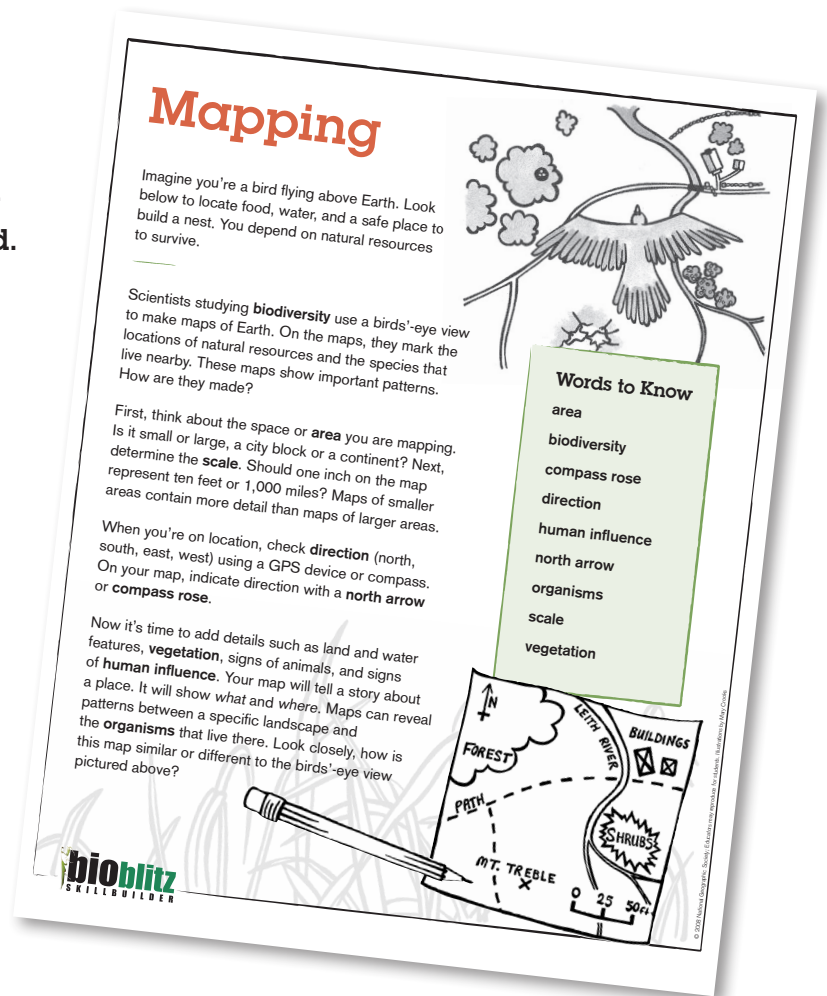


Preview

Students learn how maps reveal patterns between the location of natural resources and species that live nearby. The mapmaking process and key elements to include are reviewed.

Words to Know

area	a geographic region
biodiversity	all the different kinds of living organisms within a given area
compass rose	a symbol on a map that shows the direction of north and other main directional points
direction	the way in which somebody or something goes, points, or faces
human influence	the effect that people have on an environment
north arrow	a mark on a map that shows the direction of north
organisms	living things such as plants, animals, fungi, or bacteria
scale	the relationship between distances on a map and the actual distances on Earth
vegetation	the plants, including trees, grasses, flowers, ferns, and shrubs of a given area



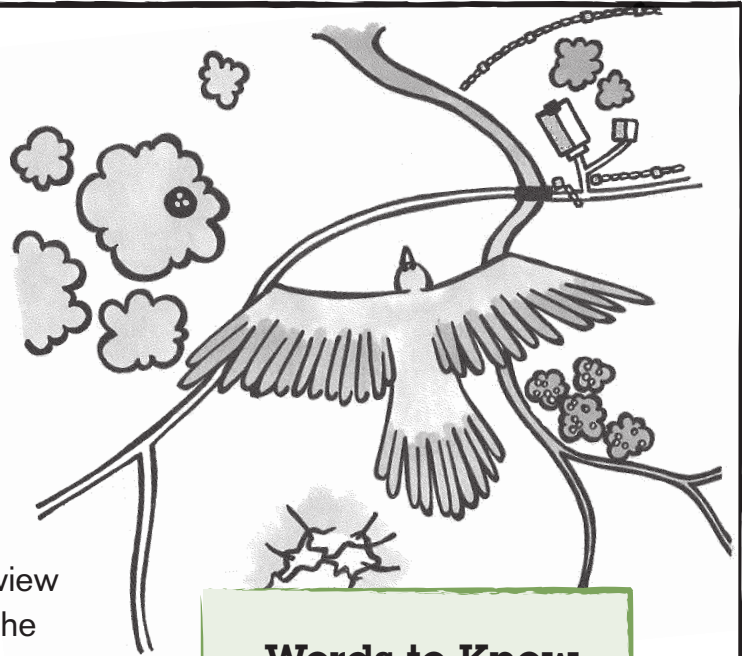
Try It!

Students select and map an area. They practice finding direction, determining scale, and identifying natural and human features.

- ✓ **Divide** students into groups. Assign or ask them to select an area to map. Suggestions: school playground, cafeteria, library, or classroom.
- ✓ **Review** the elements they should include on their map: students should indicate both natural and human features, and include a north arrow or compass rose (indicating direction) and a scale bar (indicating scale).
- ✓ **Ask** students to share the process they used to create their maps: What details did they think were important to include? How did they determine direction? How did they determine scale?

Mapping

Imagine you're a bird flying above Earth. Look below to locate food, water, and a safe place to build a nest. You depend on natural resources to survive.



Words to Know

area

biodiversity

compass rose

direction

human influence

north arrow

organisms

scale

vegetation

Scientists studying **biodiversity** use a birds'-eye view to make maps of Earth. On the maps, they mark the locations of natural resources and the species that live nearby. These maps show important patterns. How are they made?

First, think about the space or **area** you are mapping. Is it small or large, a city block or a continent? Next, determine the **scale**. Should one inch on the map represent ten feet or 1,000 miles? Maps of smaller areas contain more detail than maps of larger areas.

When you're on location, check **direction** (north, south, east, west) using a GPS device or compass. On your map, indicate direction with a **north arrow** or **compass rose**.

Now it's time to add details such as land and water features, **vegetation**, signs of animals, and signs of **human influence**. Your map will tell a story about a place. It will show *what* and *where*. Maps can reveal patterns between a specific landscape and the **organisms** that live there. Look closely, how is this map similar or different to the birds'-eye view pictured above?

