Survival

Pre-Program Activity

Grades 6-8

Objective: Students will demonstrate and describe behavioral adaptations used by various types of animals.

Sunshine State Standards:

- **SC.6.L.15.1** Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.
- **LA.6.4.2.1** The student will write in a variety of informational/expository forms (e.g., summaries, procedures, instructions, experiments, rubrics, how-to manuals, assembly instructions).
- **SC.7.L.17.2** Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism.
- **LA.7.4.2.1** The student will write in a variety of informational/expository forms (e.g., summaries, procedures, instructions, experiments, rubrics, how-to manuals, assembly instructions).
- **SC.8.N.4.1** Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.
- **LA.8.4.2.1** The student will write in a variety of informational/expository forms (e.g., summaries, procedures, instructions, experiments, rubrics, how-to manuals, assembly instructions).

Overview: As members of a group of animals, students search for "food" and develop strategies for survival.

Materials:

- 500 toothpicks (or pasta or other item that won't be harmful to the environment)
- Pencils and paper
- Copies of Survival student page

Procedure:

- Distribute the toothpicks over a wide area, such as a field.
- Put students into teams of 3-4 students and tell them that they are going to be acting as groups of animals searching for food (represented by toothpicks).
- Explain that in order for an animal to survive, it must collect 5 pieces of food. In order to "reproduce," it must have 10 pieces of food.
- Have one group stay on the sideline to become future offspring for the other groups. Position the rest of the groups around the field.
- For each round, first have students write down the number of animals in their group. Then allow 30 seconds for food collection. As a group, have the students record how many toothpicks they found. Then have anyone that did not collect at least 5 toothpicks move to the sideline. If there is anyone with 10 toothpicks that would like to reproduce, have one of the students on the sideline join their group.
- Collect everyone's toothpicks and begin the next round.
- After three rounds, tell students that any animal that has been in the same group for three consecutive rounds has now died of old age and must move to the sideline. Continue playing until most of the toothpicks have been collected.
- Move back to the classroom and ask students what type of strategies they used to continue collecting enough food to survive (working as a team, establishing a "territory," storing food for next round, etc.) Relate this to real-life animal survival strategies.

- Using the data collected by the last group they were a part of, have students fill out the student page and compare their group's survival techniques to real animal adaptations.