

Insects in Their Environment

Grades 1 to 3

Eco Tower - Post Activity

Assessment Cross-curricular simulation

Big Ideas

50 minutes

Humans need to protect animals and the places where they live.

Plants and animals are interdependent and are adapted to meet their needs from the resources available in their particular habitats.

Changes to habitats (whether caused by natural or human means) can affect plants and animals and the relationships between them.

Specific Expectations

- 1. Identify positive and negative impacts that animals have on humans (society) and the environment, form an opinion about one of them, and suggest ways in which the impact can be minimized or enhanced (Grade 2 1.1);
- 2. Identify positive and negative impacts that different kinds of human activity have on animals and where they live, form an opinion about one of them, and suggest ways in which the impact can be minimized or enhanced (Grade 2 1.2);
- 3. Analyse the positive and negative impacts of human interactions with natural habitats and communities, taking different perspective into account, and evaluate ways to minimize the negative impacts (Grade 4 1.1);
- 4. Demonstrate an understanding of a community as a group of interacting species sharing a common habitat (Grade 4 − 3.4).

Description

The students will use different coloured items to represent various plants and animals in the ecosystem. They will explore the effect of human impact.

Materials Groupings of items in 3-4 various colours (i.e. buttons, pom-pom balls, marbles) 3-4 clear jars of containers

Introduction

- 1. Discuss with the students what they learned during the "Bugs and Plants" program at Science North.
- 2. Ask the students if they understand the concepts of an ecosystem.

Action

- 1. Stack up the various jars with the coloured items at the front of the classroom.
- 2. Explain to the students that the jars represent an ecosystem and inside the ecosystem are different organisms that rely on each other for resources.
- 3. Discuss with the students what they think would happen if they were to remove one of the jars from the tower.
- 4. Remove the middle jar to cause the tower to collapse.
- 5. Discuss with the students their observations.

Consolidation/Extension

1. Discuss how when humans cause a species to become extinct if affects an entire ecosystem of different organisms.

Key terms:

Ecosystem: a biological community of interacting organisms and their physical environment

Extinct: no longer in existence; that has ended or died out

Habitat: the natural environment of an organism; place that is natural for the life and growth of an organism

Organism: a form of life composed of mutually interdependent parts that maintain various vital processes

2