WHISTLER NATURE CAMP

Pro-D Day Learning Series

Flying Animals

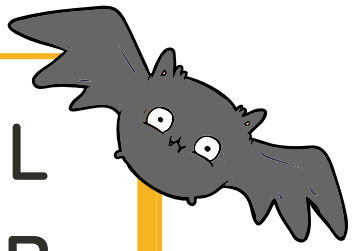
Series 3 of 6

Whistler Community Foundation

AWARE Association of Whistler Area Residents for the Environment

FLYING ANIMAL WORD SEARCH

Look for the words listed below.
Hint: words may be vertical, horizontal, diagonal or even backwards!



R	E	N	K	W	A	H	N	L
O	S	F	A	Z	R	E	L	B
B	U	T	T	E	R	F	L	Y
I	O	J	I	B	O	R	U	F
N	R	I	X	E	A	H	G	K
E	G	T	D	V	E	T	A	F
J	A	Y	E	A	G	L	E	L
N	E	N	D	L	E	F	S	W
C	R	O	W	I	E	E	B	O

Eagle	Crow	Bat	Grouse
Raven	Robin	Bee	Seagull
Owl	Jay	Butterfly	Hawk

BIRD BEAKS

Did you know: Since birds don't have teeth, paws, hands or antlers, they depend on their specialized beaks for survival.

The beak – also known as the bill – has two parts: the upper mandible and the lower mandible. The upper mandible grows out of the skull, just as your upper teeth grow out of your skull. The upper mandible doesn't move independently from the skull. The lower mandible can move independently because it's hinged. It can move up and down, just like your jaw.

Upper Mandible

Lower Mandible

Unlike your teeth, beaks are covered with skin. This skin produces a substance called keratin – the same material feathers, hair, and fingernails are made of. The keratin produced by a bird's beak will dry and condense to make the bill hard and durable. The dried keratin also gives the beak a glossy appearance. As the keratin wears down, it's replaced so the beak will remain sharp.

Question: What does a bird's beak say about what the bird eats?

_____

_____

BIRD BEAKS AND THEIR USES

Beaks come in a wonderful assortment of shapes and sizes, each perfectly suited for that particular bird's favourite foods and typical feeding behaviours. Some beaks are specialized to be just right for certain diets. For example, some birds use their bills the same way you use a spoon to eat ice cream or a fork to eat salad.

Matching challenge: draw a line from each bird to the action that best describes what they use their beak for (see answers below).

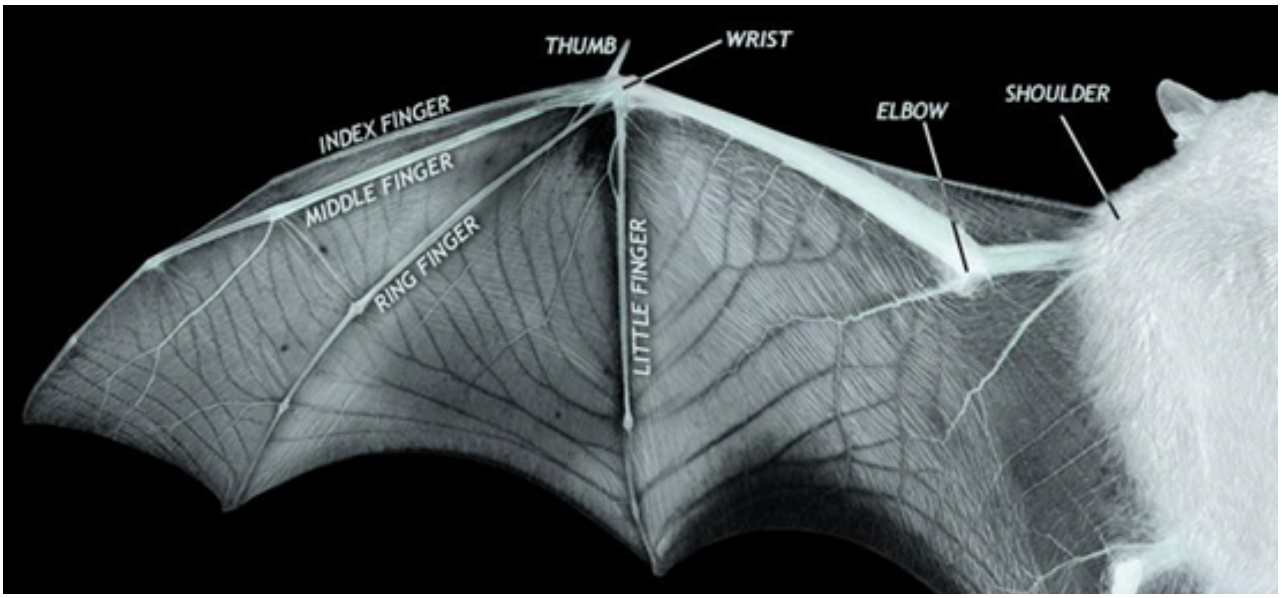
A		Woodpecker	Sipping
B		Finch	Picking
C		Hummingbird	Striking
D		Mallard	Tearing
e		Waxwing	Drilling
f		Heron	Straining
G		Bald Eagle	Cracking

a) Woodpecker - drilling
b) Finch - cracking
c) Hummingbird - sipping
d) Mallard - straining
e) Waxwing - picking
f) Heron - striking
g) Bald eagle - tearing

THE BUZZ ABOUT BATS

Bats are not birds or rodents but rather belong to their own group of mammals or “Order” called Chiroptera which means “hand-wing”.

Did you know: The wing of a bat is two layers of skin and the bones look like a human hand with elongated fingers. In fact, bats are far more closely related to primates (such as monkeys and humans) than they are to rodents.



Have you ever seen a bat? Where did you see it?

_____

_____

Bats are nocturnal. What time of the day are you most likely to see a bat?

_____

_____

Whistler bats eat huge amounts of flying insects, sometimes more than their own weight per night. That’s like a 150 lb person eating 600 “quarter-pounder” burgers in one day! Which types of insects do you think Whistler bats like to eat?

_____

_____

_____

MIGRATION SENSATION

Birds migrate to survive. If no birds migrated, food supplies in their ranges would be rapidly depleted, and many chicks and adults would starve. Competition for nesting sites would be fierce, and predators would be attracted to the high concentrations of breeding birds and easy meals of nestlings.

Circle the Whistler birds that migrate in the winter (see answers below).

Canada goose

Stellar's Jay

Common Raven

Bald eagle

Robin

Trumpeter swans

Hooded merganser

Blue heron

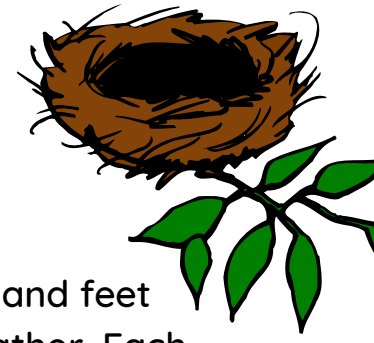
Pileated woodpecker

Birds that migrate: Hooded merganser, Blue heron, Trumpeter swans, Robin, Canada goose

COLOUR ME!

The main characteristic of a bird is feathers. No other animal has feathers. Feathers are made of keratin - this is the same stuff that fingernails are made of. Feathers do many jobs for birds. Soft down keeps them warm, wing feathers allow flight and tail feathers are used for steering. The colour of the feathers can be used to hide the bird or to help the bird find a mate!

BEST NEST



Background: Birds are the ultimate nest-builders. Their beaks and feet are designed for carrying and arranging the materials they gather. Each different species has its own unique nest-building techniques, from simple scraps on the ground to elaborately woven nests of sticks and grasses. Some are camouflaged and some are out in the open. Some are big and some are small. It all depends on the bird, and where and how it lives.

Instructions:

- Dress warmly and head outside, we're going to pretend we are birds!
- Choose a location, this is where you are going to build your nest.
- Next, find materials around you and bring them back to your designated spot.
- Time to weave, pile and create your own bird nest. This can be small or human-sized if you like.
- For an added challenge try collecting materials and building your nest without your using your hands - like a real bird!

Reflection:

Think about the proximity of resources around you. What's your nearest water or food source?

_____

Are there any threats to consider?

_____

Did you choose a sheltered location or an open area? Explain why?

_____

Winter  Watching

Background: A bird sings to attract other mates. When a bird sings, it's telling you what it is and where it is. Learning bird calls opens a new window on your birding. You can only see straight ahead, but you can hear in all directions at once. Learning bird songs is a great way to identify birds hidden by dense foliage, faraway birds, birds at night, and birds that look identical to each other.

Watch And Listen: When you see a bird singing, the connection between bird and song tends to stick in your mind.

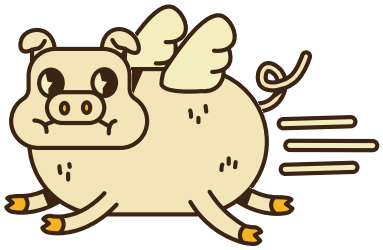
Say It To Yourself: Some songs almost sound like words which make them easy to remember like the following:

- Black-capped chickadee's call sounds like its name, "chk-a-dee-dee-dee."
- Barred Owl, “Who cooks for you, who cooks for you all?”
- A crow sounds like, “caw, caw, caw”
- A Robin sounds like, "cheerup, cheerily, cheerily"

Instructions: Head outside and get ready to watch, walk, wait and listen. Bring binoculars if you have a pair. Fill in the blanks below to record your findings.

	Draw	Name	Write what the bird call sounds like
Bird #1		_____	_____ _____
Bird #2		_____	_____ _____
Bird #3		_____	_____ _____

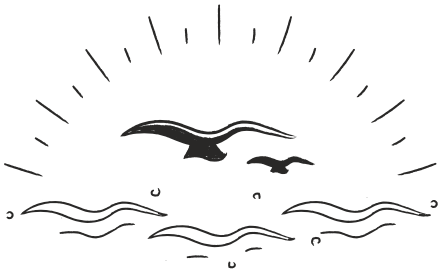
PIGS FLY



Background:

Birds fly by flapping their wings and using air pressure to create lift under their wings. Just like airplanes do. Feathers are important to birds because they keep them warm, help them to fly, and provide camouflage. Hollow bones also help in flying because they help make the bird light enough to fly.

Although an important characteristic of most birds is flying, not all birds fly. Some birds that don't fly are penguins and ostriches. Penguins actually, spend a good portion of time in the water where they are fantastic swimmers.



Instructions:

- Players should stand facing the leader.
- Each player should have enough room to make full "flapping" movements with their arms.
- The leader calls out "Ducks Fly", "Owls Fly", "Pigs Fly"...and so on.
- If the animal that is called out really does fly, the children should continue flapping their "wings". If the animal is one that does not fly, then the children should stop flapping.
- Players that stop or start flapping their wings at the wrong time are eliminated for the rest of the round.
- The last player standing is the winner and will then take a turn calling out different animals, trying to trick the group.

ALL ABOUT MY DAY

Use these sentence starters to write a journal. Complete one, two, or all of these lines below:

- My favourite part of the day was...

- The two most interesting things I learned were...

- I didn't expect to...

- Next time I'd like to...