Children's Museum of Houston

Bird Beaks

Background:
Birds don't have teeth, and have to use their beaks (or bills) as a way of manipulating their food. A bird's beak can vary in size and shape depending on the nature of the diet.

- Hummingbirds: PROBE beak for drinking nectar from flowers
- Ducks: FLAT beaks that scoop up fish and plants and drain out water.
- Cardinals: HEAVY THICK beak used to crack seeds.
- Spoonbill: SPOON beak for catching small fish and water insects.

Beaks are adapted to the type of foods a bird eats. A bird with a long pointy bill most likely does do scoop up food in the water whereas a bird with a flat or spoonbill probably does. A bird with a long skinny beak is adapted to reach into tight places for their food, like hummingbirds probing flowers for nectar. Adaptations are beneficial to the animals that possess them.

Materials

- Clothespin (grasping beak)
- Spoon (scooping beak)
- Chopsticks (probing beak)
- Craft-stick (shovel beak)
- Plastic fish, worms, and insects
- Beans
- Pasta (cooked or uncooked)
- Pie tin
- Small cup
- Data Sheet
- Pencil

Procedure

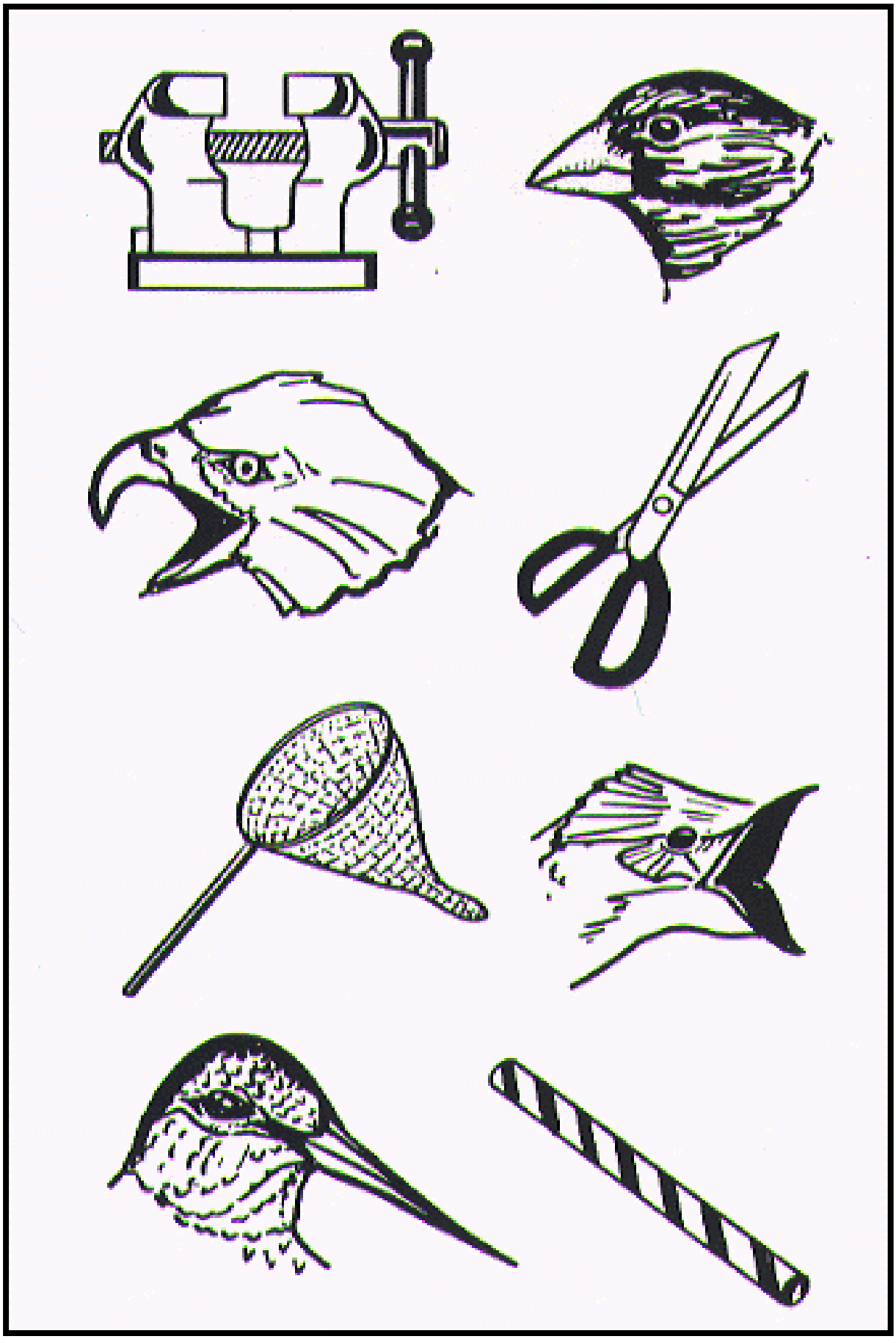
1. Show pictures of birds with different types of beaks. You may find these pictures online or in bird field guides. Discuss what each bird might eat with its beak.
2. Show students the different tools, or beaks, they will use in this experience. Which foods will be easiest to pick up with which tool? Which will be most difficult?
3. Each child should select a tool to use as a beak and should receive a cup. The cup is the "stomach."
4. Place a pie tine of food in front of each student or group of students.
5. Encourage students to pick up the "food," from the pie tin, with the "beak" and place it in the cup. If a piece of food is dropped, it goes back into the pie tin. Students should collect only one piece of "food" at a time.
6. Give students a set amount of time to "eat." Once time is up, each student should record information about how much food s/he ate on the data sheet.

7. Return the “food” to the pie tin.
8. Choose another beak and start over again.

Questions to Ask

1. Which beak works best for fish? Worms? Insects? Seeds?
2. Which birds have a grasping beak? A scooping beak? A probing beak? A shovel beak?

How are these beaks like natural tools?



Record the amount of food you caught with each beak.

	Beans	Pasta	Plastic Animals	Seeds
Clothespin (grasping beak)				
Chopsticks (probing beak)				
Craft-stick (shovel beak)				
Spoon (scooping beak)				