

19. ANTS

Overview: Students will observe ants.

Objective: Students will observe and describe ant behaviors in a natural setting.

Time needed: 30-45 minutes

Group Size: 2-4

Age appropriateness: K-2

Site: Ant nests in the Garden

Background: Ants are arthropods. They have a body divided into 3 distinct parts - head, thorax and abdomen. The ant has 6 legs which are attached to the thorax. It also has 2 antennae. Most of the ants that are seen are workers and all are female.

Materials:

Provided at the Garden

Hand magnifiers

Bug Viewers

Clipboards

Provided by the classroom teacher

Paper and pencil

Watch with minute hand

Obstacles - food and objects decided on by the class

Preparation: Locate ant nests at the Garden. Gather items to be used as obstacles.

Pre Activity: Read Two Bad Ants by Chris Van Allsburg. Discuss the obstacles the ants overcame in the story. You might word web with the students what they know about ants.

Plan with the class obstacles the groups will put in the path of the ants and predict what the ants will do. Some ideas for obstacles might be food such as sugar, tuna, dry pet food, sunflower seeds, fruit and dead insects. Also objects such as rocks, stick, leaves and a puddle of water.

Procedure:

1. Divide class into groups of 2-4. Have an adult to supervise each nest site.
2. Assign groups to the nests and remind them to be careful not to disturb the surrounding habitat.
3. Observe and sketch the ants and their nest. An adult can capture ants for the bug viewers. Encourage students to notice the color of the ants, how many legs, feelers and eyes. **Caution: Look but don't touch! Some ants can inflict painful stings.**
4. At nests, groups should determine how far from the nest ants travel (measure by counting steps). If a watch is available, see how far an ant will go in one minute.
5. After predicting what the ants might do, put an obstacle in the path of ants and observe their reactions.

6. Conduct a large group discussion about general observations, what happened with the obstacles and the accuracy of their predictions.

Modifications: Older students can compare and contrast several ant hills or try a variety of obstacles.

Extensions:

1. Update the "ant web".
2. Read One Hundred Hungry Ants by Elinor J. Pinczes. Using plastic ants, divide a single column of 100 ants into 2 columns of 50, 4 columns of 25 and so on. This can be tied in with the song, "The Ants Go Marching On."
3. Relate the ants behavior at the nests to the Aesop Fable, "The Ant and the Grasshopper."
4. Conduct research on any unanswered questions the students may have.
5. Start an ant farm in the classroom.

Reference List:

Project WILD, "Ants On A Twig"

Using Live Insects in Elementary Classrooms for Early Lessons in Life - The Center for Insect Science, University of Arizona.

Time of Year: Ants are not active when it is cold. Fall or spring would be best.

**This activity was adapted from Using Live Insects in Elementary Classrooms for Early Lessons in Life, "Little Me in a Big World".