

# Discover!

# Science

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1A



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## Lesson 17

# Characteristics of Animals

By the end of this lesson, you will be able to:

- identify the needs of animals
- explain how animals and their environments work together to survive and grow

### Lesson Review

If you need to review living things, please go to the lesson titled “Living and Nonliving Things.”

### Academic Vocabulary

Review the following vocabulary words and their meanings.

- **environment:** the surrounding area
- **provide:** to give something that is needed

### Materials Needed

ribbon; wrappers; various outdoor items such as sticks, grass, and mud

## IN THE REAL WORLD

### Pig Protection



Pigs love to roll in the mud. Have you ever thought about why? Pigs roll in mud to keep them cool on hot days. The mud also acts like sunscreen. It protects the pig from the sun’s rays. What are some things that you do to keep yourself cool on hot days? How do you protect your skin from the sun’s rays?



# EXPLORE

Imagine visiting your aunt who lives on a farm. Her horse just had a baby horse called a foal. It is sweet to watch the mom look after her young one.

You notice a lot has to be done to help the foal. The mother feeds her baby. The baby also needs to be cleaned. It also needs a safe place to sleep. Your aunt tells you the foal is still very little. Soon, the foal will have the whole farm to roam and explore.

What do animals need to live and grow? What do they do to make sure their needs get met? Who takes care of them? Talk about your thoughts with your instructor.



## IN THE REAL WORLD

### Elephants and Their Young



Just like the mother horse, this mother elephant is taking care of her baby. A baby elephant is called a calf. The mother elephant is making sure her baby has enough water and learns how to stay clean.

## Needs of Animals

Animals have needs. These needs have to be met for them to survive. Animals must have food to eat and water to drink. They need shelter from the weather. They also need space to live and grow. For many animals, the parents make sure these needs are met. But remember: humans have needs too! We have the same needs to survive. When we are little, adults make sure we are taken care of. Grown-ups teach us how to take care of our needs.



## WRITE

What do you do when you are hungry, tired, or sick? Write down a list of some ways your needs get met.

.....

.....

.....

Camels are known for living in hot, dry places. This is because they can store food and water in their bodies for long periods of time. Since it can be hard to find food and water in some hot, dry places, it is the perfect home for camels.

But do you think you would find a polar bear living where a camel lives? How about a shark? Different animals have different needs, so keep reading to learn how different places take care of animals and their needs!





## Animals and Their Environment

Animals depend on and interact with their environment.

**Environment** means the area around you. An environment provides animals with food, water, shelter, and room to grow. **Provide** means to give what is needed. Animals all over the world live in different environments. Animals might live where it is hot, cold, wet, or dry. Animals live in an environment that has what they need. The environment meets animals' needs in different ways. Animals have places where they live and grow best. They cannot live in other places where the environment does not provide their needs.

For example, polar bears live where it is very cold. They have thick fur to keep them warm. They have white fur to blend into the ice and snow. Desert rattlesnakes live where it is hot and dry. They have tan skin to blend into the sand.



Why would a polar bear have a hard time living in the desert? Write your answer on the lines below.

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In this lesson, you learned:

- Animals have special needs to survive.
- Many animals have parents that help them meet their needs.
- Animals work together with the environment to live and grow.

### Think About It

How would an animal meet their needs if they moved to a new environment?



## Building a Nest

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One of the ways birds take care of their young is by building a nest. They use things they find in their environment to build a nest. They use twigs or small branches, leaves, ribbons, twine, or even candy wrappers! They build safe nests in trees, on porches, or in shrubs to raise their young. Many people think birds sleep in their nests all year. However, they don't! Nests are only used to keep baby birds together and safe until they can fly on their own!

Let's design a bird's nest! Use the environment to make your nest just like a bird would.

1. Go outside and collect things you find to make a nest.  
You might collect string, sticks, spaghetti, or ribbon.
2. Make a sketch of your nest in the box to the right. Think about how to put your nest together. As you draw, think about these questions:
  - How would a bird keep these materials together?
  - How would a bird put the pieces together?
  - Would a bird use mud or water to keep the nest together?
  - Could a bird get inside the nest?
  - Would the nest stay together if you picked it up?

Talk to your instructor about the nest you built. Was it easy or hard? What would you change if you could?



1. Which of the following things does an animal need to survive?  
Circle all correct answers.

A. food  
B. water  
C. space to live  
D. clothes  
E. shelter

2. Look at this image. What need is being met? Fill in the blank with the correct word to complete the sentence.



The need being met is \_\_\_\_\_.

3. Look at this image. How is this owl using its environment to survive? Write your answer on the lines below.



The owl is \_\_\_\_\_.

## PLAY



Pretend you are your favorite local animal. Practice creating a shelter, finding food, finding water, staying safe, and raising babies. Talk with your instructor about the animal you are pretending to be. What would make it easy for this animal to live here? What would be hard?



# Discover! K-12 Curriculum Advantage

When students become so curious about the world around them that they are determined to set out on a journey of exploration, their “discoveries” are inspirational.

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