D.I.Y. STEM: EAT LIKE A BIRD

This activity was adapted from http://www.pbs.org/parents/fetch/activities/act/act-eatlikeabird.html

SUPPLIES

- plastic cups (one per participant)
- 2-4 kinds of bird "food"
 - "insects" (long, narrow beads; grains of rice; raisins; or toothpicks)
 "fish" (small plastic fish, Styrofoam pieces,
 - or glass marbles in a pan of water)
 - \circ "algae" (tea leaves floating in water)
 - o "nectar" (tall vase of water)

- 2-5 different bird "beaks"
 - o tongs or tweezers
 - o spoons
 - turkey baster or eyedropper
 - o chopsticks
 - o strainer
- data sheet (one per participant)
- pencil (one per participant)
- stopwatch or timer

DIRECTIONS

Step 1: Hypothesize

a. In this experiment, you'll learn how bird beaks have adapted to diet. Which beak do you think works best for each type of food? Record your guess on the data sheet.

Step 2: Set Up Your Experiment

- a. Lay out the food in the order that you will test it.
- b. Lay out the beaks in the order that you will test them.
- c. Prepare your data table. Identify the kinds of food that you will test in the first column, and note which beaks you will be testing in the first row.
- d. Choose a plastic cup. This is your bird's stomach.

Step 3: Eat Like a Bird

- a. Set the timer for one minute.
- b. When the timer begins counting, collect food #1 with beak #1. Place the food in your bird's "stomach."
- c. When time is up, count the pieces of food in your cup and record them on your data table.
- d. Repeat for each kind of food and each kind of beak.

Step 4: Draw a Conclusion

a. Review the data. Do some beaks work better than others? Why or why not?

Questions for Discovery

- Research different birds. How have they adapted to their environment?
- How is a bird beak like a tool?
- Look at pictures of different birds. Can you guess what they like to eat just by looking at their beaks?

Further Reading

- Kalman, Bobbie. How and Why Do Animals Adapt? Crabtree Publishing, 2015. (gr 2-3)
- Rockwell, Lizzy. <u>A Bird is a Bird</u>. Holiday House, 2015. (preschool gr 2)
- Russo, Monica. <u>Birdology: 30 Activities & Observations for Exploring the World of Birds</u>. Chicago Review Press, 2015. (gr 4-6)



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DATA SHEET

Hypothesis

Data Table

Food	Beak 1	Beak 2	Beak 3	Beak 4	Beak 5

Conclusion



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