



Fur, Feathers, & Feet - The Right Tools for the Job

Activity Snapshot:

- Animals are CONSUMERS! Meaning, we need to consume food for energy.
 - Herbivores primarily consume plants and plant-matter,
 - Carnivores consume primarily meat, and
 - Omnivores, like us, can consume a mixture of both plants and animals.
- Play the role of a Nature Detective, using clues called **adaptations**
- Special mouthparts work like tools to make catching or gathering preferred food easier.

Goal:

To successfully deduce which animals have which type of mouthparts, and what sort of food they could reach/catch/consume with it.

Time Recommended:

15-30 minutes

Materials:

- Supplementary Activity Sheets
- Writing tool.

Instructions:

1. Print out the supplementary activity sheets provided below.
2. Follow the instructions on each sheet to match the animals to their adaptations.
3. Write out one tool you might use in your life that could be similar to some of these adaptations. How do you use it? Is it similar or different to how an animal might use it?

4. BONUS: As an extended activity, you could attempt to collect different tools around your house that match the adaptations you learned about, and try them out for yourself! Gather 4 or 5 different tools, and then 4 or 5 different kinds of 'food', such as a bowl of cereal, slippery spaghetti, tiny cotton balls...whatever you have lying around.
 - a. Test your beak-tools out on each different food item. Which ones worked the best? Why?

Additional Materials:

Supplementary Worksheet: Mammal Adaptations Quiz: Teeth!

Supplementary Worksheet: Avian Adaptations: Beaks as Tools

BONUS: Supplementary Worksheet: Avian Adaptations: Beaks, Wings, and Feet!



Mammalian Adaptation Quiz: Teeth!

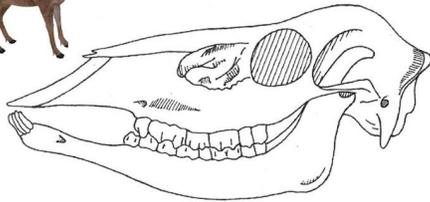
Some teeth are sharp like knives for cutting meat.
Others are flat like millstones for grinding plants.
Some have big front teeth for gnawing wood.

Label each: "H" for Herbivore (eats plants) "C" for Carnivore (eats Meat),
"O" for Omnivore (eats both). or "R" for Rodent (gnaws wood)

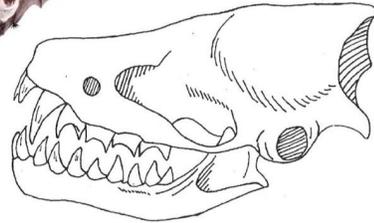
Can some animals fit in more than one category?



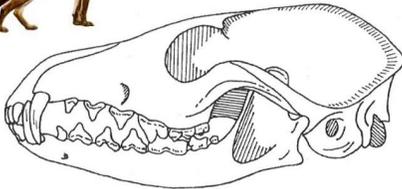
White-tailed Deer: _____



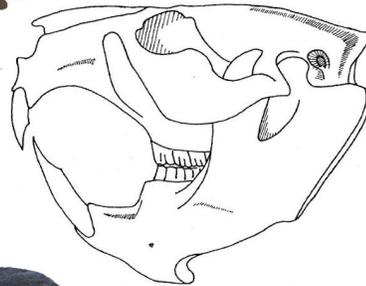
Big Brown Bat: _____



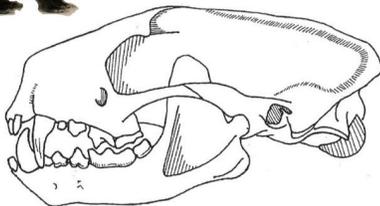
Red Fox: _____



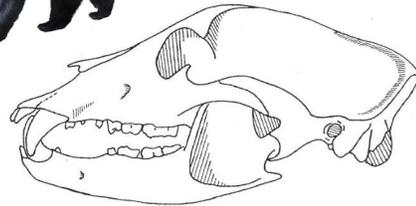
Beaver: _____



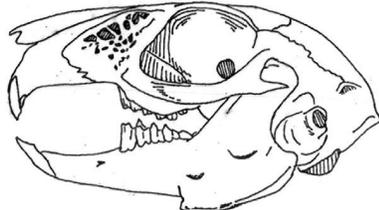
Skunk: _____



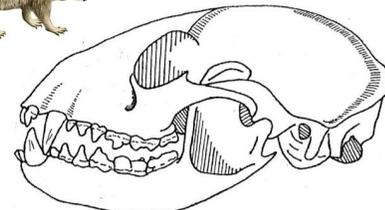
Black Bear: _____



Snowshoe Hare: _____



Raccoon: _____



Deer: H Bat: C Fox: C Beaver: R/H Skunk: C/O Black Bear: O Hare: R/H Raccoon: O



Avian Adaptations: Beaks as Tools!

Many birds have specialized beaks that help them to reach or catch a certain type of food item. These beaks are similar to the tools we use in our lives to make tasks easier.

Draw lines to connect the bird to the tool their beak is most like. Then, draw lines to connect the tool to the food it helps them catch!

Canada Goose



Grasping,
all purpose

Nectar from
flowers

Great Blue Heron



Chiseling
Wood

Nuts
& Seeds

Great Horned Owl



Sipping
Sweets

Insects

Herring Gull



Straining
Water

Meaty
Prey

Northern Cardinal



Cracking
Hard Shells

Fish

Pileated Woodpecker



Cutting/
Tearing

Aquatic
plants &
animals

Ruby-Throated
Hummingbird



Spearing
prey

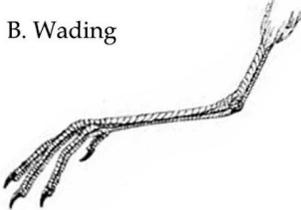
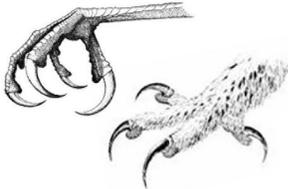
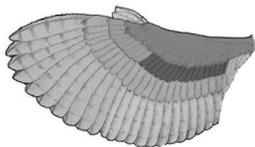
Variety
of food



Avian Adaptation Quiz: Wings, Feet, & Beaks!

Below are a list of birds, wing types, feet shapes, and beak descriptions.
Can you match each bird with the right adaptations? (answer key below)

BONUS: Build your own bird! choose colors, shape, wings, feet, and a beak for your bird. Think about how that bird would survive - where would it live? what would it eat? How do its adaptations help?

<p>Bald Eagle</p> 	<p>1. Active Soaring</p> 	<p>A. Climbing Vertically</p> 	<p>i. A curved, hooked beak for ripping or tearing meat</p>
<p>Canada Goose</p> 	<p>2. Passive Soaring</p> 	<p>B. Wading</p> 	<p>ii. A short, cone-shaped beak for cracking nuts and seeds</p>
<p>Chicken</p> 	<p>3. High-Speed wings</p> 	<p>C. Grasping Branches</p> 	<p>iii. A strong chisel-like beak for making holes in trees</p>
<p>Great Blue Heron</p> 	<p>4. Hovering</p> 	<p>D. Catching prey</p> 	<p>iv. A flat bill for dabbling and straining water</p>
<p>Great Horned Owl</p> 	<p>5. Elliptical Wings</p> 	<p>E. Swimming</p> 	<p>v. A slightly hooked beak for pecking and probing</p>
<p>Herring Gull</p> 	<p>6. Silent Flight</p> 	<p>F. Walking/ Scratching</p> 	<p>vi. A long, spear-like beak for catching fish</p>
<p>Northern Cardinal</p> 			<p>vii. A slender beak for sipping nectar</p>
<p>Pileated Woodpecker</p> 			
<p>Ruby-Throated Hummingbird</p> 			

Eagle 2, D, I - Goose 3, E, IV - Chicken 5, F, V - Heron 2, B, VI - Owl 6, D, I - Gull 1, E, V - Cardinal 5, C, II - Woodpecker 5, A, III - Hummingbird 4, C, VII

Closing Questions:

1. What did we learn? What are some adaptations that these animals displayed?
2. So what? Why are these adaptations important for the animals to survive?
3. Now what? What tools might you use in your everyday life that are similar to these animal adaptations? How do they help you succeed or survive?