animals.

A(n) _____ **microscope** _____ is an instrument used to make tiny things appear larger.



Assessment for Grade 4, Benchmark 3: Answering Inferential and Evaluative Questions

Directions: Read the passage. Then answer the questions that follow.

Grand Problems

One of the great natural wonders of the world is the Grand Canyon. It is located in the northern part of Arizona. In 1919, it became a national park, and people have traveled from all over the world to see it. However, this beautiful park is in danger. The people who visit the park today see something much different than those who visited long ago. Park rangers know that there are many reasons for the changes. Now they are trying to find answers for some of the park's problems.

The number of visitors to the park grows every year because many people want to see the pretty cliffs and bright sunsets of the canyon. As the number of visitors increases, the number of cars in the park also grows. The parking lots are full. One answer is to have a train or a bus to bring guests to the canyon. The visitors can park farther from the canyon, and they can enjoy their visit without worry. They can look at the beauty of the canyon rather than look for a parking space.

The quality of the air is another problem. Lowering the number of cars in the park may help, but that may not be enough. The cities in the surrounding areas are growing larger. Although they are far away from the park, the polluted air from the cities still blows over the canyon. Sometimes guests cannot see the bottom of the canyon because of the dirty air. Reducing air pollution in the cities may help, but that will be a slow change.

The Colorado River flows through the bottom of the Grand Canyon. In the spring, the river flows faster and higher because of the melting snow

from the mountains. Dirt washes into the river, and the dirt from the muddy water settles to the bottom and is left in a new place. For ages, the river flowed freely through the canyon. The river brought in new soil that helped build up sand bars in the canyon. The fast water also washed away dead weeds and trees. This kept the canyon clean and made it a good home for many animals.

Now, a dam controls the speed of the river. The dam sits fifteen miles from the canyon. It was built to produce electricity. The water that goes through the dam is clean. But the dam does affect the speed of the river and temperature of the water. Some people are concerned that the dam does not allow the river to flow naturally. And scientists report that the fish in the river have a hard time surviving in the colder water.

Most people agree that the Grand Canyon is beautiful. However, people do not agree about how to care for it.

1. Why has the number of cars in the park increased?
 - A. The number of people who come to the park grows.
 - B. The cities around the canyon are growing larger.
 - C. The dam is fifteen miles from the canyon.

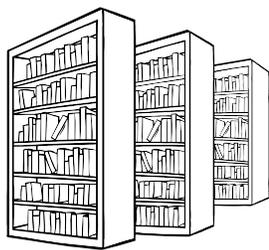
2. Why can't some visitors see the bottom of the canyon?
 - A. The water is too muddy.
 - B. The view is too pretty.
 - C. The air is too dirty.

3. What is one problem that would result if the dam was removed?
 - A. The people who built the dam would not be paid.
 - B. The electricity made by the dam would be lost.
 - C. Clean water would flood the canyon once again.

4. Read the sentences below.

Most people agree that the Grand Canyon is beautiful. However, people do not agree about how to care for it.

Why do you think people cannot agree about how to care for the park? Write your answer using complete sentences. Use information from the passage to support your answer.



Assessment for Grade 4, Benchmark 3: Answering Inferential and Evaluative Questions

Directions: Read the passage. Then answer the questions that follow.

Grand Problems

One of the great natural wonders of the world is the Grand Canyon. It is located in the northern part of Arizona. In 1919, it became a national park, and people have traveled from all over the world to see it. However, this beautiful park is in danger. The people who visit the park today see something much different than those who visited long ago. Park rangers know that there are many reasons for the changes. Now they are trying to find answers for some of the park's problems.

The number of visitors to the park grows every year because many people want to see the pretty cliffs and bright sunsets of the canyon. As the number of visitors increases, the number of cars in the park also grows. The parking lots are full. One answer is to have a train or a bus to bring guests to the canyon. The visitors can park farther from the canyon, and they can enjoy their visit without worry. They can look at the beauty of the canyon rather than look for a parking space.

The quality of the air is another problem. Lowering the number of cars in the park may help, but that may not be enough. The cities in the surrounding areas are growing larger. Although they are far away from the park, the polluted air from the cities still blows over the canyon. Sometimes guests cannot see the bottom of the canyon because of the dirty air. Reducing air pollution in the cities may help, but that will be a slow change.

The Colorado River flows through the bottom of the Grand Canyon. In the spring, the river flows faster and higher because of the melting snow

from the mountains. Dirt washes into the river, and the dirt from the muddy water settles to the bottom and is left in a new place. For ages, the river flowed freely through the canyon. The river brought in new soil that helped build up sand bars in the canyon. The fast water also washed away dead weeds and trees. This kept the canyon clean and made it a good home for many animals.

Now, a dam controls the speed of the river. The dam sits fifteen miles from the canyon. It was built to produce electricity. The water that goes through the dam is clean. But the dam does affect the speed of the river and temperature of the water. Some people are concerned that the dam does not allow the river to flow naturally. And scientists report that the fish in the river have a hard time surviving in the colder water.

Most people agree that the Grand Canyon is beautiful. However, people do not agree about how to care for it.

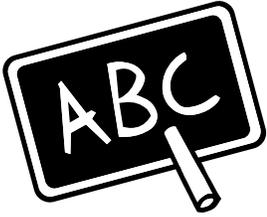
1. Why has the number of cars in the park increased?
 - A. The number of people who come to the park grows.**
 - B. The cities around the canyon are growing larger.
 - C. The dam is fifteen miles from the canyon.
2. Why can't some visitors see the bottom of the canyon?
 - A. The water is too muddy.
 - B. The view is too pretty.
 - C. The air is too dirty.**
3. What is one problem that would result if the dam was removed?
 - A. The people who built the dam would not be paid.
 - B. The electricity made by the dam would be lost.**
 - C. Clean water would flood the canyon once again.

4. Read the sentences below.

Most people agree that the Grand Canyon is beautiful. However, people do not agree about how to care for it.

Why do you think people cannot agree about how to care for the park? Write your answer using complete sentences. Use information from the passage to support your answer.

Possible response: No answer is easy. Each answer means someone has to give up something. People would have to ride a bus instead of riding in their own cars. Getting rid of the dam would mean giving up the electricity that it provides.



Drawing Conclusions

Directions: Read the story. Then complete the graphic organizer that follows.

Grand Adventure

“Joey, it’s time to go,” said Mom.

Joey sat with his eyes glued to a video game. “Aw, Mom, can’t we go a little later?” he whined. “I want to finish this level.”

“No, it’s time to go,” Joey’s father said.

Joey knew his mother wanted to take a trip to the Grand Canyon, but Joey did not. Why was it so great? he thought. Plus it would take more than two hours to drive there even though they lived in Arizona.

Joey slowly shuffled to the car. He had a big frown on his face, and he sighed and pouted. Before long he nodded off to sleep.

When he woke up Joey found they were there already. His father parked the car, and they started up a walkway along with a crowd of visitors.

“So where is it, Mom?” Joey looking bored. “I thought it was really big.”

His mother laughed. “You’ll see it in a second.”

Soon they crossed over a small hill, and Joey’s jaw dropped. The Grand Canyon was huge, it was amazing, and it stretched as far as he could see in both directions. Wind came rushing up the face of the canyon causing a whooshing sound. Joey ran up to the guardrail and looked at the enormous view in front of him.

“You can’t see it, Joey,” his father said, “but the Colorado River is at the bottom of the canyon. Some say it took the river over a million years to carve the Grand Canyon.”

“And guess what, Joey?” his mother said. “We are going to ride donkeys down into the Grand Canyon. Doesn’t that sound like fun?”

He looked up, nodded his head, and said, “Yes.”

Joey, his mother and father, and a few other people rented donkeys. A man led a donkey over to Joey and said, “We call these animals burros. This name of this one is Cloudy, and she’s your ride for two hours.” Cloudy butted Joey with her head looking for something to eat, and Joey rolled his eyes.

As they rode to the bottom, the guide explained that the Grand Canyon was more than 200 miles long and a mile deep. Joey looked at the huge rock walls.

When they reached the bottom, he noticed that the river was wider than he thought it would be. It was about 20 feet across. Joey looked at his father. “Did it really take the river a million years to make the canyon?”

“Yes, Joey,” his father said with a smile, “it really did,”

When they returned to the top, it was time to go home. Joey ran to his mother and hugged her.

As they started to walk to their car, Joey looked back at the canyon and saw the setting sun turning the rocks and cliffs all sorts of beautiful colors. Joey felt glad he finally got to visit the Grand Canyon.

“Yes, Joey,” his father said with a smile, “it really did,”

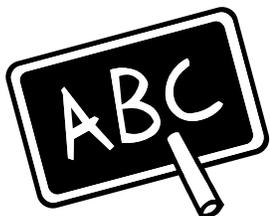
When they returned to the top, it was time to go home. Joey ran to his mother and hugged her.

As they started to walk to their car, Joey looked back at the canyon. The setting sun turned the rocks and cliffs all sorts of beautiful colors. Joey felt glad he had visited the Grand Canyon.

Directions: How does Joey change in the story? For each statement on the left, show how Joey feels and what he thinks. Use examples from the story and your own words. The first one has been done for you.

Events in the Story	My Conclusions
At first Joey was not happy about the family vacation.	The reader can tell because
When they first arrived at the Grand Canyon, Joey is not impressed.	The reader can tell because

Events in the Story	My Conclusions
As Joey approached the guardrail, his opinion of the Grand Canyon changed.	The reader can tell because
By the end of the story, Joey was glad he went to the Grand Canyon.	The reader can tell because



Drawing Conclusions

Directions: Read the story. Then complete the graphic organizer that follows.

Grand Adventure

“Joey, it’s time to go,” said Mom.

Joey sat with his eyes glued to a video game. “Aw, Mom, can’t we go a little later?” he whined. “I want to finish this level.”

“No, it’s time to go,” Joey’s father said.

Joey knew his mother wanted to take a trip to the Grand Canyon, but Joey did not. Why was it so great? he thought. Plus it would take more than two hours to drive there even though they lived in Arizona.

Joey slowly shuffled to the car. He had a big frown on his face, and he sighed and pouted. Before long he nodded off to sleep.

When he woke up Joey found they were there already. His father parked the car, and they started up a walkway along with a crowd of visitors.

“So where is it, Mom?” Joey looking bored. “I thought it was really big.”

His mother laughed. “You’ll see it in a second.”

Soon they crossed over a small hill, and Joey’s jaw dropped. The Grand Canyon was huge, it was amazing, and it stretched as far as he could see in both directions. Wind came rushing up the face of the canyon causing a whooshing sound. Joey ran up to the guardrail and looked at the enormous view in front of him.

“You can’t see it, Joey,” his father said, “but the Colorado River is at the bottom of the canyon. Some say it took the river over a million years to carve the Grand Canyon.”

“And guess what, Joey?” his mother said. “We are going to ride donkeys down into the Grand Canyon. Doesn’t that sound like fun?”

He looked up, nodded his head, and said, “Yes.”

Joey, his mother and father, and a few other people rented donkeys. A man led a donkey over to Joey and said, “We call these animals burros. This name of this one is Cloudy, and she’s your ride for two hours.” Cloudy butted Joey with her head looking for something to eat, and Joey rolled his eyes.

As they rode to the bottom, the guide explained that the Grand Canyon was more than 200 miles long and a mile deep. Joey looked at the huge rock walls.

When they reached the bottom, he noticed that the river was wider than he thought it would be. It was about 20 feet across. Joey looked at his father. “Did it really take the river a million years to make the canyon?”

“Yes, Joey,” his father said with a smile, “it really did,”

When they returned to the top, it was time to go home. Joey ran to his mother and hugged her.

As they started to walk to their car, Joey looked back at the canyon and saw the setting sun turning the rocks and cliffs all sorts of beautiful colors. Joey felt glad he finally got to visit the Grand Canyon.

“Yes, Joey,” his father said with a smile, “it really did,”

When they returned to the top, it was time to go home. Joey ran to his mother and hugged her.

As they started to walk to their car, Joey looked back at the canyon. The setting sun turned the rocks and cliffs all sorts of beautiful colors. Joey felt glad he had visited the Grand Canyon.

Directions: How does Joey change in the story? For each statement on the left, show how Joey feels and what he thinks. Use examples from the story and your own words. The first one has been done for you.

Events in the Story	My Conclusions
At first Joey was not happy about the family vacation.	The reader can tell because the author wrote that Joey did not want to go. Also Joey whined when his mom told him it was time to go. People whine when they don't want to do something.
When they first arrived at the Grand Canyon, Joey is not impressed.	The reader can tell because Joey looked bored and asked his mom where the canyon was. Joey thought the Grand Canyon would not be interesting.

Events in the Story	My Conclusions
<p>As Joey approached the guardrail, his opinion of the Grand Canyon changed.</p>	<p>The reader can tell because Joey's jaw dropped, and the Grand Canyon is described as huge and amazing.</p>
<p>By the end of the story, Joey was glad he went to the Grand Canyon.</p>	<p>The reader can tell because Joey hugged his mother. By hugging his mom, Joey shows he really did enjoy the trip. It also says Joey felt glad he got to visit the Grand Canyon.</p>



Reading Fluently

Directions: Read the passages aloud.

A Walk in the Rain Forest

Written by Wendi Silvano

Take a look at the jungle as your canoe makes its way down the river. It looks like a solid wall of trees, branches, leaves, and vines. The plants are so thick here because there is so much sunlight.

When your boat stops, you will climb out and step into the rain forest. The first thing you might notice is how dark it is because the branches of the upper trees cover the forest like an umbrella. Only thin streaks of light can get through. Plants near the ground have very wide leaves to help them catch all the indirect sunlight.

Look down. Did you think every square inch of the ground would be covered in plants? Surprise! Not much can grow with so little light. You will see some ferns and shrubs, but most of the plants are up closer to the sunlight.

What you will find on the ground are nonstop parades of ants. There are millions of them! Can you see any that are carrying bits of leaves? These are called leaf-cutter ants. They cut the leaves and take them to their nests, where they use them to help grow a fungus which they feed to their young.

Look up. You will see huge vines overhead. Some hang between branches, while others snake up the trunks. Those trunks can be enormous—perhaps even as wide as your bedroom!

If you look closely you might see some of the animals that live in the

rain forest. Perhaps you will spy a spider monkey talking nonsense with his neighbor, or catch a glimpse of the almost invisible sloth. His slow movements are difficult to spot.

So many colorful things make the rain forest their home. There are toucans, macaws, and multicolored frogs. Flowers of many kinds come in every color of the rainbow. Keep your eyes peeled for butterflies and moths. Don't let the oversized beetles and roaches scare you. They are harmless. Close your eyes and listen to the nonstop buzz of the insects.

If you are lucky, you will hear the piercing cry of the howler monkey. Or perhaps you will hear the fierce growl of a jaguar. At some point, you are sure to hear the rushing of the rain. Showers begin suddenly and are heavy. Be prepared to get wet! The rain forest is a wonderful place. You will never forget your journey to it!

Keep It Pumping

Written by Wendi Silvano

Lie down, hold still, and close your eyes. Feel your chest rising and falling as you breathe in and out. Put your hand on the side of your neck. Can you feel your heart beating? Your heart and lungs are two of the most important organs in your body. They are the leaders of the systems that keep you healthy and strong.

The heart is one of the hardest workers in your body. It pumps blood every minute of the day and night and carries oxygen and food to tissues, while it removes waste materials. Without a strong supply of oxygen, none of your organs would work properly and you might die.

The lungs work day and night to provide the body with oxygen. Without a strong heart and lungs, you would be unable to do many of the

things that you do every day. It is up to you to strengthen these important organs.

Eating right is one key to keeping your heart and lungs in good shape. Do you like to eat meat, fish, and eggs? They are the perfect providers of protein. Protein builds muscle, and your heart is the most important muscle in your body.

How about a juicy mango or a delicious tomato? Eating different fruits and vegetables is a great way to get the vitamins and minerals your organs need. A tasty peanut butter sandwich isn't bad either. The bread provides carbohydrates, and the peanut butter gives you that important protein you need.

Be careful not to eat foods with too much fat because they can plug up your blood vessels. That is certainly *not* the way to stay healthy and strong!

Exercise is another way to strengthen your heart and lungs. When you are running, swimming, or playing basketball, your muscles need more oxygen. Your heart pumps harder and your lungs breathe deeper. Working hard makes your organs stronger, so put on your favorite tennis shoes and choose a sport you enjoy. Try taking a long walk or playing at the park.

All that playing is likely to tire you out. Get to bed early. Your body needs rest to be healthy as well. Illness can damage your organs too. Wash your hands often, and wear warm clothes in the cold. Take care of your heart and lungs and it is quite possible they will serve you well your whole life.



Reading Fluently

Directions: Read the passages aloud.

A Walk in the Rain Forest

Written by Wendi Silvano

Take a look at the jungle as your canoe makes its way down the river. It looks like a solid wall of trees, branches, leaves, and vines. The plants are so thick here because there is so much sunlight.

When your boat stops, you will climb out and step into the rain forest. The first thing you might notice is how dark it is because the branches of the upper trees cover the forest like an umbrella. Only thin streaks of light can get through. Plants near the ground have very wide leaves to help them catch all the indirect sunlight.

Look down. Did you think every square inch of the ground would be covered in plants? Surprise! Not much can grow with so little light. You will see some ferns and shrubs, but most of the plants are up closer to the sunlight.

What you will find on the ground are nonstop parades of ants. There are millions of them! Can you see any that are carrying bits of leaves? These are called leaf-cutter ants. They cut the leaves and take them to their nests, where they use them to help grow a fungus which they feed to their young.

Look up. You will see huge vines overhead. Some hang between branches, while others snake up the trunks. Those trunks can be enormous—perhaps even as wide as your bedroom!

If you look closely you might see some of the animals that live in the

rain forest. Perhaps you will spy a spider monkey talking nonsense with his neighbor, or catch a glimpse of the almost invisible sloth. His slow movements are difficult to spot.

So many colorful things make the rain forest their home. There are toucans, macaws, and multicolored frogs. Flowers of many kinds come in every color of the rainbow. Keep your eyes peeled for butterflies and moths. Don't let the oversized beetles and roaches scare you. They are harmless. Close your eyes and listen to the nonstop buzz of the insects.

If you are lucky, you will hear the piercing cry of the howler monkey. Or perhaps you will hear the fierce growl of a jaguar. At some point, you are sure to hear the rushing of the rain. Showers begin suddenly and are heavy. Be prepared to get wet! The rain forest is a wonderful place. You will never forget your journey to it!

Keep It Pumping

Written by Wendi Silvano

Lie down, hold still, and close your eyes. Feel your chest rising and falling as you breathe in and out. Put your hand on the side of your neck. Can you feel your heart beating? Your heart and lungs are two of the most important organs in your body. They are the leaders of the systems that keep you healthy and strong.

The heart is one of the hardest workers in your body. It pumps blood every minute of the day and night and carries oxygen and food to tissues, while it removes waste materials. Without a strong supply of oxygen, none of your organs would work properly and you might die.

The lungs work day and night to provide the body with oxygen. Without a strong heart and lungs, you would be unable to do many of the

things that you do every day. It is up to you to strengthen these important organs.

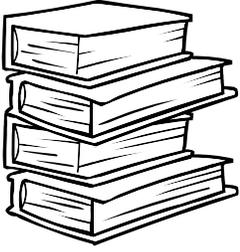
Eating right is one key to keeping your heart and lungs in good shape. Do you like to eat meat, fish, and eggs? They are the perfect providers of protein. Protein builds muscle, and your heart is the most important muscle in your body.

How about a juicy mango or a delicious tomato? Eating different fruits and vegetables is a great way to get the vitamins and minerals your organs need. A tasty peanut butter sandwich isn't bad either. The bread provides carbohydrates, and the peanut butter gives you that important protein you need.

Be careful not to eat foods with too much fat because they can plug up your blood vessels. That is certainly *not* the way to stay healthy and strong!

Exercise is another way to strengthen your heart and lungs. When you are running, swimming, or playing basketball, your muscles need more oxygen. Your heart pumps harder and your lungs breathe deeper. Working hard makes your organs stronger, so put on your favorite tennis shoes and choose a sport you enjoy. Try taking a long walk or playing at the park.

All that playing is likely to tire you out. Get to bed early. Your body needs rest to be healthy as well. Illness can damage your organs too. Wash your hands often, and wear warm clothes in the cold. Take care of your heart and lungs and it is quite possible they will serve you well your whole life.



Categorizing Words and Identifying Meanings of Words

Directions: Read the passage. Then read each question and circle the correct answer.

Saving the Wetlands

The effort of scientists to preserve and restore the American wetlands is the most inspiring subject in the world. Saving the wetlands should be the focus of everyone's attention across the country. The wildlife and plants in places like the Florida Everglades or the marshes of Chesapeake Bay have effects on all life. It is important to protect these regions. The government pays for technology used to study these important areas. It also funds programs for educating people about the problems.

Money spent on studying the wetlands is well worth it. The mammals, reptiles, birds, and plants living in the wetlands need homes and food. Losing one species affects the lives of all the others. Birds flock to the shallow, marshy waters for food. Without food, the blue heron of the Chesapeake Bay would have to go somewhere else, and the whooping cranes that flock to the Texas coast would never come back. Losing one type of animal could mean the birds never return or die out.

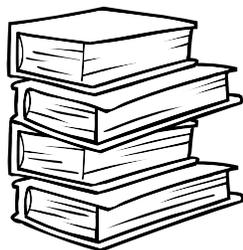
Plants in marshes need to be studied too. White water lilies are a beautiful example of the aquatic plants that live in wetlands. Cypress trees and mangroves are the trees most often seen in the wetlands. But construction and pollution can destroy these plants. The loss of plants and trees can destroy a wetland area.

But knowing what keeps the area alive allows humans take the right steps to save the wetlands. Studying these areas is vital for finding ways to help protect them. It takes so much work to keep wetlands healthy. Scientists carefully record the changes in the seasons. They study

differences in the animals and plant life. They need special equipment, like barometers, to measure weather changes.

Money is necessary to educate people about these areas. Students need to study ecology and biology in school. Then they can play a role in saving the wetlands in the future. Protecting the wetlands is everyone's responsibility. Visit these areas and learn how to preserve them.

1. Which word contains the Greek root that means "the study of"?
 - A. wetlands
 - B. biology
 - C. survive
 - D. measure
2. The words vital and important are meant to ____
 - A. entertain the reader.
 - B. give directions to the reader.
 - C. persuade the reader to do something.
 - D. give information to the reader.
3. Which group of words are types of plants?
 - A. cypress, herons, fish
 - B. water lily, mangrove, cypress
 - C. whooping crane, fish, herons
 - D. mangrove, cypress, fish



Categorizing Words and Identifying Meanings of Words

Directions: Read the passage. Then read each question and circle the correct answer.

Saving the Wetlands

The effort of scientists to preserve and restore the American wetlands is the most inspiring subject in the world. Saving the wetlands should be the focus of everyone's attention across the country. The wildlife and plants in places like the Florida Everglades or the marshes of Chesapeake Bay have effects on all life. It is important to protect these regions. The government pays for technology used to study these important areas. It also funds programs for educating people about the problems.

Money spent on studying the wetlands is well worth it. The mammals, reptiles, birds, and plants living in the wetlands need homes and food. Losing one species affects the lives of all the others. Birds flock to the shallow, marshy waters for food. Without food, the blue heron of the Chesapeake Bay would have to go somewhere else, and the whooping cranes that flock to the Texas coast would never come back. Losing one type of animal could mean the birds never return or die out.

Plants in marshes need to be studied too. White water lilies are a beautiful example of the aquatic plants that live in wetlands. Cypress trees and mangroves are the trees most often seen in the wetlands. But construction and pollution can destroy these plants. The loss of plants and trees can destroy a wetland area.

But knowing what keeps the area alive allows humans take the right steps to save the wetlands. Studying these areas is vital for finding ways to help protect them. It takes so much work to keep wetlands healthy. Scientists carefully record the changes in the seasons. They study

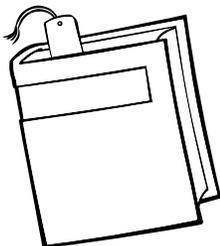
differences in the animals and plant life. They need special equipment, like barometers, to measure weather changes.

Money is necessary to educate people about these areas. Students need to study ecology and biology in school. Then they can play a role in saving the wetlands in the future. Protecting the wetlands is everyone's responsibility. Visit these areas and learn how to preserve them.

1. Which word contains the Greek root that means “the study of”?
 - A. wetlands
 - B. biology**
 - C. survive
 - D. measure

2. The words vital and important are meant to ____
 - A. entertain the reader.
 - B. give directions to the reader.
 - C. persuade the reader to do something.**
 - D. give information to the reader.

3. Which group of words are types of plants?
 - A. cypress, herons, fish
 - B. water lily, mangrove, cypress**
 - C. whooping crane, fish, herons
 - D. mangrove, cypress, fish



Understanding Metaphorical and Symbolic Words

Directions: Read the story. Then complete the activities that follow.

Uncle Coffee's Nephew

Uncle Coffee lived at the edge of a canyon all alone. He had a nice log cabin that he built himself. The wood came from trees Uncle Coffee ripped from the ground with his bare hands. He was as strong as a bear, yet he used his strength to help everyone. Uncle Coffee was a prince of a man.

While gazing over the canyon, Uncle Coffee whittled a stick into the shape of a deer. Many gentle deer grazed in the meadow at the bottom of the canyon. As he admired the view, Uncle Coffee saw someone approaching. Whoever was coming was talking a blue streak. It was Baby Clovis who was hardly a baby. He was ten years old and nearly as big as Uncle Coffee. Then Uncle Coffee remembered he promised he would watch his nephew Baby Clovis for the summer.

Suddenly Baby Clovis began to run toward his uncle. He was yelling at the top of his lungs and grinning from ear to ear. The deer in the meadow jerked up their heads and ran for the woods. Baby Clovis was a freight train traveling fast. Uncle Coffee had no time to move. Baby Clovis hit with such force he knocked Uncle Coffee off his feet and through the front door.

"Hi, Uncle Coffee. What are we going to do first?" asked Baby Clovis, sitting on his chest.

Baby Clovis was going to be strong as an ox like Uncle Coffee. Right then Uncle Coffee decided to teach his nephew how to use his strength to help others. But Uncle Coffee was worried. Baby Clovis was wild and not a good listener.

"The first thing we are going to do is fix my front door," said Uncle Coffee.

"I love to fix doors!" yelled Baby Clovis. "Do you want me to break the other doors, so we can fix them too?"

"No!" Uncle Coffee replied quickly, as he hammered the nails into the door with his fist. "Now, nephew, you can't go around...Baby Clovis? Where are you?"

Baby Clovis had already departed to find more adventure. He had decided he wanted some fresh honey. He found a beehive in a nearby tree. He picked the hive off the limb, and carried it back to Uncle Coffee's cabin. Baby Clovis did not realize a cloud of wild and angry buzzing bees was following him. Naturally, they did not want to give their honey to Baby Clovis.

Quickly Uncle Coffee racked his brain for ideas. Great strength would not help against angry bees. Or would it? A light came on in his head. He grabbed a tree about ten-feet tall and ripped it out of the ground. He told Baby Clovis to throw the beehive at him as hard as he could. Baby Clovis smiled and threw it at his uncle. When the beehive was close, Uncle Coffee swung the giant bat and knocked the beehive back into the forest. The bees followed the hive.

Looking at Baby Clovis, Uncle Coffee couldn't help but wonder what his nephew would do the next day. Uncle Coffee hoped Baby Clovis would not drive him crazy before learning some self-control.

Directions: Follow the instructions below.

1. Underline the phrase in the passage that means “a great idea.”
2. Double underline the phrase that is a metaphor for the tree Uncle Coffee uses to swing at the bees.
3. Draw a circle around a metaphor for Uncle Coffee.
4. Draw a wavy line under the simile for Uncle Coffee’s powers.

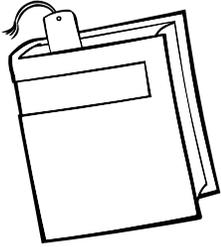
Directions: Read each question and circle the correct answer.

- | | |
|--|--|
| <p>5. Which creature in the story symbolizes something gentle?</p> <p>A. ox
B. bear
C. bee
D. deer</p> | <p>6. Which creature in the story symbolizes something that is out of control?</p> <p>A. ox
B. bear
C. bee
D. deer</p> |
|--|--|

Directions: Read each question. Then write your answer in complete sentences on the lines below.

7. Write the metaphor from the story that shows Clovis is both large and fast.

8. Write the expression that represents someone talking nonstop.



Understanding Metaphorical and Symbolic Words

Directions: Read the story. Then complete the activities that follow.

Uncle Coffee's Nephew

Uncle Coffee lived at the edge of a canyon all alone. He had a nice log cabin that he built himself. The wood came from trees Uncle Coffee ripped from the ground with his bare hands. He was as strong as a bear, yet he used his strength to help everyone. Uncle Coffee was a prince of a man.

While gazing over the canyon, Uncle Coffee whittled a stick into the shape of a deer. Many gentle deer grazed in the meadow at the bottom of the canyon. As he admired the view, Uncle Coffee saw someone approaching. Whoever was coming was talking a blue streak. It was Baby Clovis who was hardly a baby. He was ten years old and nearly as big as Uncle Coffee. Then Uncle Coffee remembered he promised he would watch his nephew Baby Clovis for the summer.

Suddenly Baby Clovis began to run toward his uncle. He was yelling at the top of his lungs and grinning from ear to ear. The deer in the meadow jerked up their heads and ran for the woods. Baby Clovis was a freight train traveling fast. Uncle Coffee had no time to move. Baby Clovis hit with such force he knocked Uncle Coffee off his feet and through the front door.

"Hi, Uncle Coffee. What are we going to do first?" asked Baby Clovis, sitting on his chest.

Baby Clovis was going to be strong as an ox like Uncle Coffee. Right then Uncle Coffee decided to teach his nephew how to use his strength to help others. But Uncle Coffee was worried. Baby Clovis was wild and not a good listener.

"The first thing we are going to do is fix my front door," said Uncle Coffee.

"I love to fix doors!" yelled Baby Clovis. "Do you want me to break the other doors, so we can fix them too?"

"No!" Uncle Coffee replied quickly, as he hammered the nails into the door with his fist. "Now, nephew, you can't go around...Baby Clovis? Where are you?"

Baby Clovis had already departed to find more adventure. He had decided he wanted some fresh honey. He found a beehive in a nearby tree. He picked the hive off the limb, and carried it back to Uncle Coffee's cabin. Baby Clovis did not realize a cloud of wild and angry buzzing bees was following him. Naturally, they did not want to give their honey to Baby Clovis.

Quickly Uncle Coffee racked his brain for ideas. Great strength would not help against angry bees. Or would it? A light came on in his head. He grabbed a tree about ten-feet tall and ripped it out of the ground. He told Baby Clovis to throw the beehive at him as hard as he could. Baby Clovis smiled and threw it at his uncle. When the beehive was close, Uncle Coffee swung the giant bat and knocked the beehive back into the forest. The bees followed the hive.

Looking at Baby Clovis, Uncle Coffee couldn't help but wonder what his nephew would do the next day. Uncle Coffee hoped Baby Clovis would not drive him crazy before learning some self-control.

Directions: Follow the instructions below.

1. Underline the phrase in the passage that means “a great idea.”
2. Double underline the phrase that is a metaphor for the tree Uncle Coffee uses to swing at the bees.
3. Draw a circle around a metaphor for Uncle Coffee.
4. Draw a wavy line under the simile for Uncle Coffee’s powers.

Directions: Read each question and circle the correct answer.

- | | |
|---|---|
| <p>5. Which creature in the story symbolizes something gentle?</p> <p>A. ox
B. bear
C. bee
D. deer</p> | <p>6. Which creature in the story symbolizes something that is out of control?</p> <p>A. ox
B. bear
C. bee
D. deer</p> |
|---|---|

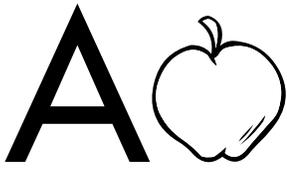
Directions: Read each question. Then write your answer in complete sentences on the lines below.

7. Write the metaphor from the story that shows Clovis is both large and fast.

Clovis was a freight train traveling fast.

8. Write the expression that represents someone talking nonstop.

Someone who talks nonstop is talking a blue streak.



Determining Meanings of Words

Directions: Read the poem. Then complete the activity that follows.

Desert Rain

This morning the sky opened and
rivers fell.
I was sleeping like a cat in the sun.
When I opened my eyes and peeked
outside,
No sun was to be found,
But it was raining cats and dogs.

I'm usually quiet, you see,
Quiet as a mouse.
But this morning, I jumped and
squealed!
It was raining, and raining hard!
Everything gleamed with water—
Sidewalks, driveways, streets, bricks,
Grass, leaves, petals!

Huge puddles appeared.
A pool around the cactus in our yard,
The desert roses open their petals
And sipped a long, quenching drink.
Across the street, Marissa, my friend,
Splashed around the puddles in her
yard.

I rushed to get dressed, hurried to eat
And darted across the crosswalk in
the street

To reach her house.
Together we splashed and played
Because there was no other today.
Tomorrow, the sun will shine
And hug the desert
With his long, hot rays.

All the puddles will dry up
And the clouds will drift away.
The blue skies will appear
Like they awakened from a long
nap,
And stretch and stretch to every
horizon.

Before I wait for the next rain,
I was going to enjoy *this* rain—
This chilly and wet winter rain.
After playing with Marissa,
I went home with my hair soaked
through,
Dripping rain water.
The cuffs of my jeans were a deep,
dark blue,
My shoes squish and squash,
Socks, coat, hands, and feet—
Wet, wet, wet!

Directions: Determine if the text is a simile, idiom, or both. Then explain what it means on the lines below.

No sun was to be found,
But it was raining like cats and
dogs.

This is an example of _____

What it means: _____

I was sleeping like a cat in the
sun.

This is an example of _____

What it means: _____

I'm usually quiet, you see,
Quiet as a mouse.
But this morning, I jumped and
squealed!

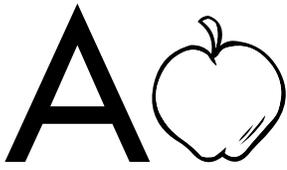
This is an example of _____

What it means: _____

The blue skies will appear,
Like they awakened from a long
nap,
And stretch to every horizon.

This is an example of _____

What it means: _____



Determining Meanings of Words

Directions: Read the poem. Then complete the activity that follows.

Desert Rain

This morning the sky opened and
rivers fell.
I was sleeping like a cat in the sun.
When I opened my eyes and peeked
outside,
No sun was to be found,
But it was raining cats and dogs.

I'm usually quiet, you see,
Quiet as a mouse.
But this morning, I jumped and
squealed!
It was raining, and raining hard!
Everything gleamed with water—
Sidewalks, driveways, streets, bricks,
Grass, leaves, petals!

Huge puddles appeared.
A pool around the cactus in our yard,
The desert roses open their petals
And sipped a long, quenching drink.
Across the street, Marissa, my friend,
Splashed around the puddles in her
yard.

I rushed to get dressed, hurried to eat
And darted across the crosswalk in
the street

To reach her house.
Together we splashed and played
Because there was no other today.
Tomorrow, the sun will shine
And hug the desert
With his long, hot rays.

All the puddles will dry up
And the clouds will drift away.
The blue skies will appear
Like they awakened from a long
nap,
And stretch and stretch to every
horizon.

Before I wait for the next rain,
I was going to enjoy *this* rain—
This chilly and wet winter rain.
After playing with Marissa,
I went home with my hair soaked
through,
Dripping rain water.
The cuffs of my jeans were a deep,
dark blue,
My shoes squish and squash,
Socks, coat, hands, and feet—
Wet, wet, wet!

Directions: Determine if the text is a simile, idiom, or both. Then explain what it means on the lines below.

No sun was to be found,
But it was raining like cats and
dogs.

This is an example of **an idiom**

What it means: **This idiom**
means it was raining very hard.

I was sleeping like a cat in the
sun.

This is an example of **a simile**

What it means: **This simile**
means that the narrator of the
poem was cozy and warm while
sleeping. Cats that sleep in the
sun appear cozy and warm.

I'm usually quiet, you see,
Quiet as a mouse.
But this morning, I jumped and
squealed!

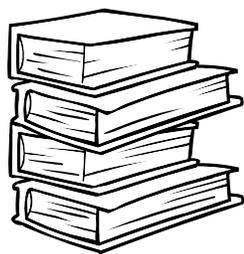
This is an example of **both**

What it means: **People think**
mice are very quiet. By
comparing the narrator to a
mouse means the narrator does
not talk very much.

The blue skies will appear,
Like they awakened from a long
nap,
And stretch to every horizon.

This is an example of **a simile**

What it means: **This simile**
shows that usually the sky is
blue where the narrator lives
and rarely rains.



Using Information from Tables and Charts

Directions: Read the table and encyclopedia entry. Then read each question and circle the correct answer.

Mount Everest

Mount Everest is the tallest mountain in the world. It is located on the border between Tibet and Nepal, and is part of a group of mountains known as the Himalayas.

Mount Everest Facts	
Height	29,035 feet
Age of Mount Everest	Formed about 60 million years ago
Its name	Named after Sir George Everest, British land surveyor, 1865
Other names	Chomolungma (Tibetan) Sagarmatha (Sanskrit and Nepali)
First people to climb to the top	Sir Edmund Hillary and Tenzing Norgay, 1953
First ascent by a woman	Junko Tabei, 1975
First ascent by a legally blind person	Erik Weihenmeyer, 2001
First person to climb from three points of the compass	Kushang Dorjee Sherpa
Youngest climber	Temba Tsheri at age 15 years old, 2001
Oldest climber	Yuichiro Miura at age 70 years and 222 days old, 2003
Most climbs	Apa Sherpa with 15 climbs, 2000

Longest stay on top	Babu Chiri Sherpa stayed for over 21 hours, 1999
Fastest trip down the mountain	Jean-Marc Boivin returned in 11 minutes by paraglider, 1988
First ski descent	Davo Karnicar, 2000
Highest cause of death	Avalanches
Most dangerous area	Khumbu Icefall with 19 deaths

Southeast Ridge Route

If climbers take the Southeast Ridge route, they must spend about two weeks in Base Camp so they can adjust to the altitude. The trek to the next camp begins very early in the morning. Once the sun reaches the icefall, it becomes extremely dangerous to climbers.

Camp I is just above the icefall. From Camp I, climbers continue up to Camps II, III, and IV. Once they are at Camp IV, climbers only have about two or three days to attempt a climb to the summit. That is about how long they can survive in the high altitude. The weather must be clear and winds low in order for climbers to try to reach the top. If conditions are not good, climbers have to return to Base Camp.

Northeast Ridge Route

The Northeast Ridge route begins in Tibet. Base Camp is located on the Rongbuk Glacier. From Base Camp, climbers go to Camps II, and III. Climbers must use ropes in order to reach Camp IV.

From Camp IV, climbers continue on to Camps V and VI. It is from Camp VI that climbers try to reach the summit. First, they must go through the First Step, Second Step, and Third Step, which are three bands of different types of rock. Once climbers have passed the Third Step, they have a short distance before reaching the top, but it is very steep.

1. Who was the oldest person to climb Mount Everest?
 - A. Edmund Hillary
 - B. Apa Sherpa
 - C. Yuichiro Miura
 - D. Temba Tsheri

2. What causes the most deaths on Mount Everest?
 - A. falls
 - B. lack of oxygen
 - C. storms
 - D. avalanches

3. How did Jean-Marc Boivin get down the mountain in only 11 minutes?
 - A. by helicopter
 - B. by paraglider
 - C. by skis
 - D. by parachute

4. Who is the only climber to have climbed from three sides of Mount Everest?
 - A. Kushang Dorjee Sherpa
 - B. Junko Tabei
 - C. Erik Weihenmeyer
 - D. Davo Karnicar



Using Information from Tables and Charts

Directions: Read the table and encyclopedia entry. Then read each question and circle the correct answer.

Mount Everest

Mount Everest is the tallest mountain in the world. It is located on the border between Tibet and Nepal, and is part of a group of mountains known as the Himalayas.

Mount Everest Facts	
Height	29,035 feet
Age of Mount Everest	Formed about 60 million years ago
Its name	Named after Sir George Everest, British land surveyor, 1865
Other names	Chomolungma (Tibetan) Sagarmatha (Sanskrit and Nepali)
First people to climb to the top	Sir Edmund Hillary and Tenzing Norgay, 1953
First ascent by a woman	Junko Tabei, 1975
First ascent by a legally blind person	Erik Weihenmeyer, 2001
First person to climb from three points of the compass	Kushang Dorjee Sherpa
Youngest climber	Temba Tsheri at age 15 years old, 2001
Oldest climber	Yuichiro Miura at age 70 years and 222 days old, 2003
Most climbs	Apa Sherpa with 15 climbs, 2000

Longest stay on top	Babu Chiri Sherpa stayed for over 21 hours, 1999
Fastest trip down the mountain	Jean-Marc Boivin returned in 11 minutes by paraglider, 1988
First ski descent	Davo Karnicar, 2000
Highest cause of death	Avalanches
Most dangerous area	Khumbu Icefall with 19 deaths

Southeast Ridge Route

If climbers take the Southeast Ridge route, they must spend about two weeks in Base Camp so they can adjust to the altitude. The trek to the next camp begins very early in the morning. Once the sun reaches the icefall, it becomes extremely dangerous to climbers.

Camp I is just above the icefall. From Camp I, climbers continue up to Camps II, III, and IV. Once they are at Camp IV, climbers only have about two or three days to attempt a climb to the summit. That is about how long they can survive in the high altitude. The weather must be clear and winds low in order for climbers to try to reach the top. If conditions are not good, climbers have to return to Base Camp.

Northeast Ridge Route

The Northeast Ridge route begins in Tibet. Base Camp is located on the Rongbuk Glacier. From Base Camp, climbers go to Camps II, and III. Climbers must use ropes in order to reach Camp IV.

From Camp IV, climbers continue on to Camps V and VI. It is from Camp VI that climbers try to reach the summit. First, they must go through the First Step, Second Step, and Third Step, which are three bands of different types of rock. Once climbers have passed the Third Step, they have a short distance before reaching the top, but it is very steep.

1. Who was the oldest person to climb Mount Everest?
 - A. Edmund Hillary
 - B. Apa Sherpa
 - C. Yuichiro Miura**
 - D. Temba Tsheri

2. What causes the most deaths on Mount Everest?
 - A. falls
 - B. lack of oxygen
 - C. storms
 - D. avalanches**

3. How did Jean-Marc Boivin get down the mountain in only 11 minutes?
 - A. by helicopter
 - B. by paraglider**
 - C. by skis
 - D. by parachute

4. Who is the only climber to have climbed from three sides of Mount Everest?
 - A. Kushang Dorjee Sherpa**
 - B. Junko Tabei
 - C. Erik Weihenmeyer
 - D. Davo Karnicar



Distinguishing Fact and Opinion

Directions: Read the passage and underline the two statements of opinion.

A statement of **fact** can be proven true or false. It can be proven through research or observation.

A statement of **opinion** tells what someone is thinking or feeling. It cannot be proven true or false through research or observation.

Making a Mountain

Have you ever tried to make a mound in the sand? There are several methods you can use. You can pack sand with your hands or use a form to shape it. Mountains are formed in different ways as well. But even though they are formed in different ways, all mountains are amazing.

Volcanic Mountains

Some mountain ranges are formed by volcanoes. Lava, which is rock melted deep within the earth, flows out of the ground. When the lava cools, it forms hard rock, which builds up and eventually forms mountains. Volcanic mountains are usually steep and shaped like a triangle. One example of a volcanic mountain is Mount Fuji in Japan.

Mountains Formed by Movement of the Earth's Crust

There are other mountains that are formed when the earth's crust moves. There is a theory that the earth's crust is made up of several plates, and these plates are thought to be constantly moving. Sometimes these plates bump into each other and new landforms are created. Some of this land piles up into mountains. The Alps of Europe and the Himalayas of Asia are excellent examples of this type of mountain formation.

Fold Belts

Fold mountains are similar to mountains made by the movement of the earth's crust. Layers of rock are folded to create parallel mountain ridges and valleys. The valleys look like trenches dug into the earth. These are called *fold belts*. One example of fold mountains are the Appalachian Mountains of North America.

Fault-Block Mountains

Sometimes mountains are formed because of breaks in the earth's crust. This can happen in two ways. First, mountains can form when there are two breaks, or faults, close together. In between the two faults, land is pushed up and becomes a mountain range. That is how the Rocky Mountains were formed. Second, mountains can form when parts of the land is pulled apart. This type of mountain has one side that is steep and another side that barely slopes. In California, there is a range formed like this called the Sierra Nevada.

Mountains are created in different ways. Some scientists believe that you can tell what type a mountain is just by looking at it. No matter how they are formed, mountains make the planet Earth beautiful.



Distinguishing Fact and Opinion

Directions: Read the passage and underline the two statements of opinion.

A statement of **fact** can be proven true or false. It can be proven through research or observation.

A statement of **opinion** tells what someone is thinking or feeling. It cannot be proven true or false through research or observation.

Making a Mountain

Have you ever tried to make a mound in the sand? There are several methods you can use. You can pack sand with your hands or use a form to shape it. Mountains are formed in different ways as well. But even though they are formed in different ways, all mountains are amazing.

Volcanic Mountains

Some mountain ranges are formed by volcanoes. Lava, which is rock melted deep within the earth, flows out of the ground. When the lava cools, it forms hard rock, which builds up and eventually forms mountains. Volcanic mountains are usually steep and shaped like a triangle. One example of a volcanic mountain is Mount Fuji in Japan.

Mountains Formed by Movement of the Earth's Crust

There are other mountains that are formed when the earth's crust moves. There is a theory that the earth's crust is made up of several plates, and these plates are thought to be constantly moving. Sometimes these plates bump into each other and new landforms are created. Some of this land piles up into mountains. The Alps of Europe and the Himalayas of Asia are excellent examples of this type of mountain formation.

Fold Belts

Fold mountains are similar to mountains made by the movement of the earth's crust. Layers of rock are folded to create parallel mountain ridges and valleys. The valleys look like trenches dug into the earth. These are called *fold belts*. One example of fold mountains are the Appalachian Mountains of North America.

Fault-Block Mountains

Sometimes mountains are formed because of breaks in the earth's crust. This can happen in two ways. First, mountains can form when there are two breaks, or faults, close together. In between the two faults, land is pushed up and becomes a mountain range. That is how the Rocky Mountains were formed. Second, mountains can form when parts of the land is pulled apart. This type of mountain has one side that is steep and another side that barely slopes. In California, there is a range formed like this called the Sierra Nevada.

Mountains are created in different ways. Some scientists believe that you can tell what type a mountain is just by looking at it. No matter how they are formed, mountains make the planet Earth beautiful.

Identifying Cause-and-Effect Relationships

Directions: Read the passage. Then complete the activity that follows.



Mount St. Helens

Mount St. Helens has stood for thousands of years in the southwestern part of Washington State. On May 18, 1980, an earthquake shook this majestic mountain and set off a terrible chain of events.

An avalanche of rock and ice fell down the mountain's side, burying everything in its path. Hot gases that had been trapped inside the mountain exploded. The explosion sent a blast of hot rocks, steam, and gas sweeping over the forests below, leveling the trees. Ash, gases, and rock shot 16 miles (about 26 kilometers) into the sky. A heavy blanket of ash fell across the land and covered everything in sight. A sleeping giant had awakened.

A volcano is an opening in the earth's crust. Eruptions occur when molten rock, which has formed within the earth's crust, begins to rise. The melted rock moves up toward the surface. Solid rock that lies in the path of the rising molten rock can crack, causing earthquakes.

On March 20, 1980, an earthquake had struck Mount St. Helens. It was the first signal that there was a problem on the mountain. There were more and more earthquakes during the next few days. In one two-day period, hundreds of quakes were recorded. People who lived near the volcano could feel some of these.

On the afternoon of March 27, a cloud of ash and steam blasted out of the top of Mount St. Helens. A crater formed that was about 250 feet across and 150 feet deep (76 by 46 meters). The earthquakes and eruptions went on. Then, a second crater formed. Finally, the two joined and formed a single, huge crater.

On the morning of May 18, two geologists, Keith and Dorothy Stoffel, were flying over Mount St. Helens. They wanted to check the crater to see how active it was. They arrived over the restricted area at 7:50 A.M. and flew over the crater twice. At first, it did not look like an active volcano at all. Then Keith Stoffel noticed some debris moving down the mountainside. Suddenly, the whole north side of the mountain began sliding away.

An earthquake with a magnitude of 5.1 on the Richter scale had broken loose the bulge on the side of the mountain. The resulting avalanche, or landslide, was the largest one in recorded history. It suddenly reduced the pressure on the rock that had been covering the magma inside the mountain.

It was like opening a pressure valve. Extremely hot water and gases were instantly released in a tremendous explosion that ripped through the north face of the mountain. A huge blast of black smoke and ash shot out sideways. As the blast surged from the volcano, it carried with it the rock it had shattered.

Directions: Circle the correct answer for each question. Then write a response to the last question.

1. What started the chain of events that led to the eruption of Mount St. Helens?
 - A. avalanche
 - B. earthquake
 - C. explosion
 - D. landslide

2. What was an effect of the explosion on March 27?
 - A. a huge crater formed
 - B. forest trees were leveled
 - C. homes were buried
 - D. molten rock began to rise

3. What can be inferred from the passage?
 - A. The frequent eruptions of Mount St. Helens prevent people from living near the mountain.
 - B. People who once lived on Mount St. Helens are too afraid to return to the area.
 - C. People are no longer allowed to build homes on or around Mount St. Helens.
 - D. Mount St. Helens' eruptions are so rare that people feel safe in the area.

4. Which sentence from the passage provides relevant information?
 - A. The Stoffels arrived over the restricted area at 7:50 A.M. and flew over the crater twice.
 - B. People who lived near the volcano could feel some of the quakes.
 - C. There were more and more earthquakes in the next few days.
 - D. Mount St. Helens has stood for thousands of years in southwestern Washington State.

5. Describe the effects of the eruption of Mount St. Helens.

Directions: Circle the correct answer for each question. Then write a response to the last question.

1. What started the chain of events that led to the eruption of Mount St. Helens?
 - A. avalanche
 - B. earthquake**
 - C. explosion
 - D. landslide

2. What was an effect of the explosion on March 27?
 - A. a huge crater formed**
 - B. forest trees were leveled
 - C. homes were buried
 - D. molten rock began to rise

3. What can be inferred from the passage?
 - A. The frequent eruptions of Mount St. Helens prevent people from living near the mountain.
 - B. People who once lived on Mount St. Helens are too afraid to return to the area.
 - C. People are no longer allowed to build homes on or around Mount St. Helens.
 - D. Mount St. Helens' eruptions are so rare that people feel safe in the area.**

4. Which sentence from the passage provides relevant information?
 - A. The Stoffels arrived over the restricted area at 7:50 A.M. and flew over the crater twice.
 - B. People who lived near the volcano could feel some of the quakes.
 - C. There were more and more earthquakes in the next few days.**
 - D. Mount St. Helens has stood for thousands of years in southwestern Washington State.

5. Describe the effects of the eruption of Mount St. Helens.

Answers will vary. Everything in the path of the avalanche was buried. Ash covered the land around the mountain. Two craters formed, which then joined together to form one huge crater. Extremely hot water and gases exploded from the mountain, carrying shattered rock with it.

Identifying the Main Idea and Supporting Details

Directions: Read the passage. Then complete the activity that follows.



The Land of Strange Vegetation

The Central Desert in Baja California, Mexico, is part of the larger Sonoran Desert, the hottest of all North America deserts. Despite its hot, dry climate, this region produces unusually lush vegetation. That's because it receives summer and winter rains, making conditions just right for growing some very strange plant life.

They grow in a very wide variety of shapes, colors, and sizes. Some are as small as insects, while others grow taller than buildings. Some are graceful and produce beautiful flowers. Others are prickly and grotesque, like something from a horror movie. Some are sweetly edible, and others are bitter and poisonous.

One of its oddest tree species has short, stout trunks and branches that look like elephant legs. These features inspired its name—elephant tree. Then there are the cactus plants. The 20-foot ocotillo is an inverted-funnel-shaped cactus. It has leafless spiny branches and produces beautiful blood-red blooms. The 23-foot organ pipe cactus blooms at night and produces edible fruit. The world's tallest species of cactus is the cardón. It grows very slowly and can reach heights of 70 feet. It can weigh up to 25 tons. Many species of cardón have lived for more than 300 years.

The most unusual cactus is the boojum tree. Its long, tapered shape inspired its Spanish name, *cirio*, which means "candle." Some say this bizarre plant looks more like a spiny, upside-down carrot. It grows about 50 feet high. And it produces yellowish flowers that hang in clusters from the top.

The Central Desert is home to hundreds of species of unusual cacti, trees, and shrubs. It is truly a land of strange vegetation.

Directions: Circle the correct answer for each question. Then write a response to the last question.

1. What is the main idea of the passage?

- A. *Cirio* trees and cardón cacti grow in the Central Desert.
- B. Some plants in the Central Desert have sharp thorns and spines.
- C. Some plants that grow in the Central Desert can be eaten.
- D. The Central Desert is home to a large variety of vegetation.

2. Which detail supports the main idea of the passage?

- A. Baja California is surrounded by both sea and mountains.
- B. The plants give a sense of symmetry on the flat horizon.
- C. The plants of the Central Desert add color to the landscape.
- D. The plants of the Central Desert vary in size and shape.

3. What can be inferred from the passage?

- A. An arid climate is the best climate for vegetation to grow.
- B. The strange species that exist in Baja were brought by explorers.
- C. Much time has been spent studying Central Desert plants.
- D. The desert plants are few and far between, making it easy to cross the desert.

4. How are some of the Central Desert's plants different from one another?

- A. Some are flat while others have sharp angles.
- B. Some blend in with the landscape while others are colorful.
- C. Some are poisonous while others are edible.
- D. Some are native to the coast while others are native to the mountains.

5. Write a summary of this passage.

Directions: Circle the correct answer for each question. Then write a response to the last question.

1. What is the main idea of the passage?

- A. *Cirio* trees and cardón cacti grow in the Central Desert.
- B. Some plants in the Central Desert have sharp thorns and spines.
- C. Some plants that grow in the Central Desert can be eaten.
- D. The Central Desert is home to a large variety of vegetation.**

2. Which detail supports the main idea of the passage?

- A. Baja California is surrounded by both sea and mountains.
- B. The plants give a sense of symmetry on the flat horizon.
- C. The plants of the Central Desert add color to the landscape.
- D. The plants of the Central Desert vary in size and shape.**

3. What can be inferred from the passage?

- A. An arid climate is the best climate for vegetation to grow.
- B. The strange species that exist in Baja were brought by explorers.
- C. Much time has been spent studying Central Desert plants.**
- D. The desert plants are few and far between, making it easy to cross the desert.

4. How are some of the Central Desert's plants different from one another?

- A. Some are flat while others have sharp angles.
- B. Some blend in with the landscape while others are colorful.
- C. Some are poisonous while others are edible.**
- D. Some are native to the coast while others are native to the mountains.

5. Write a summary of this passage.

Answers will vary. The weather in the Central Desert of Baja California is unique. Because of this weather, there are many different kinds of plants in the Central Desert. The plants have different shapes, sizes, and colors.

Differentiating between Fact, Opinion, and Bias

Directions: Read the passage. Then complete the activity that follows.

**Deforestation Perspectives**

Deforestation results from forested land being used or changed in a way that does not allow for new tree growth. When deforestation occurs, forest ecosystems are lost. A rapid increase in global deforestation took place from 1960 to 1990. During this time, one-fifth of the world's tropical rain forests were destroyed. Many people feel this is an environmental crisis. Governments around the world are working to find solutions.

Farmers, loggers, construction workers, and ranchers pursue trades that involve the harvesting of forests. Their work is important because it provides jobs and goods for many people. Cleared land is used to grow crops for people to eat. Grazing areas are used for animals that provide dairy products. Roads and homes create cities in which people live together in communities. Wood provides heat that warms people in winter. It is unfair to say that the work of these groups is harmful. They work hard to support their families. They also provide goods and services that everyone uses.

However, the cultures of indigenous people who live within tropical forests are in danger due to the current rate of deforestation. When forests disappear, so do the cultures of people whose communities are within those forests. It is not equitable to sacrifice their ways of life for more modern ways of life. Indigenous people depend on the maintenance of forest ecosystems. It is unjust to allow whole cultures to vanish. Deforestation cannot be allowed to lead to the destruction of any civilization.

Conservationists believe that governments should uphold laws that protect forests so that they cannot be cut down. They point out that future generations will be deprived of the biodiversity of forests if humans today do not work to protect them. They cite data documenting that, on average, 137 species become extinct every day due to deforestation.

As populations have increased over the centuries, more and more trees have been used by human consumers. Altering the course of deforestation is a difficult task. It is a challenge to balance the needs of different groups of people who depend on forests in conflicting ways. It is also a challenge to convince people to change their habits with respect to the kinds of products they consume. Solutions can be found if people work together. Hopefully, solutions will be uncovered that provide adequate jobs while also preserving indigenous cultures and forest habitats.

Directions: Circle the correct answer for each question. Then write a response to the last question.

1. Which of the following statements is a fact?

- A. Deforestation should be encouraged.
- B. When deforestation occurs, forest ecosystems are lost.
- C. It is unfair to say that the work of these groups is harmful.
- D. Deforestation cannot be allowed to lead to the destruction of any civilization.

2. Which of the following statements is an opinion?

- A. A rapid increase in global deforestation took place from 1960 to 1990.
- B. Indigenous people depend on the maintenance of forest ecosystems.
- C. It is not fair to sacrifice their ways of life for more modern ways of life.
- D. Roads and homes create cities in which people live together in communities.

3. What is the main idea of the passage?

- A. Deforestation has been practiced since the 1960s.
- B. Deforestation provides many benefits to all humans.
- C. Deforestation has both advantages and disadvantages.
- D. Deforestation is a harmful practice that should be discontinued.

4. Which sentence summarizes how loggers and farmers feel about deforestation?

- A. If people used fewer resources, deforestation would not be necessary.
- B. The most positive result of deforestation is that it helps provide roads and homes.
- C. It is important to preserve the cultures of all indigenous people affected by deforestation.
- D. Deforestation is beneficial because it allows people to receive many goods and services.

5. Do you agree with the author's views of deforestation? Explain your answer.

Directions: Circle the correct answer for each question. Then write a response to the last question.

1. Which of the following statements is a fact?
 - A. Deforestation should be encouraged.
 - B. When deforestation occurs, forest ecosystems are lost.**
 - C. It is unfair to say that the work of these groups is harmful.
 - D. Deforestation cannot be allowed to lead to the destruction of any civilization.

2. Which of the following statements is an opinion?
 - A. A rapid increase in global deforestation took place from 1960 to 1990.
 - B. Indigenous people depend on the maintenance of forest ecosystems.
 - C. It is not fair to sacrifice their ways of life for more modern ways of life.**
 - D. Roads and homes create cities in which people live together in communities.

3. What is the main idea of the passage?
 - A. Deforestation has been practiced since the 1960s.
 - B. Deforestation provides many benefits to all humans.
 - C. Deforestation has both advantages and disadvantages.**
 - D. Deforestation is a harmful practice that should be discontinued.

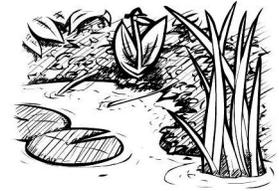
4. Which sentence summarizes how loggers and farmers feel about deforestation?
 - A. If people used fewer resources, deforestation would not be necessary.
 - B. The most positive result of deforestation is that it helps provide roads and homes.
 - C. It is important to preserve the cultures of all indigenous people affected by deforestation.
 - D. Deforestation is beneficial because it allows people to receive many goods and services.**

5. Do you agree with the author's views of deforestation? Explain your answer.

Answers will vary. I think the author is against deforestation. I am, too. I think that it is not fair that indigenous peoples are in danger of losing their homes and culture. Modern ways of life are not more important than the ways of life of indigenous peoples who are threatened by deforestation. It is not fair to allow entire cultures to disappear as a result of deforestation.

Using Cause and Effect to Gain Meaning

Directions: Read the passage. Then complete the activity that follows.



Endangered Wetlands

There is only one place in the world where alligators and crocodiles live side by side. That place is Everglades National Park, a 1.5 million-acre wetlands area in southern Florida. This park is America's biggest marsh.

The Everglades is a wide, shallow river that flows south from Lake Okeechobee to Florida Bay and the Gulf of Mexico. Fifty miles wide in some locations, the water in the Everglades might be three feet deep or a mere six inches.

Many different creatures make their homes in the Everglades. Some of the wetland creatures that live in the Everglades are endangered, such as wood storks, Florida panthers, and American crocodiles. There are so few of these animals left that there is a danger that they will die out completely, making them extinct in the near future.

Humans are the reason that these wetland animals are endangered. Years ago, canals were dug in the Everglades to control the water flow and prevent the river from flooding people's homes and businesses. Sadly, this project badly damaged the Everglades ecosystem.

Some wetlands have been completely drained to make it easier for people to survive. This has happened across the United States, including parts of the Everglades.

Farmers drained some of the wetlands so that the water could be used for their crops and for more land to raise animals. Other people drained them to build offices and homes. However, when wetlands are drained, plants and animals' homes are destroyed. When that happens, wetland creatures must find another place to live.

Other problems are created when people share their land with the animals of the wetlands. Alligators, for example, often eat small mammals that come too close to the water. What would happen if someone's dog went near the water for a cool drink or decided to jump in for a swim?

Conservation groups across the United States are working to solve the problem of threatened wetlands and wildlife. Protecting the remaining wetlands is one solution.

Other solutions include restoring former wetlands to their original state and even creating new wetlands. The U.S. Environmental Protection Agency (EPA) offers a program to help restore local wetlands. The EPA is working to bring together volunteers for this purpose. Groups of students, for example, might partner with government employees to build a fence to keep vehicles away from a stream, or to remove plants that don't naturally grow in the area.

Protecting wetlands helps people as well as animals. For example, wetlands serve as a place for floodwaters to flow, keeping homes and businesses safe. Wetlands also purify the water people drink by naturally filtering water that is flowing downstream. Wetlands trap dirt and absorb substances that pollute water. In fact, when wetlands are destroyed, water treatment plants must sometimes be built to do the same job that nature can do by itself!

Everyone can take part in saving endangered wetlands.

Directions: Reread the passage on the previous page. Use the graphic organizer below to identify the effects.

Cause
Canals were dug in the Everglades.



Effects

Cause
People drained some of the wetlands to build offices and homes.



Effects

Cause
Farmers drained some of the wetlands.



Effects

Cause
Wetlands are protected.



Effects

Directions: Reread the passage on the previous page. Use the graphic organizer below to identify the effects. **Answers will vary.**

Cause
Canals were dug in the Everglades.



Effects
Water flow in the Everglades was controlled.
Homes and businesses were protected from flooding.
The Everglades ecosystem was damaged.

Cause
People drained some of the wetlands to build offices and homes.



Effects
Plants were destroyed and so were animals' homes.
Wetlands animals were forced to find new homes.

Cause
Farmers drained some of the wetlands.



Effects
Water from the wetlands was used for crops.
More land was created to raise animals.

Cause
Wetlands are protected.



Effects
Dirt and pollution are filtered from drinking water.
Drinking water is purified.
Buildings are kept safe from floodwater.
Plants and animals' homes are protected.