

Relationships and Interactions

Real World Ecosystems
Activity
Grade Level: 5-8



Main Objectives

Learners will learn about the potential types of relationships that may be found in communities. Using the Species cards, they will sort information into various types of groups.

Learning Outcomes

By the end of this activity, learners will:

- Classify organisms as producers or consumers and use appropriately the following items: herbivore, omnivore, predator, scavenger and decomposer to further classify consumers into more specific groupings
- Define the various closely linked (symbiotic) interactions that exist between organisms within an ecosystem using appropriate terms (parasitism, mutualism, commensalism)

Length of Activity

1 hour

Materials List

Internet-enabled device and printer
Relationships and Interactions Backgrounder
25 Species cards per learner group
Relationships and Interactions Learner Worksheet
Relationships and Interactions Learner Answer Key

Activity

Step 1:

- a. In groups or individually, review the Relationships and Interactions Backgrounder.
- b. As learners are finishing up their reading, be sure to remind them to discuss amongst themselves the “Think About” questions at the end of the backgrounder.

Step 2:

- a. Divide the class into groups of two. Give each group about 25 cards each (depending on the number of card sets you print out). Keep one set of 25 cards for yourself. Print off one Learner Worksheet for each learner and hand them out.
- b. Have learners look at the cards and discuss the information that is given on each card. Remind learners of the classification of organisms.

Step 3:

- a. Have learners sort their Species cards into two groups producers and consumers and ask them to record their information on their worksheet.

Step 4:

- a. Have learners take the pile of cards that are consumers and sort the consumer group of cards into smaller groups, using the classifications of herbivore, carnivore and omnivore.

Review each of the terms to be sure learners understand the differences.

- b. Ask learners to record the information in their worksheet.

Step 5:

- a. Next, ask learners to use all their cards and build a food pyramid. They should identify three or four species for each level.
- b. Have learners use the background information and the species cards to fill out the remainder of the questions on the worksheet.

Extension Activity

- In groups of 2-3, assign learners to research and report on a species of animal or plant that is native to Alberta (or the region you live in) and have each group prepare a new Species card for that organism:
 - Western blue flag
 - Bull trout
 - Northern leopard frog
 - Ferruginous hawk
 - Loggerhead shrike
 - Peregrine falcon
 - Trumpeter swan
 - White pelican
 - Swift fox
 - Woodland caribou

Comprehension

When learners have finished reading the Relationships and Interactions Backgrounder and have sorted the Species cards as directed, you may want to check their understanding of the concepts by distributing the Learners Worksheet and assigning the questions.

- What is the difference between mutualism, commensalism and parasitism?
- What are some examples of mutualism, commensalism and parasitism?
- What are some characteristics of herbivores, carnivores and omnivores?
- What role(s) do humans play in the food chain?
- What are the differences between producers and consumers?