

# Animals Have Class

## Pre-Program Activity

Grades 6-8



**Objective:** Students will describe various ways of classifying objects and 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.
- **SC.7.L.17.2** Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism.
- **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.

**Overview:** Students sort writing utensils into different groups based on their characteristics.

### Materials:

- Ten different writing utensils

### Procedure:

- Collect a variety of writing utensils and show them to the class. Ask the students what characteristics all of the writing utensils have in common and what makes them different from other objects in the classroom.
- Ask students to name each type of writing utensil and discuss why it is useful to be able to classify things into different groups.
- Tell the students that they are going to be developing a way to classify each of the writing utensils into its own category. Explain that for this activity, they will be using the physical properties of the writing utensils to classify them rather than the names of the items.
- Tell the students that the first step in classifying the writing utensils is to separate them into two groups. Ask the students for suggestions on how to do this and decide on a way that splits the writing utensils as evenly as possible. Write 1a and 1b on the board and then writing the defining characteristic for each group. After the 1a characteristic, write "Go to 2." Then have the students come up with a way to separate the writing utensils in the 1a group into two groups. Write the defining characteristic for each of these groups beside 2a and 2b. Continue dividing the groups until each writing utensil is in its own category. ([Click here](#) to see an example.)
- Once all the writing utensils have been classified, tell the class that they have just created a dichotomous key. Explain that people use dichotomous keys to identify all kinds of things, including minerals, plants and animals. Discuss the similarities and differences between a dichotomous key and the way animals are classified. Ask students why they think animal groups are usually divided into more than two subgroups and why animals are not classified solely based on their appearance. Discuss how animal classification has changed throughout history, and review the systems that are currently used. Ask students why they think animal classification is constantly changing and have them explain why it is useful to have a universally accepted classification system.

### Extensions:

- Put students into small groups and have them develop their own dichotomous key for another group of items, such as buttons, candy or keys.

- Ask students to re-sort the writing utensils using a Linnaean-type system.
- Have students research outdated systems for classifying animals and then come up with new ways of their own.