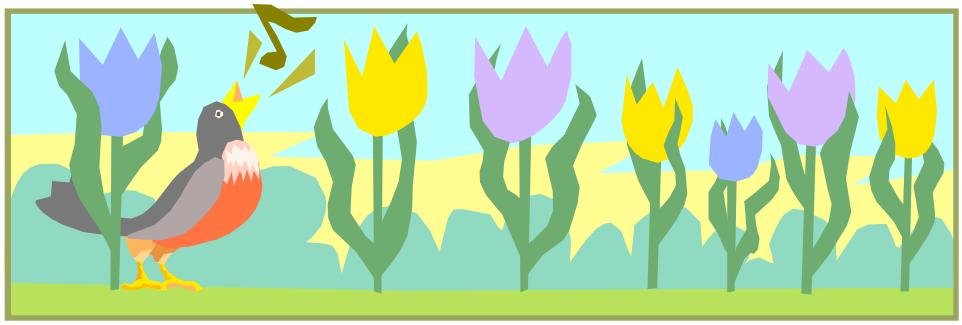


AMAZING BIRDS

STUDENT MANUAL

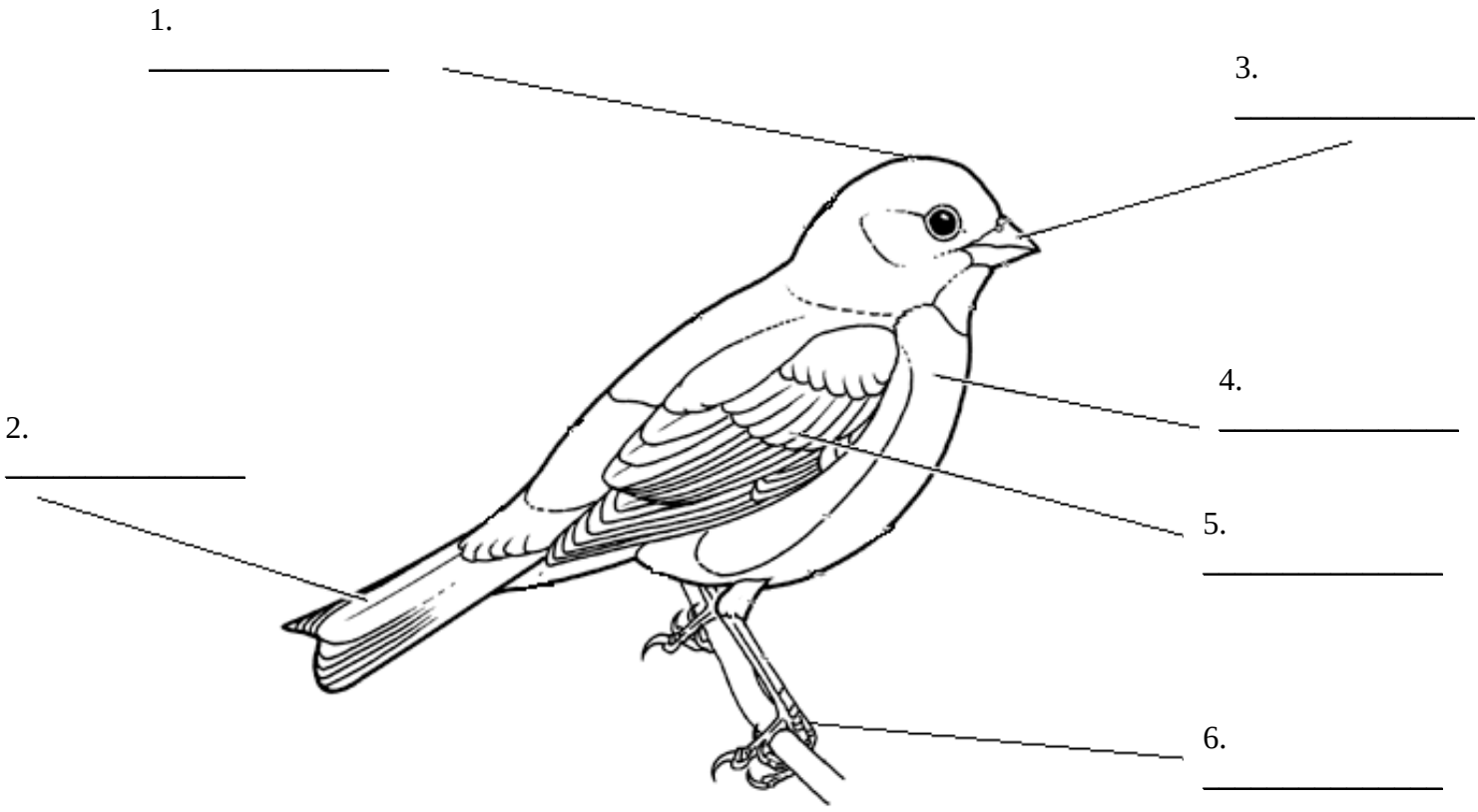
Name: _____

Name _____ **Activity Sheet 1: Bird Parts**

PHYSICAL FEATURES OF A BIRD

1. Label the parts of the bird using the list given.

2. Use a field guide to figure out what type of bird this might be and color it accurately.



WORD LIST

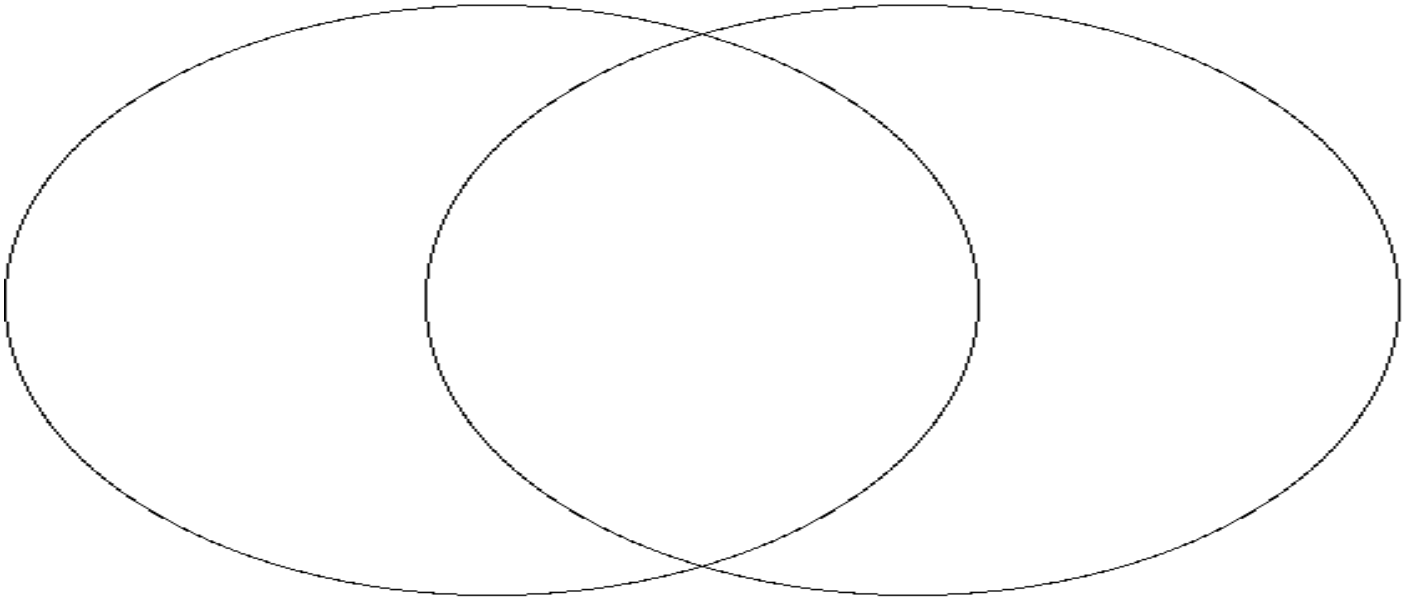
Crown (head)
Beak
Breast
Tail Feathers
Claws
Wing Feathers

Name: _____ **Activity Sheet 2: Adaptations**

Directions: Compare and contrast the birds using the Venn diagrams below. Add other diagrams if you like such as Camouflage (the White-Tailed Ptarmigan and the Mallard).

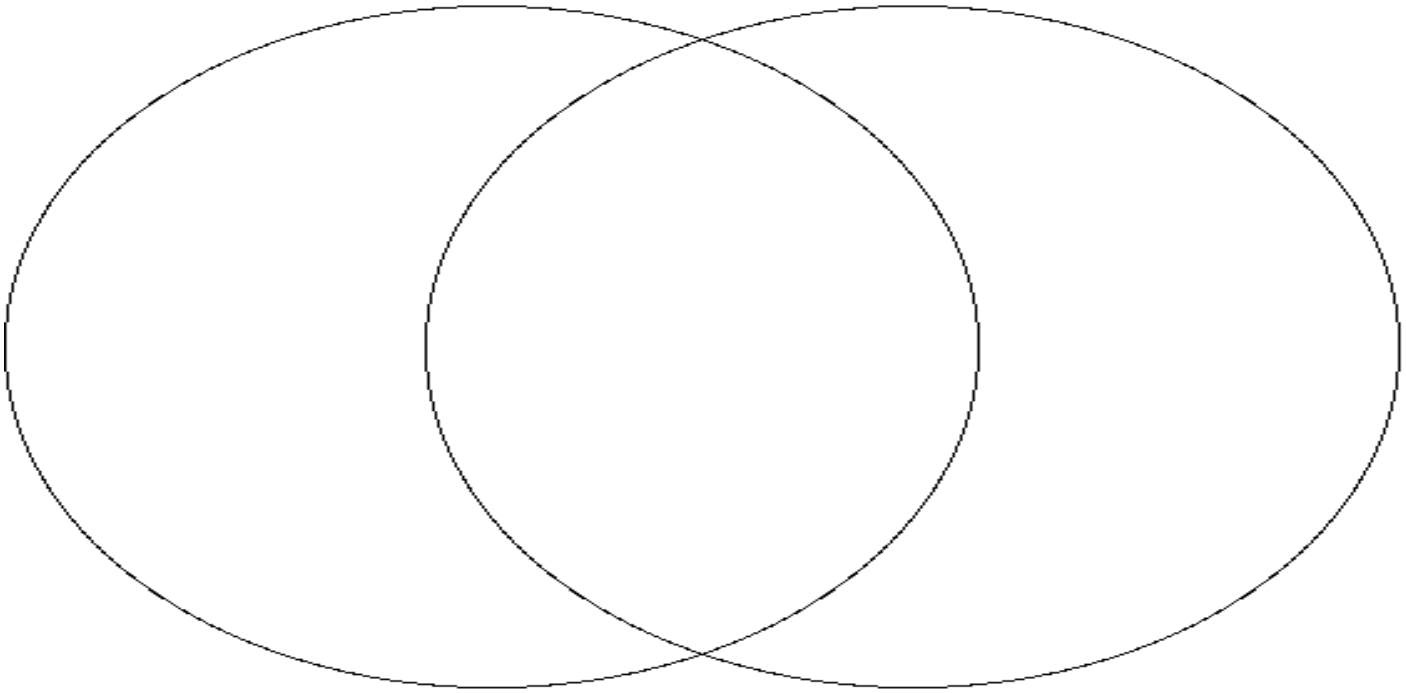
Beaks

Common Ostrich **Roseate Spoonbill**



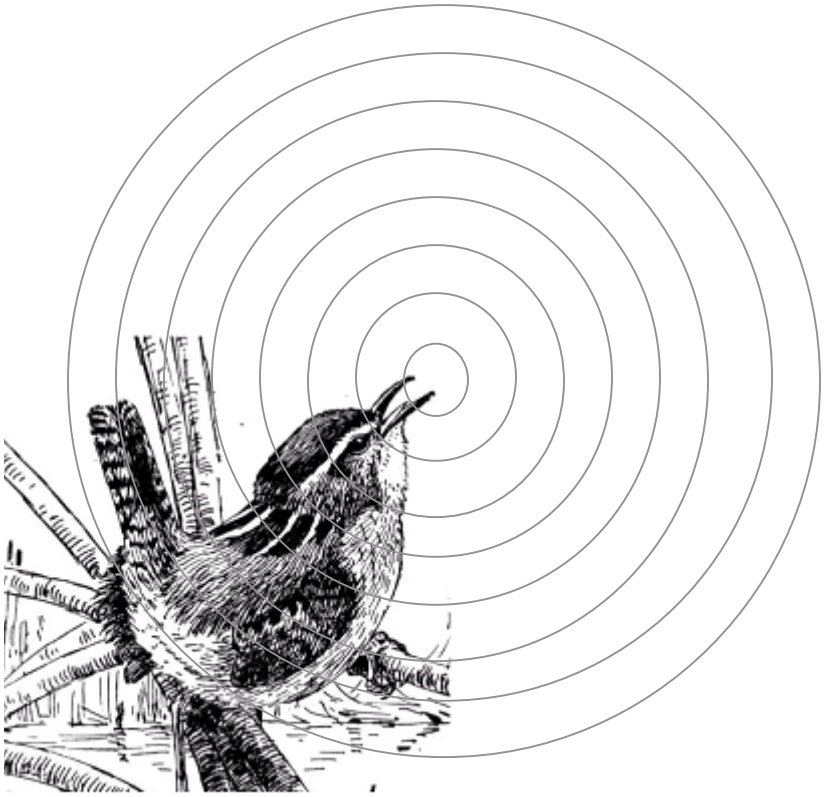
Movement

Hudsonian Godwit **White-throated Sparrow**



Name: _____ **Activity Sheet 2: Sound**

Write what you think this picture tells you about sound.



Sound: _____

_____

_____

_____

Name: _____ **Activity Sheet 4: Bird Sounds**

Draw a line to match the birds and their songs or calls.

Black-capped Chickadee 	"hoo-oo, hoo-hoo-hoo"
American Crow 	"chicka-dee-dee-dee"
Mourning Dove 	"cheer-up, cheer-up"
American Robin 	"caw, caw, caw"
Northern Cardinal 	"wha-cheer, wha-cheer"

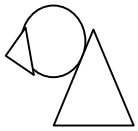
Name: _____ **Activity Sheet 5: Bird Sounds 2**

Draw a line to match the birds with their songs or calls

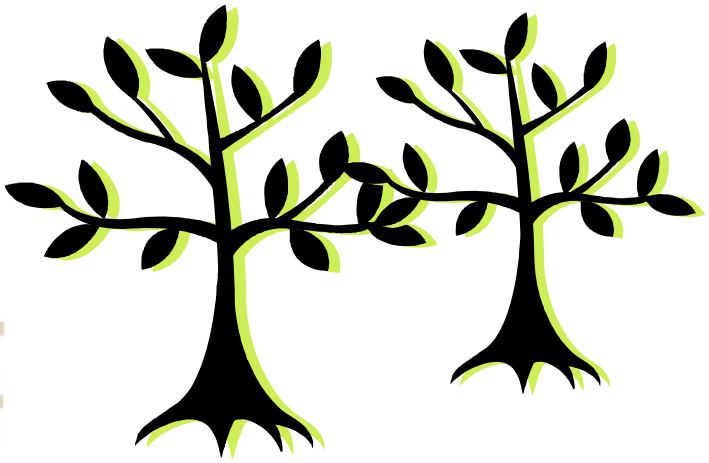
Blue Jay 	"o-ka-lee, o-ka-lee"
American Goldfinch 	"jay, jay"
Red-winged Blackbird 	"chissick, chissick"
White-crowned Sparrow 	"chip-chip-chip-chip-chip"
Barn Swallow 	"tswit-tswit, tswit-tswit"
Ruby-throated Hummingbird 	"potato-chip, potato-chip"

Name _____ **Activity Sheet 6: Quick Sketch**

Directions: Read about why birds sing. Add a "quick sketch" to each picture. A "quick sketch" is a simple drawing that uses shapes. A quick sketch for a bird might look like this:



Birds use **songs** and **calls** to communicate with each other. Songs and calls use **sound energy** and can carry over long distances. Sound energy also allows birds to communicate at night or when they cannot see each other. Most birds sing at sunrise when the air is still and quiet.



(Draw a bird singing on the fence, and the sunrise peeking over the trees.)

Birds sing for many different reasons. **Songs** are long and musical. They are used to attract mates and defend territory. **Calls** are short and repeat a pattern. They are used to signal danger, show where food is, find family members, and communicate when migrating.

(Draw a cat looking up at the nest.)

Each species (kind) of bird has its own song. Some birds are born knowing how to sing, and some learn their songs from adult birds. The males do most of the singing, but females do sing too.

(Draw three baby birds in the nest, begging and cheeping for food.)

Birds in different habitats have different kinds of songs. Forest birds sing from the treetops so their sounds do not get lost in the leaves. Their calls have many short, repeated high notes. Marsh birds, like ducks, have loud, short calls with many low notes, which can be heard through reeds and over the ground.

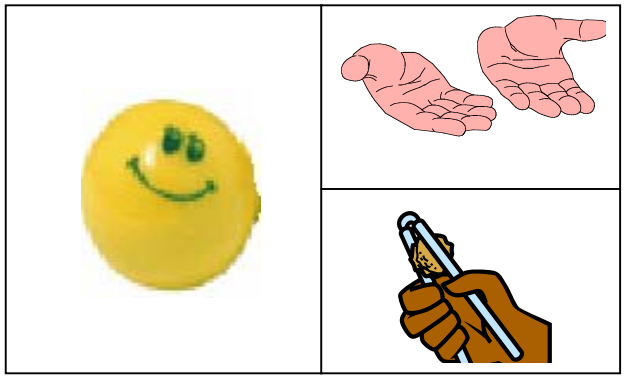
(Draw water around the duck, and a red cardinal in the treetop.)

Name: _____ **Activity Sheet 7: Simple Machines**

Easy or Hard

1. Try to pinch the gumball to crush it.

Was it easy or hard? Write your answer on the line.



Hands: _____

2. Use the nutcracker to pinch the gumball.

Was it easy or hard? Write your answer on the line below.

Nutcracker: _____

3. How is a nutcracker like a beak?

_____

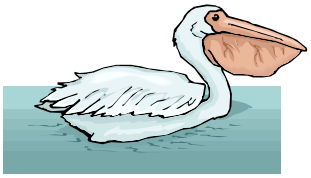
_____

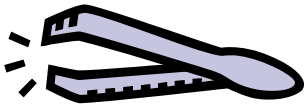
_____

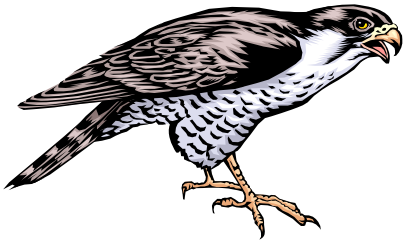
Name: _____ **Activity Sheet 8: Natural Tools**

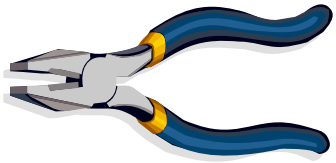
How does a bird's beak work like a simple machine?

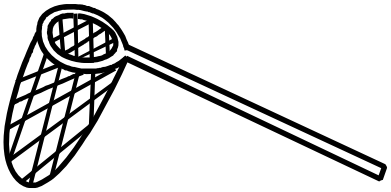
1. Match the beak to the tool it is similar to.











Name _____ **Activity Sheet 9: Birds' Beaks**

Directions: For each beak, count the number of food items collected and write it in the table.

	PONY BEADS	RUBBER BUGS	PLASTIC LEAVES
BEAK TYPE			
 **Chopsticks**			
 **Toothpicks**			
 **Tongs**			
 **Clothespins**			

Name _____ **Activity Sheet 10: Birds and Food**

Draw a line from the bird to the correct food they eat.

The woodpecker digs holes in trees.

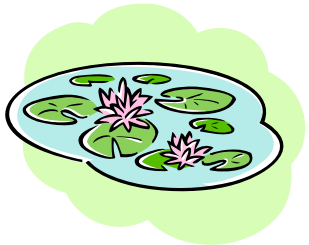
The duck sifts out water plants.

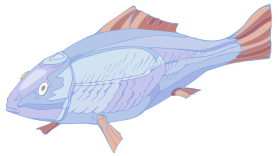
The cardinal cracks seeds.

The pelican scoops food.

The hummingbird sips nectar from plants

The eagle catches animals



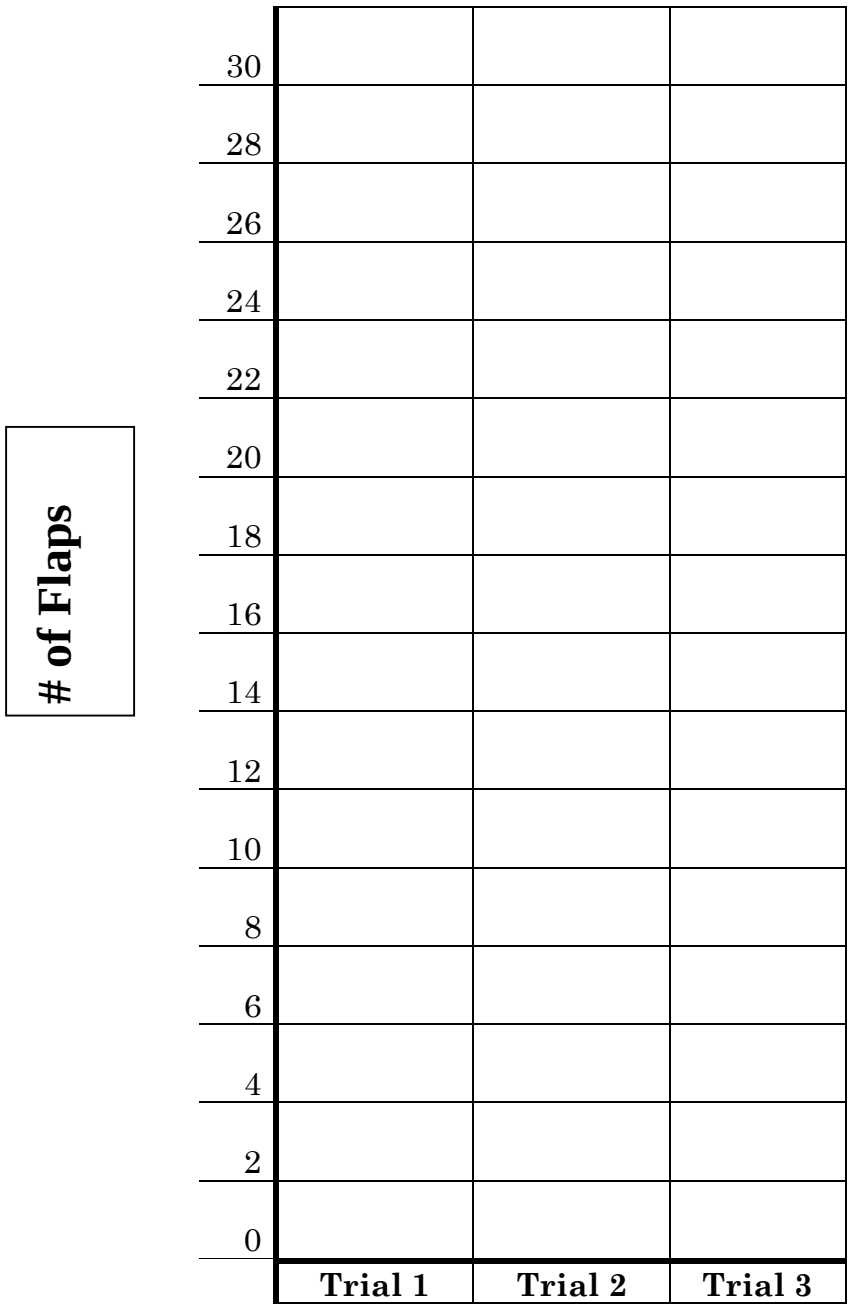


Name: _____ **Activity Sheet 11: Flight**

Record the number of flaps you could do.

	Trial #1 Elbows In	**Trial #2 Arms Out**	**Trial #3 With Weights**
# of Flaps:			

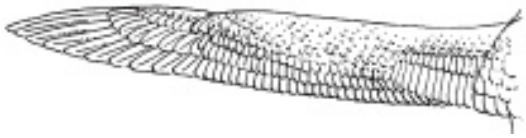
Color in the number of wing flaps you had in each trial.



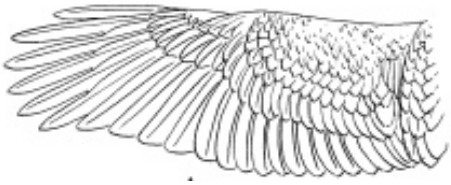
Name: _____ Activity Sheet 12: Flying and Bird Wings

Match the type of bird to the way it flies.

Rapid takeoff and easy turns



Hovering



Gliding over water

Soaring up high

High speed

Name _____ **Activity Sheet: 13 Feathers**

Directions: Use a hand lens to look at a contour feather and a down feather. Make a scientific drawing of each. On the contour feather, label the following: **rachis** (hard, hollow center tube), **barbs** (the larger branches out to each side), and **barbules** (come off of barbs, and have zipper-like hooks).

Contour Feather

Down Feather

Name: _____ Activity Sheet 14: Attracts or Repels

Observe the objects to be tested and discuss the materials that the objects are made of. Predict whether the object will be attracted to the magnet or not, and write your prediction below. Using a bar magnet, test each object and write yes if it is attracted to the magnet or no if it repels the magnet.

Objects	Materials	Prediction (yes or no)	Attracted (yes or no)
Paper clip	**Iron**		
Washer	**Iron**		
Black rock (lodestone)	**Iron**		
Bell	**Steel (contains iron)**		
Gray metal rectangle	**Aluminum**		
Purple rock (Fluorite)	**Stone**		
Wooden block	**Wood**		
Brown metal rectangle	**Copper**		

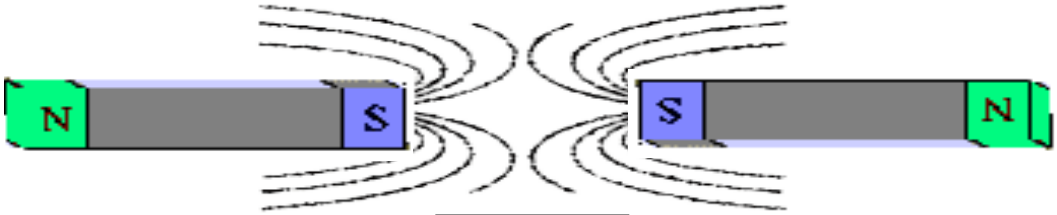
What type of metal attracts a magnet? _____

Name: _____ Activity Sheet 15: The Poles

When two magnets are attracted to each other, for example, the north and south poles, it is often shown in a diagram. The "attraction" or lines of force are shown as follows:

Attracting

When two magnets repel each other for example the south and south poles, it is shown as follows:



Repelling

Using your two magnets, follow the diagrams below and draw in the lines of force.

1. 

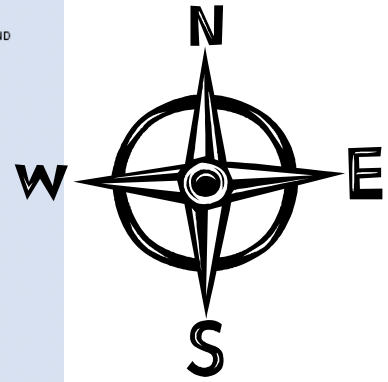
2. 

3. 

4. 

Name: _____ **Activity Sheet 16: Migration**

Below is a picture of the migration routes for some birds. Using the magnetic migration map and magnet birds, answer the following questions.



1. Which birds use the Pacific Flyway? _____, _____, _____

2. Which birds use the Atlantic Flyway? _____, _____, _____

3. Is the Pacific Flyway on the east or west coast of the U.S.? _____

4. What body of water does the _____ fly over? _____