









Name(s): _____

Date: _____

Animal Adaptations, Bird Beak Investigations





Have you ever wondered why there are so many different kinds of bird beaks? A bird's beak is mainly used for feeding. Bird beaks have different shapes and sizes, based on a bird's diet and available food sources. An adaptation is a part of an animal's body or way that an animal behaves that helps it to survive. A bird's specialized beak helps it to survive. Below are some common bird beak shapes and what they most commonly eat. **Record examples of species with each type of beak.**

| | | | |
|---|---|---|---|
|  | <p>Seed Eater: Cone shaped, strong beak used for cracking seeds and nuts</p> <p>Example: _____</p> |  | <p>Aquatic omnivore: fringed to strain plants, seeds, and small animals from mud and water</p> <p>Example: _____</p> |
|  | <p>Insect eater: Thin, slender, pointed beaks used to pick insects off leaves, twigs, and bark</p> <p>Example: _____</p> |  | <p>Aquatic scooping carnivore: pouch-like or spoon-like beak used for scooping up fish or crustaceans</p> <p>Example: _____</p> |
|  | <p>(Drilling) Insect eater: strong beaks that form a sharp tip for pecking holes in trees to find insects which live under the bark</p> <p>Example: _____</p> |  | <p>Aquatic hunting carnivore: fish-eating birds have spear-like beaks designed for stabbing fish</p> <p>Example: _____</p> |
|  | <p>Nectar eater: long, tubular bills that resemble straws, used to sip nectar from flowers</p> <p>Example: _____</p> |  | <p>Raptors: sharp, "hooked" beaks used to tear prey into pieces small enough to swallow</p> <p>Example: _____</p> |

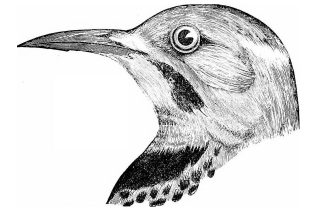
2. Investigate: Bird Beaks

- Work together in groups of four or more. Each person has one tool to use as a “bird beak” (spoon, tweezers, clothespin, dropper).
- Spread all the “food items” in a tray. (Food items: string or yarn, erasers, beans, gummy candy)
- Label the cups according to their “bird beak” tools: *spoon, tweezers, clothespin, dropper*. The cups are your “stomachs”!
- Round 1: Use a stopwatch to time 30 seconds.
 - Pick up as many pieces of **string** as you can using the different “bird beak” tools and place them in the appropriate cup.
 - Count the pieces of string and record your results on the table.
- Rounds 2-4: Repeat with each food item, recording your results.
- Use the last row to predict what type of bird might use that particular type of bird beak.

How many can you pick up in 30 seconds?

| | Spoon  | Tweezers  | Clothespin  | Dropper  | Total Collected |
|--|---|---|--|---|-----------------|
| 1. String/ Yarn | | | | | |
| 2. Small Eraser | | | | | |
| 3. Beans | | | | | |
| 4. Gummy candy | | | | | |
| Predict: What type of bird uses this type of beak? | | | | | |

3. a) Reflect: Adaptations



1. What is an adaptation?







2. What do you think is the difference between a physical adaptation and a behavioral adaptation?

3. Explain: What would happen to eagles if a disease suddenly spread throughout all the small rodents in its habitat?

4. What would be an example of a behavioral adaption of birds? _____

3. b) Predict

Use the space provided to describe physical or behavioral adaptations of each animal:

| | | | |
|---|---|---|---|
|  | <p><u>Skunk</u></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |  | <p><u>Monarch Butterfly</u></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
|  | <p><u>Shark</u></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |  | <p><u>Otter</u></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
|  | <p><u>Red Fox</u></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |  | <p><u>Ants</u></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |

