

Bat and Moth



Goals

Students will be introduced to predator-prey relationships in nature and in the garden.

Objectives

Through role-play, students will physically demonstrate the method that bats use to obtain their food.

Materials

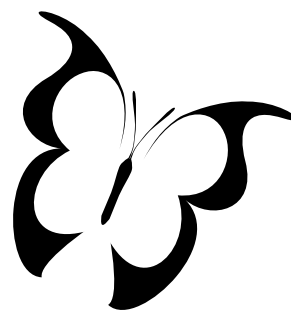
- Blindfold
- Space for a 15-foot circle

Time: 15-20 minutes

Background Information

Predator: an organism that is hunting or feeding.

Prey: an organism that is attacked or fed on.



Predation occurs when one organism (the predator) eats another living organism (the prey) to utilize the energy and nutrients from the body of the prey for growth, maintenance or reproduction.

The predator-prey relationship can be a fairly stable situation. When the natural system is working properly, pest insects inhabiting the garden along with the predators and parasites seldom become a problem.

Introduction (2 min)

Students turn to a partner and discuss their understanding of the term “predator.” Students then turn to a new partner and discuss their understanding of the term “prey.”

Activity Steps (10 min)

1. Gather the students into a circle and discuss predator-prey relationships. Ask them about their discussions of the terms and give examples of this predator-prey dynamic in the garden.
2. Get the students thinking about bats. What do they look like? What do they eat? Ask the group how a predator, the bat, might find its prey, the moth. Talk about echolocation and how animals have different abilities for finding their food. Bats emit high-pitched sounds, which bounce off surrounding objects (or echo), and give the bat a picture of its surroundings, including where dinner is!
3. Select four volunteers from the circle to be a bat and three moths. Place a blindfold over the bat to simulate its weak sense of sight. In order to find the moth, the bat must use echolocation by saying “BAT.” Every time the bat speaks, its signal is hitting the moths and they must respond by saying “MOTH.” The bat blindly moves around the circle trying to catch its prey.

4. To avoid bumping into other students in the circle, each of the remaining students should say “TREE” to simulate the forest as the bat gets very close to them. If it is necessary to help the bat, make a smaller circle by telling the students to take one step forward. Also, the bat could shout more frequently. Give everyone a turn that wants to play the bat or moth.
5. Discuss with the students what happened and some strategies they think moths might use to escape a hungry bat.

Conclusion (5 min)

In their garden journals, have students write their own definition of predator and prey and draw a picture of each.

Notes

