Rainforest Bird Beaks Challenge:

At-Home Edition!

Have you ever wondered why birds have beaks in different shapes and sizes? This simple experiment will help you understand how different beaks help birds eat different types of food.

For this experiment, you will need:

- Two plates or bowls
- "Bird Food": mix rice, beans, small rocks, marbles, pom-poms, and other small household items of various sizes in a plate or bowl.
- "Beaks": clothes pin, small tweezers, small tongs, chopsticks, plastic silverware banded together, etc. These items are meant to model bird beaks of varying shapes and sizes.

Instructions:

- Choose a beak model and practice transferring the “bird food” from one plate to another.
- After a minute, stop. Choose another beak and try again for another minute.
- Repeat this with each of your beak models.

As you are working, think about:

- Which beak(s) allows you to pick up the most *small* foods?
- Which beak(s) allows you to pick up the most *large* foods?
- Which beak(s) allow you to pick up a *variety of sizes* of food?
- Can you match the shape of the beak you’re using to a bird beak in the photos below?

Scarlet Macaw

The scarlet macaw’s beak is shaped to be very strong for cracking open nuts, and large enough to fit a variety of sizes of fruit and nuts.

Resplendent Quetzal

Quetzals eat small or soft animals that can fit in their small beaks, like insects and lizards.

Keel-Billed Toucan

The toucan’s beak is large to fit high-energy foods like eggs, and baby birds from other species’ neighboring nests!

Violet-Eared Hummingbird

Hummingbirds have a long, thin beak to sip nectar from flowers (not like a person would sip through a straw, but rather, lapping nectar like a dog would drink from a water bowl, with a very long tongue!).