

Eating Adaptations: Beak Lab

Materials Needed

For the beaks:

- 1 spoon
- 1 set of "chopsticks"
- 1 clothespin
- 1 tweezer
- 1 binder clip
- 1 disposable cup (stomach)

For the food:

- Yarn (worms)
- Swedish Fish and a beaker of water (fish)
- Marshmallows (wood beetles/insects)
- Seeds (well, uh, seeds)
- Jelly Beans (other insects)



Lab Background Information

There are approximately 10,000 species of birds that are known to currently exist world wide. Modern birds descended from a group of two-legged dinosaurs known as theropods, whose members include the infamous Tyrannosaurus rex and the smaller Velociraptors. We can thank genetic diversity and natural selection for all of the wonderful birds (or dinos for that matter) that have ever existed!

Today, students will investigate bird adaptations through class demonstration. Using a tool that simulates one style of bird beak, they will learn how adaptations connect birds to certain habitats and behaviors. A beak is a specialized mouthpart that serves as a tool for eating and other activities. It is made out of a hardened, fingernail-like material called keratin.

Directions

We will need 5 volunteers to do the demonstration. Each person will get one beak (tool) to use in an attempt to fill up their stomach (disposable cup). Remember that safety always comes first in lab! You may use only the beak to transfer the food to the stomach (no touching food with hands). You will get 30 seconds to pick up as many of each food type as you can. You may only collect one piece of food at a time. We will do about 30 seconds of practice pickups at each food station, but they do not stay in your stomach. ...and go!



Class Data: Fill in the Table *(as the demo happens)*

Put how many each beak got.	Pliers	Clothespin	Needle Nose Plier	Chopstick	Spoon
Mini-marshmallow					
Bird Seed					
Yarn (Worms)					
Jelly Beans					
Swedish Fish					

Wards Investigating Bird Beak Adaptations Lab Activity Answers

Huangqi Zhang



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