



Everyone Has a Role



Essential Question: What can happen to an ecosystem if one niche is not filled?

Overview

Ecosystems are very complex systems. They survive on the relationships among their inhabitants. Everything is related to something in an ecosystem. In the last lesson, you studied energy relationships. In this lesson, you will look at other types of relationships. You will see how animals that do not eat each other are still dependent on each other. The role that an organism has in an ecosystem is called its niche. This includes its energy transfer and its relationships with other organisms and non-living things. In today's activity, you will see what happens when a niche in an ecosystem is not filled.

Materials

For each group:

- 1 pair of scissors
- tape
- 5 pieces of scrap paper
- ruler
- pencil

Safety Concerns

Use caution with sharp scissors; return all materials as instructed by your teacher.

Procedure

Round 1

1. Form a group of four students. As a group, try to make as many "X"s as you can in five minutes.
2. An "X" is made by cutting out two pieces of paper, each 3 inches long and 1 inch wide. Then tape the strips of paper into an "X" shape.
3. Each person in your group will have one specific task in the creation of the "X"s. One person will measure the dimensions with a ruler. Another will mark the ruler measurements with a pencil. A third will cut the paper along the pencil marks. The fourth will tape the strips of paper into the "X" shape.