

Night Sounds*

Subject: Science, Social Studies

Duration: 45 minutes

Location: Outdoors (One of two ways - at night in a forested area with lots of cover or in a smooth, grassy open field using blindfolds).

Key Vocabulary: Communication, predation, territoriality, adaptation, and mimicry

Related Activities: Camouflage Critters; Win, Lose, or Adapt; Animal Olympics; Hurry for a Habitat

Florida Sunshine State Standards: SC.G.1.2



Objectives. The student will demonstrate the concepts of animal communication, predation, territoriality, mate-seeking, adaptation, and/or mimicry and describe how these physical and behavioral adaptations allow animals to survive in their environment.

Method. Students will play a physical game using noise/light makers which portray animal behaviors and explain the key concepts listed above.

Background. Animals have unique traits which often go unnoticed. Animal traits, such as communication, predation, territoriality, mate-seeking abilities, adaptations, and mimicry are often overlooked. This game is designed to demonstrate to students the importance of these animal characteristics.

Materials

- Blindfold for each student (if done during daylight)
- Noise-makers or light-makers (if done in the dark): You will need 1 noise/light-maker for each student. At least two students should hold identical noise/light-makers.

Suggested Procedure

1. Spend some time familiarizing students with the terms listed under the objectives.
2. Have students stand in a circle facing outward with their hands behind their backs.
3. The teacher should go around the circle placing one noise and light-maker in each student's hand. Some examples of noise or light-makers include: whistles, shakers, or flashlights. (The first time you play, everyone gets something.) Distribute duplicate devices to opposite sides of the circle.
4. Have participants scatter outward from the circle (and find a place to hide if they are playing without blindfolds.)
5. When all participants have scattered, the leader gives a signal to begin. The participants attempt to find

their mate (the matching sound or light signal) by using the noise/light-makers.

6. After a majority of the noise/light-makers have found a mate, return to the circle and discuss the activity. It may be that some critters could not find a mate, and others may have found more than one.

Possible Results From 1st Activity:

- 1:1 ratio (critter finds his mate)
- 2:1 ratio (two critters find the same mate)
- 1:0 ratio (no mate available for the critter)

7. Are some critters able to find their mates easier than others? Why? If the concept of a “predator” does not arise in the discussion, inject it briefly before playing a second round.

8. Have the students face outward in the circle again to play a second round. This time, one or two persons will not get a device. They will be the predators. Predators can capture (touch) prey when they hear the noise or see the light source. Play again.

9. After playing a second time, discuss some limitations that may be placed on predators. Examples include: must capture animal within three seconds after device has been used, predator can only capture one or two animals per game. Play the game again.

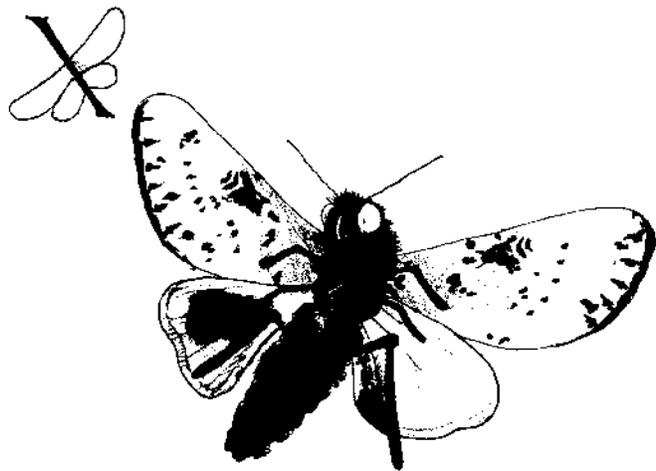
10. After playing the third round, discuss how the new rules affected predators. Is this reality?

Evaluation

Make a conclusion about the most important factors in the survival of critters presented in this game. Do skills in using senses help animals to live better in their environment? How?

Extension

Introduce the idea of predators imitating (mimicking) the noise/light source of their prey (some species of fire fly do this. They imitate the light flashes of a prey species of fire fly to attract and eat them). This will allow students to see how predators adapt, making it easier for them to capture prey. The game may then be played again. Discuss this new option (mimicry). Did it effect the game? How could a moth or a butterfly use mimicry? (A non-poisonous species may have a similar coloration to a poisonous species, fooling would-be predators.) Are predators the only living things that use mimicry?



* Adapted from **OBIS** “Sound Off” activity published by Delta Education, Hudson, NH