

Name _____

Date _____

Activity: Bird Beak Adaptation Lab



Goal:

To learn about the advantages and disadvantages of variations, by simulating birds with different types of beaks competing for various foods.

Background Information:

Darwin was amazed by the variation in the characteristics of plants and animals he encountered on his journey. In any habitat, food is limited and the types of foods available may vary. Animals that have variations that enable them to take advantage of available foods will be more likely to survive. We call beneficial inherited variations adaptations. Adaptations are inherited characteristics that increase an organism's chance of survival. Those with the most helpful adaptations will be the most likely to live long enough to pass on their genes to the next generation. This process ensures that beneficial adaptations will continue in future generations, while disadvantageous characteristics will not.

Materials

scissors, plastic spoons, tweezers, large binder clip, paper clips, rubber bands, toothpicks, dried macaroni, plastic cups, cardboard box lids or trays

Procedure:

1. **What I Know:** Write a sentence or two about what you already know about adaptations.
2. Each student will be given a spoon, tweezers, binder clip, OR pair of scissors. Each student will also get a plastic cup.
3. You are now a very hungry bird. The tool you have selected is your "beak". You can only use your beak to pick up food.
4. The cup is your stomach. It must remain upright at all times. You must hold your beak in one hand, and your stomach in your other hand, close to your body. Only food that is placed in the cup by the beak has been "eaten".
5. Food items will be placed in your "habitat". When the teacher says "go", you will have 20 seconds to feed (or until the food runs out). Collect as much food in your stomach as possible until the teacher says "stop".
6. When the teacher says "stop", students will empty their stomachs and count the contents. Record data in *Individual Data Table*. We will collect data from the class and you will record it in the *Class Data Table*. Clean up food items.