

Food Web Grades 4 to 6

<h2 style="margin: 0;">Post Activity - Predators</h2>	Cross Curricular	
	Safety Notes	If doing this outside, look out for uneven ground.
<p>Big Ideas Plants and animals are interdependent and are adapted to meet their needs from the resources available in their particular habitats. (Grade 4)</p> <p>Changes to habitats can affect plants and animals and the relationships between them. (Grade 4)</p> <p>Society relies on plants and animals. (Grade 4)</p>	<p>Specific Expectations Build food chains consisting of different plants and animals, including humans.</p> <p>Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers (plants) and then to consumers (animals).</p> <p>Classify organisms, including humans, according to their role in a food chain.</p>	

Description
Students will learn how plants, animals and humans are interconnected and interdependent. They will identify the relationships between living and non-living things in the environment and create a food web with Ontario species.

Materials

Ball of string or yarn
 Picture- or name-cards with different plants, animals and non-living factors (see resource)

Accommodations/Modifications

You can use picture or words to represent the different parts of the environment.

This game can be played inside or outside.

Introduction

Almost all energy for life on Earth comes from the sun. Plants use the sun’s energy and nutrients from the air and soil to grow and produce sugars. Plants are **producers** because they produce their own energy from the sun. Animals gain energy by eating plants and/or animals, and are called **consumers**. Animals that only eat plants are **herbivores**. Animals that only eat other animals are **carnivores**. Animals that eat both plants and animals are **omnivores**. When both plants and animals die, organisms, like earthworms and microbes, recycle the dead and rotting material into organic soil. These organisms are called **decomposers**. A food chain is a simple representation of how energy flows from the sun to the top predator in an area. However, the environment is made of many different species all interacting with each other. Some species share the same food source and are competing with many other species. These interactions all together form what is called a food web.

Action

1. Have your students stand in a large circle. This can be done in the classroom, or outside if you need more room.
2. Ask the students to describe living and non-living things that make up an ecosystem. Be sure to have the students mention the sun, soil and water, as well as plants and animals.
3. Ask the students to describe how different living organisms get energy to live and grow. If they haven’t mentioned it, bring up that animals rely on plants for energy, but often plants rely on animals to reproduce and grow.
4. After recap, assign roles to each of the students in the circle. Make sure to include the sun, a variety of plants, a variety of animals, and humans. Use the list, provided as a resource, with this lesson plan. Your class can also come up with species for different food webs prior to the physical activity.
5. Ask students to say where all the energy comes from (the sun). Give the student who is the “sun” the ball of yarn. Then, name one food chain that will start with the sun and end with a carnivore (top predator). Pass the yarn from student to student in the food chain described. At the end, pass the yarn back to the “sun”.

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6. Continue other sequences with different students until everyone is holding onto the yarn.

Consolidation/Extension

1. Keep the students in the web formation and ask the students what this represents in real life (everything is interconnected).
2. Ask students what would happen if one or more species went extinct. Some species are currently at risk in Ontario (see resource). Have the students who represent some of these species drop their yarn. Everyone else connected on either side should also drop their yarn, and so on. The web falls apart.

Additional Resources

Handout with different species

List of At Risk species
