BETTER TOGETHER

Third Grade: Animals that Form Groups

OVERVIEW

For this activity, head **to the Ecosystems Gallery**. You will go to two separate locations: the Kelp Forest located on the Lower Level and the Desert Zone located on the Upper Level. In each of these spaces, students will make observations of two different animals in their natural habitat.

Next Generation Science Standards

This lesson supports the following performance expectation:

3-LS2-1. Students who demonstrate understanding can construct an argument that some animals form groups that help members survive.

Focus Question
Why do some animals work or travel in groups?

Group Love

The tendency to "follow the crowd" and travel in packs is nothing new and as anyone who has tried to exit a concert or sporting event knows, it's natural to follow others. In nature, animals also tend to group together. Living in groups can provide many advantages to animals. Groups are more resistant to attacks by predators, especially if the group has large numbers, because the predator can only take a few individuals. Some animals also live in groups because it makes it easier to stay organized and delegate responsibilities to different members in order to have enough resources such as food and shelter.

Students will compare two animals that live in vastly different environments, but have one thing in common. Both these animals tend to live in groups, a characteristic that enables group members to survive.

SMALL GROUP CHALLENGE

Help your group explore two different animals. They should work together to complete the animal summaries for sardines and honey ants.

1. Identify one person to be the Recorder and take notes for the group. The group will share notes once they get back to the classroom. You may also choose to be the Recorder for your group.
2. Introduce your group to the Kelp Forest. Inside the Kelp Forest students will find a number of animals that live right off the coast of California.
3. Have students identify the sardines that should be swimming near the surface of the tank.
4. Have students observe how sardines form a group known as a school in which these small fish swim together in the same direction and in a coordinated manner.
5. Assign each student one thing to find out about the group of animals (see below). They should spend at least 2 minutes observing the animal in order to answer their question, as well as reading the text panels within the exhibit. They may also ask questions to Science Center staff or other students.
   Investigation Questions:
   - How many animals are in this group?
   - Are the animals doing the same thing?
   - What are the advantages of living in a group?
   - What are the disadvantages of living in a group?

6. Students should report back to the Recorder with their findings after exploring the gallery.
7. Move to the Desert Zone. Introduce your group to the Desert Zone. Inside the Desert Zone, students will find a number of animals that have adapted to the extreme conditions of the southwestern desert.
8. Point out the honey ants to students.
9. Have students observe how ants form a group known as a colony in which these small insects work together to maintain their colony.
10. Repeat steps 5 and 6.

VISIT DEBRIEF

As you wind up your visit to the Ecosystems Gallery, ask students to reflect on the grouping behavior of the animals they found in the two different areas.

Have students record a response to the focus question in their notebook: Why do some animals work with or travel in groups?

IN THE CLASSROOM: GOING FURTHER

Materials

- Writing tools
- Poster paper
- Observation guides

Students observed two animals in Ecosystems. Extend their experience by having them relate the grouping behavior of the animals to the grouping behaviors of other animals that they can think of.

1. Ask students to draw other animals that live or travel in groups. Examples may include: birds, dogs, wolves, honey bees, humans, etc.
2. Teacher should create a class T-chart to write down notes as students answer the following questions for those animals:
    - What are the advantages of forming a group?
    - What are the disadvantages of forming a group?
3. Focus students' attention on the "Advantages" list. Which of these items are similar to the advantages of grouping behavior in the animals they saw at the Ecosystems gallery?
4. Wrap up by having students return to their initial responses to the focus question and refine their response.

SCHOOL OF SARDINES: KELP FOREST

Draw us!

How many of us are in this colony?

Do we all do the same things?

Advantages of living in a group

Disadvantages of living in a group

HONEY ANT COLONY: DESERT ZONE

Draw us!

How many of us are in this colony?

Do we all do the same things?

Advantages of living in a group

Disadvantages of living in a group