Living Things Need Shelter

Grade Level

Grades 1

Engage

This activity is designed to start your students in recognizing themselves as scientists and thinking critically about problem-solving. The goal is to teach concepts through discovery and to encourage using scientific thought processes. As with all lessons provided, please feel free to adapt them according to your students' abilities. Some of your students may be early readers, in which case you may find it more successful to lead activities and discussions as a whole group rather than using individual Research Plan sheets. Certain scientific vocabulary may or may not be appropriate for your students' level of understanding. Take these ideas, make them your own and your students will have a greater chance at success.

In what ways are shelters from animals in different habitats the same or different from one another?

1. Begin this lesson by telling students that they will be investigating one of the basic needs of all animals, shelter.
2. If your students are familiar with brainstorming and recording their ideas, break them into small groups. If your students need more guidance, work with them as a large group. Engage your students in a discussion of what they predict the answer to this question to be. More importantly, <u>why</u> do they think this?

Explore

3. Continue with the above discussion and encourage the group to come up with ways that they could investigate the question and test their predictions scientifically (all suggestions are welcomed). What tools might they need to carry out their suggested explorations? Are there materials that would help them find the answer? Should they be making observations? What kinds of records will they need to keep? What will they do with the information once they have it? And how will they know that they've successfully answered the question? Allow a wide variety of ideas and encourage conversation amongst the students to refine the details of their ideas.
4. Ideas should be recorded on the Research Plan sheets. Small groups can record their own answers or you can record ideas as a group.

Explain

5. Explain to the students that they are going to use a method of scientific exploration to answer to this question.
6. Assign each student an animal that represents a different habitat. To provide for a diversity of shelter types, consider assigning some of the following animals: leaf-cutter ants, bats, beavers, bees, boa constrictors, eagles, hermit crabs, meerkats, owls, polar bears, spiders and wolves. The student is in charge of finding out everything that they can about the shelter used by their assigned animal. They can use whatever means necessary and whatever resources are available to discover this information.

Expand

7. After gathering information, have the students discuss as a group what they think they should do with this new information. Any suggestions and ideas should be encouraged and welcomed. The students should then choose what they would like to do with this new information.
8. Discuss these different shelters. Why do different animals require different types of shelter? Are the reasons that individuals need shelter in all of the these habitats the same or are they different? What are other factors that may influence shelter structures and use?

Assess

9. Review the information that was collected and discuss if the group's predictions on shelter similarities and differences were a match to the ones that were actually observed.
10. If the students are working in small groups, observe their work and review what they are writing on the Research Plan. If working as a whole group, fill in the Research Plan together.

Standards

Ohio Academic Content Standards
Grade 1 Life Science Topic: Basic Needs of Living Things Living things have basic needs, which are met by obtaining materials from the physical environment

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Supplemental Materials

My Research Plan

1. What is my research question?
Is it a good question?

2. How can I get my information?

3. What will I do with this information?

4. How will I know I did my job well?

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