

# Adaptations: Day 1

This week, Weekday Wonders will help young scientists go deeper into exploring and understanding different characteristics seen in animals. This week will help young scientists learn about adaptations and how they allow an animal to obtain food, protect themselves, and help them survive. We will discuss how and why different animals have different types of adaptations, as well as touch on the differences between physical and behavioral adaptations. Young scientists will also have a chance to consider why animals have similar or different adaptations in certain habitats.

These curated activities are listed in a suggested sequence but may be done in the order that works best for you and your young scientists. Learn more about this series in the <u>Introduction to Weekday Wonders</u>.



## Question of the Day What characteristics do animals have that help them live in their environment?



### **Daily Nature Journal**

Ask your young scientists to spend some time outside completing a daily nature journal entry. If you need more information, use the <u>Guide to Nature Journaling</u> to support them in nature journaling each day.



### **Home Sweet Home**

Have your scientist draw the following environments on different pieces of paper. For younger scientists, you may need to read one description, give them time to draw, and then read the next one. For older scientists, just tell them the name of the environment, allow them to draw, then compare their pictures to the descriptions below. Have them add in any details that are not well-represented in their drawings.

- Desert: There are four kinds of deserts. Here, we are talking about a hot, dry desert. These deserts are warm all year and extremely hot in the summer. There is not much rain that falls here.
- Tropical Rainforest: Rainforests are warm and wet. There is a lot of rain that falls each year. There are many plants and trees, and they grow very tall because they have to compete for sunlight.
- Marine (Ocean): The ocean is made of salt water that is in constant motion. Some areas are warm, shallow, and light. Other areas are deep, so sunlight does not reach them, making it cold and dark.
- Tundra (Polar): Tundra regions are covered in ice. Bitterly cold winds can make the temperature drop below freezing. These areas are near the Earth's poles, so it is dark for days at a time in winter.

Once your young scientist has drawn the environments, tell them that these are some of the *biomes*, or major communities of plants and animals, in the world. Now your scientist will need to add some animals to each biome drawing. Ask him or her to look at the animals and characteristics that are listed on pages 3 and 4. Then have him or her draw each animal in the biome where s/he thinks it belongs.

Once your young scientist has drawn the animals, ask why he or she placed the animals in each biome. Ask what evidence told them where to put the different animals. As he or she discusses the statements on the cards, tell him or her that each characteristic is an *adaptation* which makes the animal well-suited to live in the particular biome that is its home.

Extend this activity by having young scientists add other animals that they think live in the different biomes they drew or by having them consider other biomes such as freshwater, savannah, temperate forest, or grassland.



## **Animal Charades**

Use the Animal Cards on pages 3-4 to play charades. Ask your young scientist to draw one of the cards from a stack. Then have him or her act out the animal, being sure to emphasize an adaptation it has. Your scientist might also act out something related to the habitat to show additional information. Your scientist could also use the cards to play freeze dance if s/he is playing alone.



## Where Do I Live?

Tell your young scientist the following information. In the eastern United States, the biome is mostly deciduous forest. There are many trees that are deciduous, or that lose their leaves in the winter. These areas have four distinct seasons and quite a bit of rain.

Ask your scientist to write or draw some adaptations that would help an animal live in a deciduous forest. It may help him or her to think of specific animals that s/he knows live nearby. For older scientists, consider having them research some animals that they do not know much about to discuss the adaptations.

#### **Home Sweet Home Animal Cards**





**Toucans** have large beaks that help them eat fruit. They do not fly well, so they are able to live well in places with lots of thick trees.

# **Camels** store water in their humps. They can drink water and go for five days without drinking again if there is no water available.

Photo: Herding camels, by Wikimedia Commons user Boushabe.ahl.ali

**Dunes Sagebrush Lizards** are the same color as sand, which makes it harder for their predators to see them in the environment.

Photo: Dunes Sagebrush Lizard, by USFWS

**Jellyfish** are almost colorless, which makes it harder for predators to see them. They swim freely, so they are also able to sting predators who get too close.