

Relationships and Interactions

Real World Ecosystems Learner Worksheet Answer Key Grade Level: 5-8

To understand their understanding of the concepts presented, the learners should produce answers as follows:

- Sort your cards into two groups: producers and consumers. Record the common name of 5 species for your producers and for consumers in the chart below The learner will have different answers depending on the cards they got.
- 2. Now take the species cards that were sorted into the consumers pile in the first question and sort the cards into smaller groups using the classifications or herbivore, carnivore, and omnivore.

The learner will have different answers depending on the cards they got.

3. Build a food pyramid using some or all of your cards. Find 3 or 4 species for each level (tertiary consumers, secondary consumers, primary consumers and producers) and record the common name below.

The learner will have different answers depending on the cards they got.

- All producers should be plant material.
- Primary consumers should be animals that eat producers or plant material.
- The secondary consumers prey upon the animals that are primary consumers.
- Tertiary consumers will eat both primary and secondary consumers.
- 4. Use the background information and the cards to find examples of the different types of symbiotic relationships.
 - **a.** An important characteristic of mutualism is: Both species receive some benefit from their close, living relationship.
 - b. An example of mutualism is: Honeybees and flowers
 - **c.** An important characteristic of commensalistic organisms is: Two species live closely together, one species benefits while the other isn't affected.



- **d.** An example of commensalistic organisms is: The human follicular mite found in the eyebrows and eyelashes of almost all humans.
- e. An important characteristic of parasitism is: Parasite are a very diverse group; they can live on or in a host. Parasites can harm their host and cause illness or death.
- f. An example of parasitism is: The horsehair worm.

5. Explain the difference between predation and parasitism.

The difference between predation and parasitism is very slight. Some scientists consider parasitism to be just an extreme form of predation. In either case, the predator or parasite gains a benefit and the prey or host is harmed. In the case of parasitism, the parasite (predator) is extremely dependent on one individual host (prey), which is not the case in normal predation. In predation, the predator kills its prey.

6. Explain the difference between scavengers and decomposers.

Scavengers actually feed on dead or decaying plant or animal matter, while decomposers do not actually eat the dead organism, but merely extract from dead plant and animal material the nutrients they need.

7. What classification would humans have in terms of our role in an ecosystem? (Producer, herbivore, carnivore, omnivore, decomposer)

At different times, humans may fill all of these roles in the food web.