



Education and Research: Testing Hypotheses

Lesson Plan—Local Organism Sort

Summary

This lesson can be used as an intermediate step for younger students or students who may need more exposure to the process of classification. Using animals that students are already familiar with may assist them in making connections between physical characteristics and categorization.

Key Concepts

- Features used for grouping depend on the purpose of the grouping. Animals and plants have a great variety of body plans and internal structures that contribute to their being able to make or find food and reproduce.
- In classifying organisms, biologists consider details of internal and external structures to be more important than behavior or general appearance.

Objectives

Students will be able to:

- *Determine* which characteristics are useful in sorting or classifying items
- *Create* and *explain* a classification scheme using familiar organisms

Materials

- Computers with Internet access (optional)
- Resources about local habitats and the organisms that live there
- Index cards
- Poster board
- Other presentation materials (markers, glue, tape, etc.)

Procedure

1. Divide students into pairs or small groups. Have each group choose a local habitat and, using available resources, generate a list of organisms that occur there.
2. Have students write the name of each organisms (or find a picture on the Internet) and place each on a separate index card. *Note: Pictures of local animals can be provided for younger children.*
3. Have each group of students discuss the characteristics of their organisms, how they could group them and why. Then have them work together to organize their organisms into a classification scheme. Students should glue or tape their final organization to a poster board for presentation. Throughout the discussion, have each group maintain a list of any questions regarding classification.
4. Have groups share their classification schemes and explanations with each other in a whole-class discussion of categorization. Students may want to change the categorization of their organisms as they hear others discuss the reasoning behind their own choices.

5. Discuss the questions that arose as groups were working on classifying organisms. Ask students to apply the information they found during their activities and investigations to answer their questions.

Assessment

- **Performance**—Did student participate in discussion sessions and demonstrate an understanding of the concept of classification? Did student participate in the group activity and successfully create a classification scheme with his/her group? Did group accurately explain their classification scheme and their reasoning to the class?
- **Product**—Did group successfully create a classification scheme using the organisms they chose? Did group compose thoughtful questions for investigation?