



Science Log – 3rd

Learning Goals:

1. Investigate the physical characteristics and behaviors that give animals the ability to survive in the environment and get the resources needed to carry out life processes.
2. Compare the physical characteristics of animals and explain how they are adapted to their environment.
3. Create an example of an animal or insect using camouflage.

Topic: Animal Adaptations

K What do you already know about the topic?	W What do you want to know about the topic?	L What did you learn about the topic?

Vocabulary Review

Population	All organisms of the same species that live in the same place at the same time.
Community	Populations of species that live in the same place at the same time.
Habitat	Place or kind of place in which an animal or plant naturally lives.
Niche	Function that an organism performs in the food web of that community.
Physical Adaptation	Special body parts that help a plant or animal survive in their habitat.
Behavioral Adaptation	Special actions (behaviors) that help a plant or animal survive in their habitat.







Science Log – 3rd

Bird Beak Challenge

Supplies: Scissors, pipette, tweezers, chopsticks, Play-doh or clay, water, red food coloring, raisins, soil, toy fish, paper plate, tall skinny container, medium sized container, pencil or pen.

Directions:

1. *Predict* what type of food each bird eats based on the shape of their beak and the tool used to represent their beak (model beak).

Bird:	RED-TAILED HAWK	HUMMINGBIRD	AMERICAN ROBIN	BLUE HERON
Bird beak:				
Model beak:	Scissors	Pipette	Tweezers	Chopsticks
Which type of food do you predict the bird will eat?	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects





2. *Set up* the model bird food as follows.

BIRD FOOD	MODEL FOOD
Nectar	Mix 2 drops of red food coloring with ½ cup of water and pour into tall skinny container.
Live animals (rodents, snakes, and small mammals)	Mold a snake or mouse out of Play-doh or clay.
Fish (small fish)	Fill a medium sized container halfway with water and place a few toy fish into the water.
Insects	Fill a cup ¼ - ½ full of soil on a small plate and mix in some raisins.

3. *Use each of the model beaks* (tools representing bird beaks) to try to eat the different types of model food provided.
4. *Record* your experience with the different model beaks by rating how challenging it was to get the food using each type of beak.
Add notes about your experience.

	Model Beaks & Model Beaks							
	<i>How easy was it to . . .</i>							
	Drink nectar? (Red water)		Tear apart live animals/flesh? (Play-doh or clay)		Catch fish? (Toy fish in water)		Dig up insects? (Raisins in soil)	
<i>Using tweezers?</i>	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:
<i>Using a pipette?</i>	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:
<i>Using scissors?</i>	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:
<i>Using chopsticks?</i>	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:	<input type="radio"/> Impossible <input type="radio"/> Hard <input type="radio"/> A little challenging <input type="radio"/> Easy or just right	NOTES:

5. Use the data you collected, and notes you recorded, to *come to a conclusion* about the type of food each bird eats based on its beak adaptation.

Bird:	RED-TAILED HAWK	HUMMINGBIRD	AMERICAN ROBIN	BLUE HERON
Bird beak:				
Model beak:	Scissors	Pipette	Tweezers	Chopsticks
Bird food:	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects	<input type="radio"/> Nectar <input type="radio"/> Live animals <input type="radio"/> Fish (small) <input type="radio"/> Insects

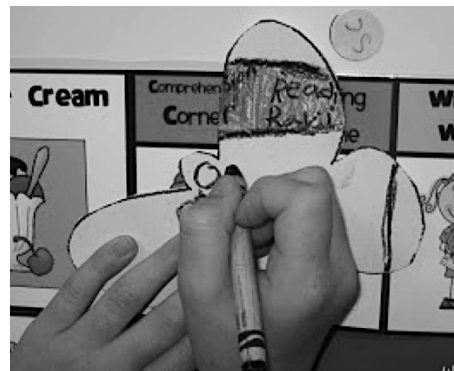
6. Check your results against the answer key provided on the next page.

Science Log – 3rd

Camouflage Creatures

Directions:

1. Choose a pre-drawn creature outline or draw an outline of a creature and cut it out.
2. Choose a habitat for your creature in your home.
3. Color the creature so that it camouflages in the habitat you have chosen.



Animal Adaptations

Directions: See the Animal Adaptations worksheet for this fun and creative scientific challenge that will activate your imagination!

Bird:	RED-TAILED HAWK	Bird beak:		Model beak:	Scissors	<input type="checkbox"/> Nectar <input checked="" type="checkbox"/> Live animals <input type="checkbox"/> Fish (small) <input type="checkbox"/> Insects	Bird food:
HUMMINGBIRD		Pipette	<input checked="" type="checkbox"/> Nectar <input type="checkbox"/> Live animals <input type="checkbox"/> Fish (small) <input type="checkbox"/> Insects				
AMERICAN ROBIN		Tweezers	<input type="checkbox"/> Nectar <input type="checkbox"/> Live animals <input type="checkbox"/> Fish (small) <input checked="" type="checkbox"/> Insects				
BLUE HERON		Chopsticks	<input type="checkbox"/> Nectar <input type="checkbox"/> Live animals <input checked="" type="checkbox"/> Fish (small) <input type="checkbox"/> Insects				

Answer Key