

Thicket Game

Predators and prey engage in a high stakes contest of hide and seek.

Objectives

Students will (1) identify examples of adaptation in animals, and (2) describe the importance of adaptation to animals.

Background

Animals are adapted to their environment in order to survive. Animals may also be adapted to changes in their habitats. For example, snowshoe rabbits have a white winter coat to blend with a snowy environment and a tan summer coat to blend with summer ground and vegetation colors. Chameleons change color to blend with their surroundings. The walking-stick insect can look like a twig or stick. Fawns have spotted hair that resembles dappled light on the forest floor in spring. Adaptations to predator and prey relationships may also include behavioral (e.g., hiding or flight) and physical (e.g., camouflage) variations.

The major purpose of this activity is for students to understand the importance of adaptation to animals.

Procedure

Play it safe. Prior to conducting this activity, scan your site for any toxic plants, stinging insects, or other hazards. In warmer temperatures, consider spaces in which participants can easily avoid brushing up against brush and tall grass to avoid biting insects such as chiggers and ticks.

- **l.** Take the group to a place outdoors that represents a "thicket." This place should have areas where students can hide.
- **2.** Blindfold one student who will be the "predator." The predator slowly counts to 20 while the other students, or "prey," hide. Students who are hiding must be able to see some part of the predator at all times.

Grade Level:

Lower Elementary, Upper Elementary

Content Areas:

Science, Environmental Education, Expressive Arts, Physical Education

Method:

Students become "predator" and "prey" in a version of "hide and seek."

Materials: Blindfolds; outdoor area such as a thicket or other vegetated area free of poisonous plants and other hazards where students can hide safely, or a "thicket" built using desks, chairs, and blankets in a large room

Activity Time:

one 30-minute session

People Power: minimum of five students

Setting: outdoors

Conceptual Framework
Topic Reference:
CAIIA, CAIIA1, CAIIA1b

Terms to Know: adaptation, predator, prey, thicket

Appendices: Field Ethics, Simulations



to survive! **Geographers** study many features of an area to understand as much as they can about the place. For example, knowing what natural features are on the land might help people better provide for needs of wildlife. **Wildlife Biologists** study wildlife and predict how animals will utilize the land to improve their chances for survival. Learn more about these interesting occupations at *www.projectwild.org*.

In Step with STEM

or camouflage, is a commonly used mechanism for prey to avoid predators. See if you can spot animals using camouflage in videos. Go to www.projectwild.org for links.

Using the ecosystem from the "Thicket Game" activity as your guide, brainstorm an organism that could survive the longest in the thicket without being killed by a predator. When you think you have created the ideal critter, research organisms that exist in habitats like the thicket. Do any of the animals closely resemble the one you created?

- **3.** After counting, the predator removes the blindfold and looks for prey. The predator can turn around, squat, or stand on his or her tiptoes, but cannot walk or change location. The predator should see how many students he or she can find, identify them out loud, and describe where they are. When identified, the prey students move to the predator's location and wait until the next round to become predators. Make sure the students do not tell the original predator where any of the students are hiding.
- **4.** When the original predator cannot see any more students, a new round starts. All of the predators put on blindfolds and stand in close proximity to each other. Each predator has the same motion restrictions. Again, the original predator counts aloud to 20. At that point all the remaining prey must move at least 10 feet closer to the predators. Those remaining prey still try to remain hidden. All predators remove their blindfolds and take turns naming students they can see.
- **5.** Play as many rounds as necessary until only one or two prey students are left. At that time, have the remaining students stand up and identify themselves. It may be surprising how close the prey got to the predators without being detected. The ability to remain undetected and to detect others is an example of successful adaptation. Introduce the term "adaptation."
- **6.** Conduct the activity one or two more times.
- **7.** Discuss what made predators and prey successful. Were they quiet, clever, camouflaged, or good listeners? Ask students to identify animals that are adapted with similar survival characteristics.
- **8.** Ask the students how they could change to be more successful predators and prey. Some ideas that may come out are changing color (clothes), wearing clothing that does not stick to plants, being smaller, or climbing a tree. Ask the students if animals can make any similar kinds of changes.
- **?.** Talk about differences between physical and behavioral changes. Have the students identify which adaptations related to predators and prey are behavioral, which are physical, and which involve both.
- **IO.** Ask students to summarize what they have learned. See if students can think of other examples of animal adaptations. Generalize that all animals are adapted to survive.

Assessment

- **L** Describe the importance of adaptations to animals. Give at least two examples of animal adaptations.
- **2.** Create a play or skit that shows how both predators and prey are adapted to survive.