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Read the passage. Use the ask and answer questions strategy to help you understand what you read.

Life in the Desert

What do you think of when you hear the word desert? You probably picture a place that is hot and dry. Although there are some desert areas that are cold, most deserts are as you imagine them. They are dry and hot.

A desert is an area that gets less than ten inches of rain each year. Many types of animals live in these harsh climates. Survival for desert animals depends on their ability to adapt, or change.

Structural Adaptation

One kind of adaptation is structural. This means the animal's body has changed so that it can survive in the climate. The gundi is an example of this adaptation. A gundi is a small animal that looks a lot like a guinea pig. Gundis live in the deserts of Africa. The desert has very little drinking water, but gundis get all the moisture they need from their diet of plants. Gundis' fur helps them stay cool during the day and warm at night.

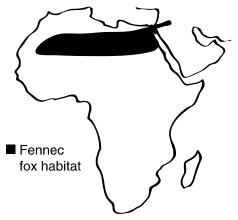
Behavioral Adaptation

Another type of adaptation is behavioral. Desert animals act in ways that help them survive. Since it is so hot during the day, many animals are nocturnal. They rest under rocks or in other cool places during the day and come out at night to hunt for food.

Thriving in the Desert

Most desert animals adapt in a combination of ways. Dromedary camels live in the deserts of Africa and the Arabian Peninsula. They raise their body temperature to reduce loss of water, and they can live for days without eating or drinking. Dromedaries have a hump on their backs that is made up of fat. They use the fat for energy when food is scarce. These animals sweat very little, which saves water. When they do drink, they can take in as many as thirty gallons of water in a little over ten minutes!

The fennec fox is a tiny fox that weighs only about three pounds as an adult. Like dromedaries, fennec foxes live in the African and Arabian deserts. Their sand-colored fur makes it difficult for their enemies to see them. The light color also keeps them cool during the day. Fennec foxes even have fur on the bottoms of their feet. This makes it easier to walk on the hot desert sand. Their bodies lose water very slowly, so they can go for days without drinking. Fennec foxes rest in burrows during the



Fennec foxes live in the harsh desert climates of Africa and the Arabian Peninsula.

day. At night they hunt for eggs, insects, and other small animals.

The deserts of the southwestern United States and northern Mexico are home to a large lizard called a Gila monster. Gila monsters store fat in their abdomens and tails, which lets them live for months without eating. They come out only at night during the summer. In winter the lizards hibernate. During this period of inactivity, they use very little food and energy.

Many different types of snakes live in the desert. Because they are cold-blooded, snakes' body temperatures change with that of their surroundings. To avoid becoming too hot, they find shelter under bushes or rocks. Some rattlesnakes, for example, are nocturnal and bury themselves in the sand during the day. In the hottest part of the year, many snakes rest for a long period. This is similar to the winter hibernation of some other animals.

Meerkats are members of the mongoose family that live in Africa. They hunt early in the day to avoid the heat. They live in mobs, or groups, of as many as thirty members. The mob helps keep its members safe. Predators, such as eagles or jackals, are often frightened away by a meerkat mob.

Even though deserts are one of Earth's harshest environments, the animals that live in them have bodies that are adapted for extreme conditions. These adaptations help the animals avoid heat, store food and water, and protect themselves from enemies.

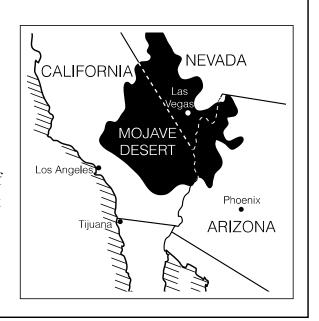
Nam	ne
	eread the passage and answer the questions.
	hat causes many desert animals to adapt their behavior so that they sleep uring the day instead of at night?
_	
	hat evidence in the fifth paragraph shows the structural effects of a desert limate on an animal's body?
_	
3. W	hat are three ways the fennec fox has adapted to its harsh desert climate?
_	
B W	ork with a partner. Read the passage aloud. Pay attention to rate

B. Work with a partner. Read the passage aloud. Pay attention to rate
and accuracy. Stop after one minute. Fill out the chart.

	Words Read	_	Number of Errors	=	Words Correct Score
First Read		_		=	
Second Read		_		=	

Desert Plant Adaptations

Plants adapt to living in the Mojave Desert in many ways. One way plants survive is by conserving water. They have spines or thorns that direct air flow and reflect hot sunlight. Waxy leaves hold moisture in to reduce water loss. Shallow roots help plants use every bit of rainfall. Other plants have long roots that allow them to get water from deep in the ground. Desert flowers bloom only when it rains. These adaptations enable a wide variety of plants to survive in the desert.



Answer the questions about the text.

- 1. How do you know this is expository text?
- 2. What is the heading? Is it a strong heading for this text? Why or why not?
- 3. What other text feature does this text include? What information does it give you?

N	ame
m	ead each passage. Underline the context clues that help you figure out the eaning of each word in bold. Then, in your own words, write the definition the word.
1.	One kind of adaptation is structural . This means the animal's body has changed so that it can survive in the climate.
2.	Another type of adaptation is behavioral . Desert animals act in ways that help them survive.
3.	Since it is so hot during the day, many animals are nocturnal . They rest under rocks or in other cool places during the day and come out at night to hunt for food.
4.	Gila monsters come out only at night during the summer. In winter the lizards hibernate . During this period of inactivity, they use very little food and energy.
5.	Many different types of snakes live in the desert. Because they are cold-blooded , snakes' body temperatures change with that of their surroundings.
6.	Meerkats are members of the mongoose family that live in Africa. They hunt early in the day to avoid the heat. They live in mobs , or groups, of as many as thirty members. The mob helps keep its members safe.

	Word Study: Words from Mythology
Name	
	e word that has origins in mythology. on the line. You may use a dictionary.
	•
Janus: Roman god of beginnings	
Atlas: Greek giant who supported th	e world on his shoulders
Luna: Roman goddess of the moon	
Clotho: Greek goddess who spins th	ne thread of human life
Oceanus: Greek god of the stream of	of water encircling the world

Furies: Greek goddesses of law and punishment

Olympus: mountain in Greece known as home of the gods

Fortuna: Roman goddess of luck

1.	The ocean is home to a wide variety of plants and animals.
2.	They used an atlas to plan their trip around the world.
3.	Some people start a new hobby or exercise routine in January.
4.	Many people watched the first lunar landing on television.
5.	The other team was furious when the referee made an incorrect call.
6.	In the winter, people wear several layers of clothes to keep warm.
7.	The summer Olympics in 2008 were held in China.
8.	In many fairy tales the main characters set out to seek their fortune.

Write a topic sentence:
Cite evidence from the text:
End with a concluding statement:

Name _			

A. Read the draft model. Use the questions that follow the draft to help you think about how you can rewrite sentences to vary the structure and make the writing more interesting to read.

Draft Model

I would rather live in an extremely cold environment. I like cold weather. I can put on a sweater. I can also put on a coat.

- **1.** Which sentences can you combine to add interest for the reader?
- 2. How can you vary the rhythm of the sentences?
- **3.** What other kinds of sentence structures would make the writing more interesting?
