

Identifying Species

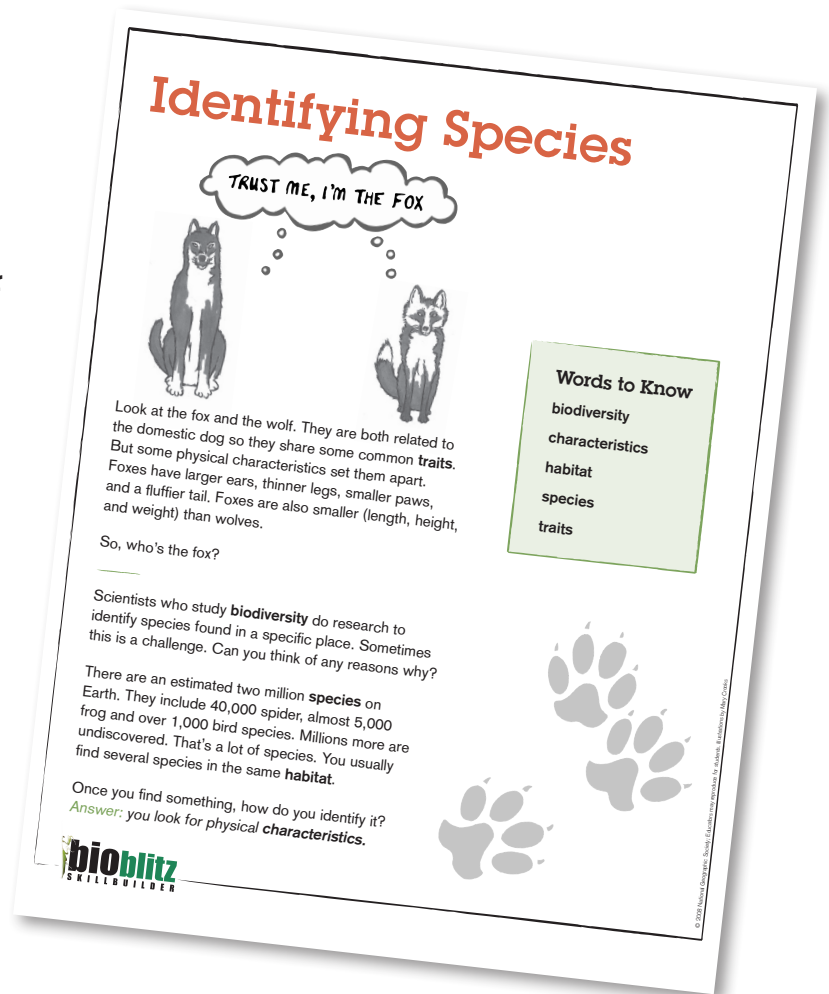
Preview

Students learn that scientists identify species by examining physical characteristics and that this can sometimes be a challenge. They learn about physical characteristics that distinguish foxes and wolves and examine a pair of illustrations to identify the fox.

(Answer: the fox is pictured on the right)

Words to Know

biodiversity	all the different kinds of living organisms within a given area
characteristics	watching and recording things, actions, or events
habitat	the environment where an organism lives
species	a group of similar organisms within the same population that can reproduce with each other
trait	a genetically determined (inherited) characteristic

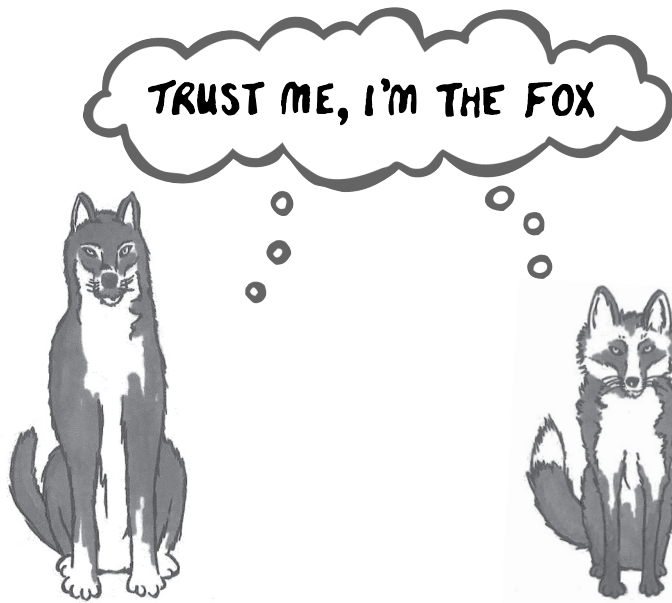


Try It!

Students select an area, identify the species living there, and complete a species inventory.

- ✓ **Ask** students to select a familiar "habitat" such as a classroom, home, or playground. Explain that they will use observation and recording skills to complete a species inventory of this area.
- ✓ **Review** with students the types of living organisms they might look for, including different species of plants, trees, grasses, mammals, reptiles, insects, or birds.
- ✓ **Ask** them to think about other organisms that might be in the environment but are harder to spot and identify without tools such as microscopes (e.g. fungus, bacteria, or viruses).
- ✓ **Remind** students that finding and identifying are often separate steps. Encourage students to use library or other resources to identify the species they find.
- ✓ **Complete** the activity by asking students to discuss how they identified species. Have them communicate the details that lead to their identification, such as "I saw a bug and counted eight legs, so I knew it was a spider."

Identifying Species



Words to Know

biodiversity

characteristics

habitat

species

traits

Look at the fox and the wolf. They are both related to the domestic dog so they share some common **traits**. But some physical characteristics set them apart. Foxes have larger ears, thinner legs, smaller paws, and a fluffier tail. Foxes are also smaller (length, height, and weight) than wolves.

So, who's the fox?

Scientists who study **biodiversity** do research to identify species found in a specific place. Sometimes this is a challenge. Can you think of any reasons why?

There are an estimated two million **species** on Earth. They include 40,000 spider, almost 5,000 frog and over 1,000 bird species. Millions more are undiscovered. That's a lot of species. You usually find several species in the same **habitat**.

Once you find something, how do you identify it?

Answer: you look for physical **characteristics**.

