

Engagement – Natural Selection

Materials Needed - Each group of 4 should have these materials

Beak Material

Plastic spoon, binder clip, forceps or tweezers, toothpick (sturdy round ones) or scissors (choose 4)

Food Materials

Teacher's option, but suggestions might be: rice, cheerios, gummy worm pieces, macaroni, or beans

Small Dixie cup for stomach

Container for the food such as a tray or shoe box lid

Objective Introduction

1. Have the students do a Think-Pair-Share to discuss the objective. One student will read the objective and the other student will respond with their understanding of the objective (topic).

Class Activity

1. Bird Beak Lab can be done in groups of 4 most effectively.
2. Ask students to write a definition of the word adaptation. An adaptation is a body part, feature, or behavior that helps a living thing survive and function better in its environment.
3. Ask them what they already know about bird beaks. Ask why there is such a wide variety of bird beaks.

Student Activity

1. Assign students numbers 1-4. Assign "bird beaks" numbers 1-4. That will avoid the hassle of who wants which utensil. If you're number 1, you get the spoon and so on.
2. Pass out the "bird feed" and a cup to each group. Tell them the cup represents their stomach.
3. Have them predict which "beak" they think will gather the most food.
4. On your mark have the "birds" feed for 20-30 seconds, depending on how much food you prepared.
5. Let the students design a data table to record their results.
6. Make a class data table on the board with the groups' numbers. (Good bar graph practice, too)
7. Questions you might ask concerning the data.
 - a. How can we summarize the data?
 - b. Which beak was adapted the best for each type of food?
 - c. What if the birds visited a new island where only macaroni was available? What would be the outcome for the birds in future years?
8. Tell students they will be learning about natural selection based on adaptations.