

Vertebrates




Needs

Feeds

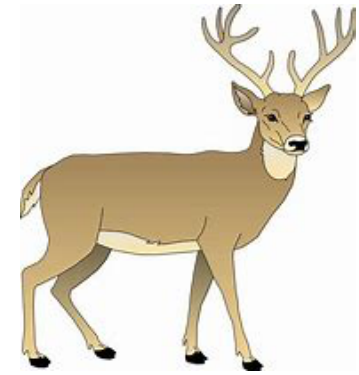
Adaptation

Inside Outside Part 1

Needs, Feeds and Adaptations

- What do animals need to survive? 
- What are the different ways animals eat? 
- How are bird beaks and movement patterns adapted for different food sources? 

We will learn what animals need (deer)



Different kinds of food patterns (bears)



And adaptations for feeding (birds)



Animals need 4 things to survive:

- Food



- Water



- Shelter



- Space



Food and water keep all the body systems working.

Shelter helps the animal stay safe from heat and cold and other weather and provides a safe place to rest and sleep.

Space means that a given place can only provide food, water and shelter for a set number of animals, so space allows the number of animals in that area to meet their needs.

Deer and all animals need **FOOD, WATER, SHELTER** and **SPACE** to stay alive.

They need a place to live where they can hide and move around.



They need food to eat, to grow and have energy.



They need water to drink to stay healthy.



There must be enough space so all the deer can eat and drink and hide.



Make a roof (hands together over head) to be the “house” for the deer.



Let’s make some food (rub tummy yummy) to feed the deer.



Let’s make some water (cupped hand to mouth) so the deer can drink.



Let’s spread our arms wide to make space.

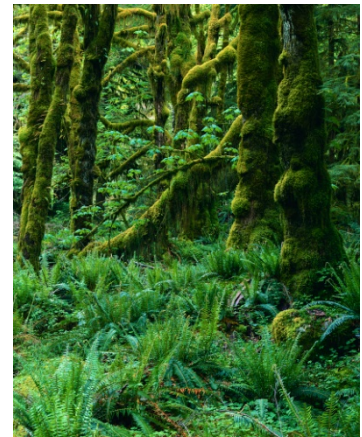


What deer need:

- Food



- Shelter=place to live safely



- Water



- Space



We Can Have a Deer Needs Scavenger Hunt!

- Make a deer bag or envelope for collecting deer survival needs scattered around the house.

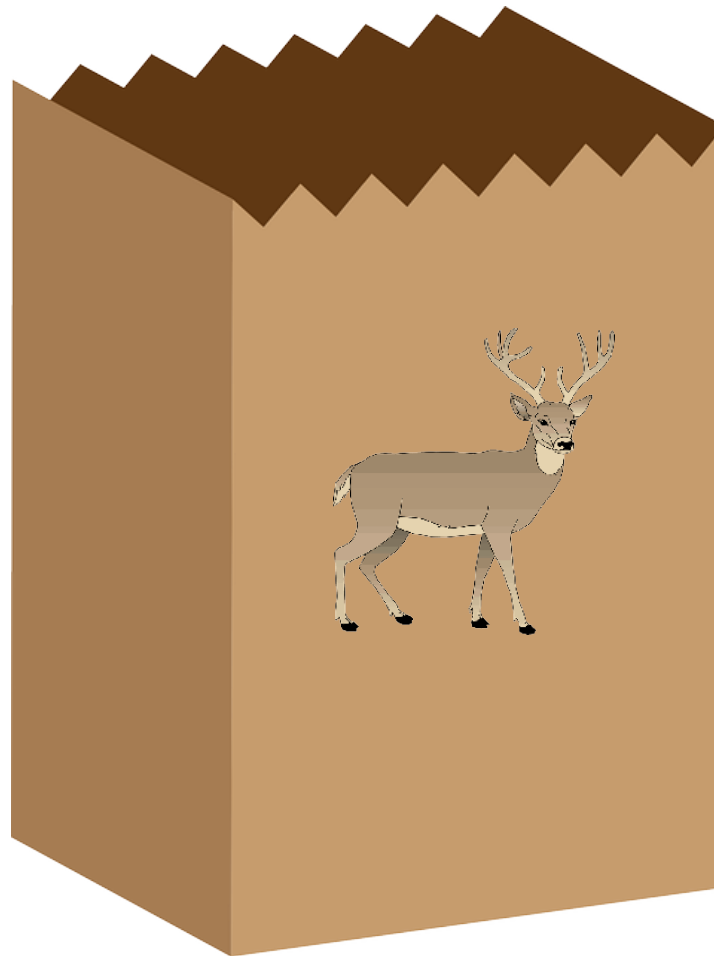


- Cut out the deer survival need cutouts for collecting in the bag.

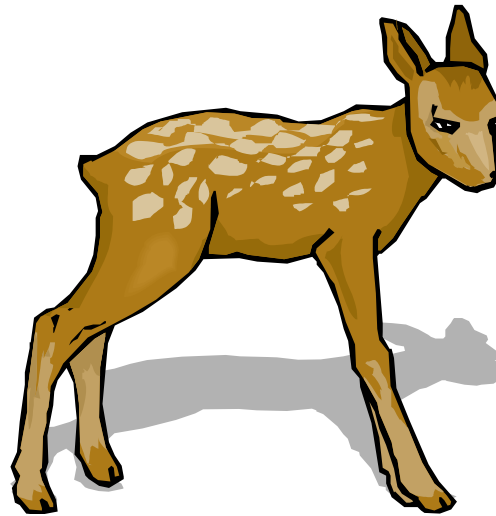
- Now—Scavenger Hunt!



Make a Deer Bag/envelope for collecting deer survival needs scattered around the house.



Deer for Deer Bag for collecting pictures of deer survival needs. Stomp and leap and paw and run like a deer!



Deer survival need cutouts for collecting in the bag



Food



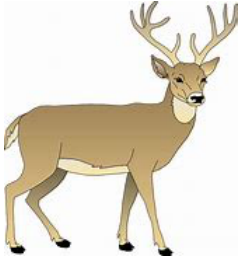
Water



Shelter



Space





To the tune of
*Darling
Clementine*

- Deer need food (point to tummy)
- and deer need water, (pretend to drink)
- deer need shelter (make roof over head)
- and space too. (arms sweep sides)
- They need all these things together (hands together)
- so they live like me and you! (point out and in)

Antlers vs Horns

- **Antlers** are found on members of the deer family and caribou, are made of bone, are typically branched, and are shed every year.

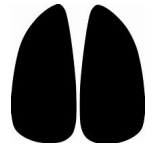
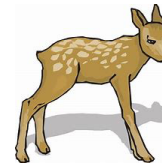
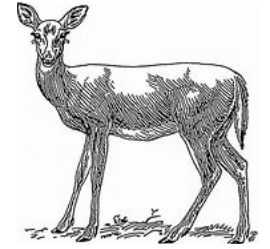


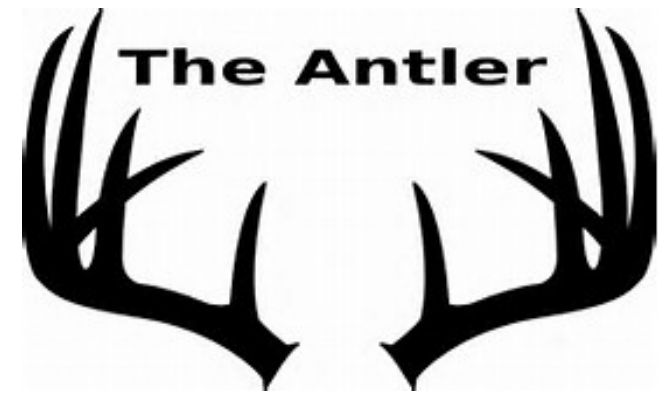
- **Horns** are found on animals who chew their cud and have cloven hooves, are made of a bony core with a keratin (like fingernails) sheath, are not branched and are a permanent part of the animal.



Deer can live in forests, or deserts or farmlands and sometimes in parts of cities. Deer prance and grunt and kick the ground to tell how they feel. You can be a deer and prance like deer, grunt like a deer, and kick your hoof (feet) like a deer. You can pretend to give a warning and lift your tail and run and jump. Daddy deer are called “stags”. They have antlers on their heads. The stags have contests with each other. Baby deer are called “fawns”. They have spots to hide in the light and shadow in the forest. Mommy deer are called “does”. They take care of the babies. Deer have hooves which are like big strong nails on the end of their legs. The spots on a fawn are an example of camouflage.

You can read the camouflage story or view it as a slide show.





Sung to *Did You Ever See a Lassie*

- If you're ever in a forest, the forest, the forest.
- If you're ever in a forest (hands up high for tree)
- You might see some deer.
- With antlers on some deer (hands on both sides of head)
- And spots on the fawns, (fingers open tap on chest)
- If you're ever in the forest (hands up high)
- You might see some deer. (hands by head).
- Growing Up WILD



Fingerplay

Deer need water
(slurp)

and a sheltering place
(hands make roof over
head)

Deer need food (chew)
and deer need space
(wave arms out).



Food fingerplay picture



Shelter fingerplay picture



Water fingerplay picture

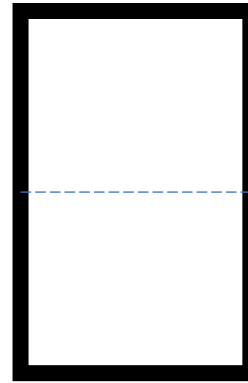
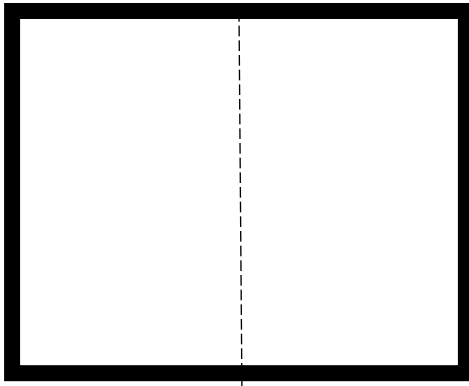


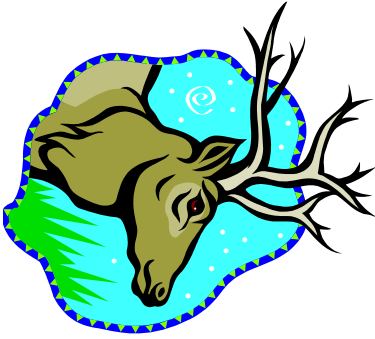
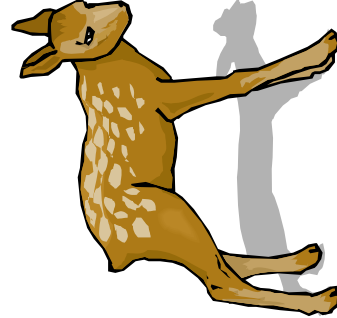
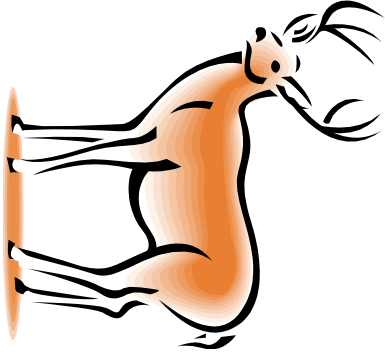
Space fingerplay picture








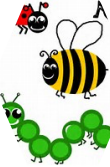


You can make a mini-book!

- Fold the paper in half
- Then in half again.

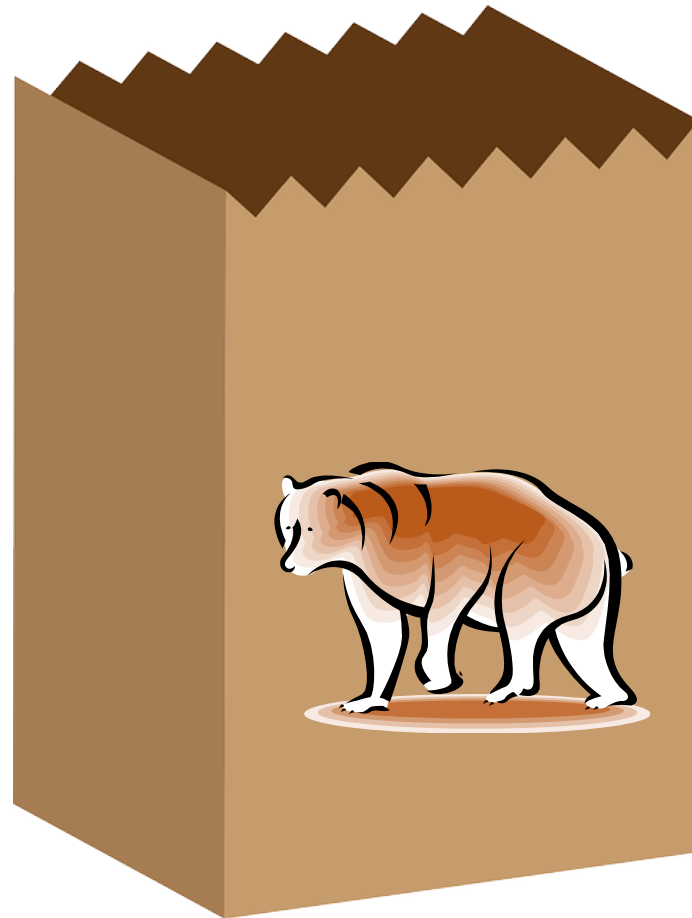




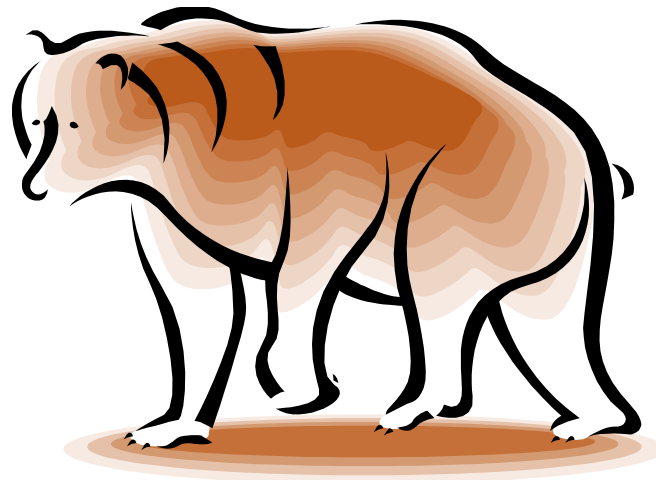
Different animals eat different things. There are special names for the way different animals eat.

- Herbivores eat plants, berries, grains or nuts. 
- Carnivores eat meat—animals, worms, etc. 
- Omnivores eat meat, insect and plants foods.   
- Insectivores eat insects. 
- Detritivores eat dead animals. 
- Decomposers eat decaying matter. 

Make a Bear Tummy Bag for collecting bear foods hidden around the house. You can go on a bear scavenger hunt!



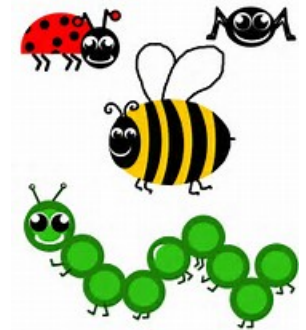
Bear to glue on the Bear Tummy Bag.



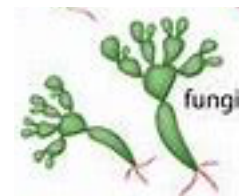
Bears are omnivores—they eat plants, meat and insects—herbivore, carnivore, insectivore foods.

Bears like plants and bears crave meat.

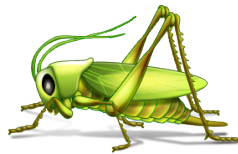
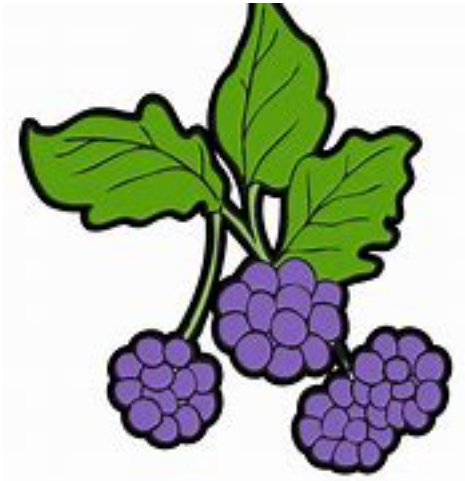
Bears think insects are great to eat!



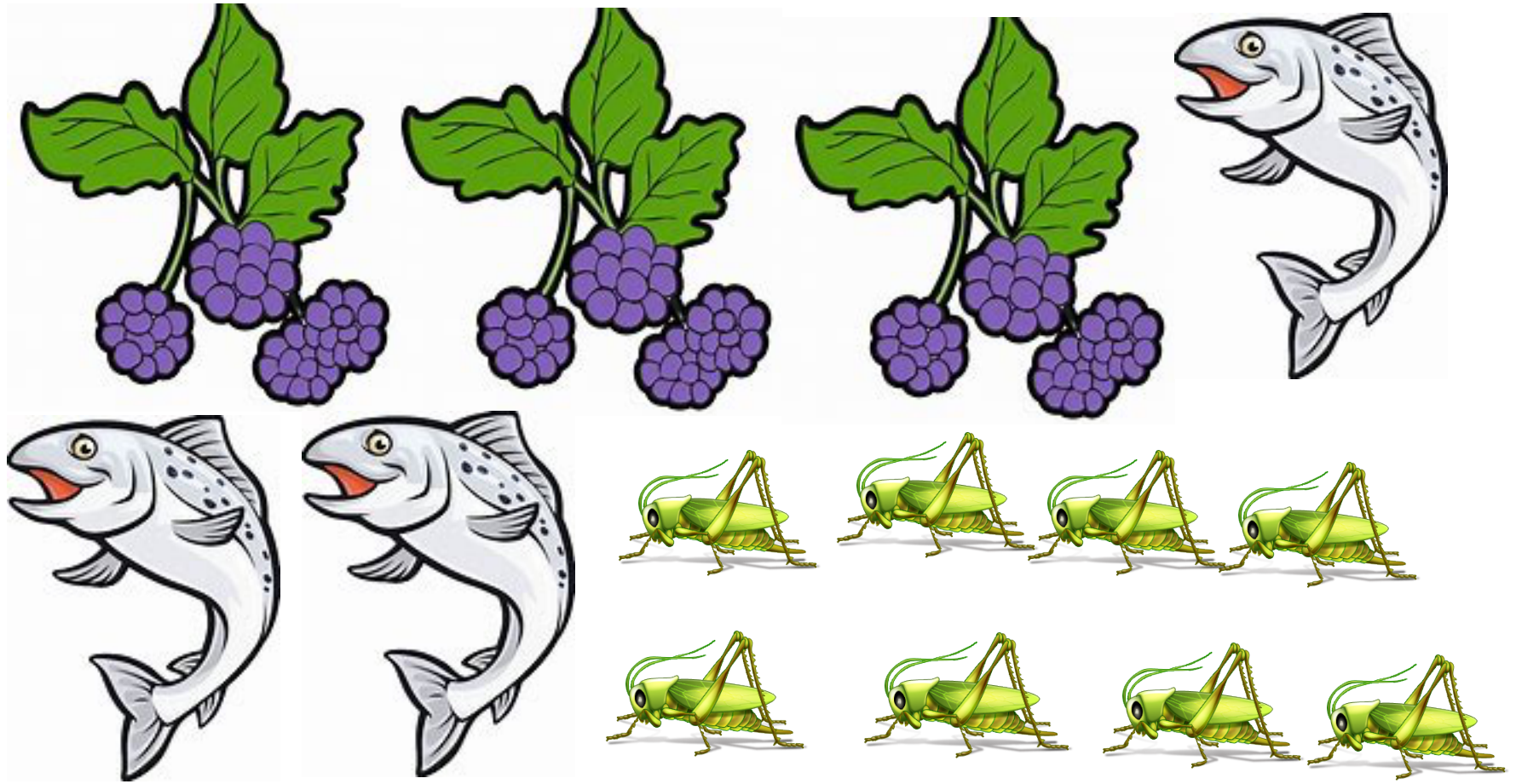
Some animals eat decaying matter—they are detritivores.
Decomposers breakdown decaying matter.



Bears are omnivores. Omnivores eat plants, meat and insects.



Pictures to cut out and hide for the bear food scavenger hunt.



Songs

**The bear went over the
mountain (3x)**

To see what it could eat.

**And what do you think it
ate? (2x)**

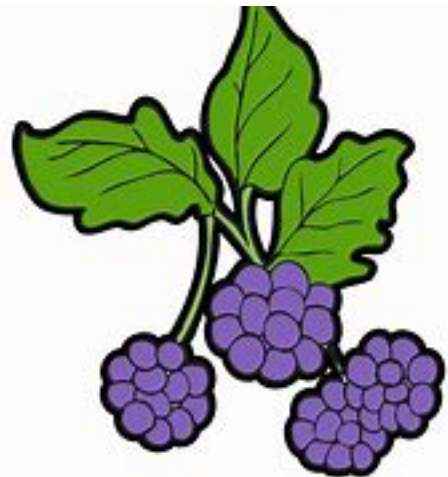
**It ate fruit and nuts on
the mountain.**

**It ate meat and plants on
the mountain.**

**It ate insects on the
mountain!**

As much as it could eat.

Adapted from Growing Up
WILD

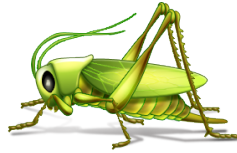


Bear Song to *My Darling Clementine*

- Bears eat fruit and



- Bears eat insects



- Bears eat meat and some nuts too.



- They eat all these things together



- So they live like me and you!



Going on a Bear Hunt actions:

We're going on a bear hunt! (clap) 



Climb a tall mountain. (reach up high)

Swish through the tall grass. (sway) 

Climb up a tree. (pretend to climb) 

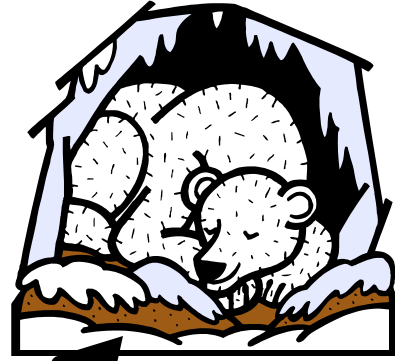
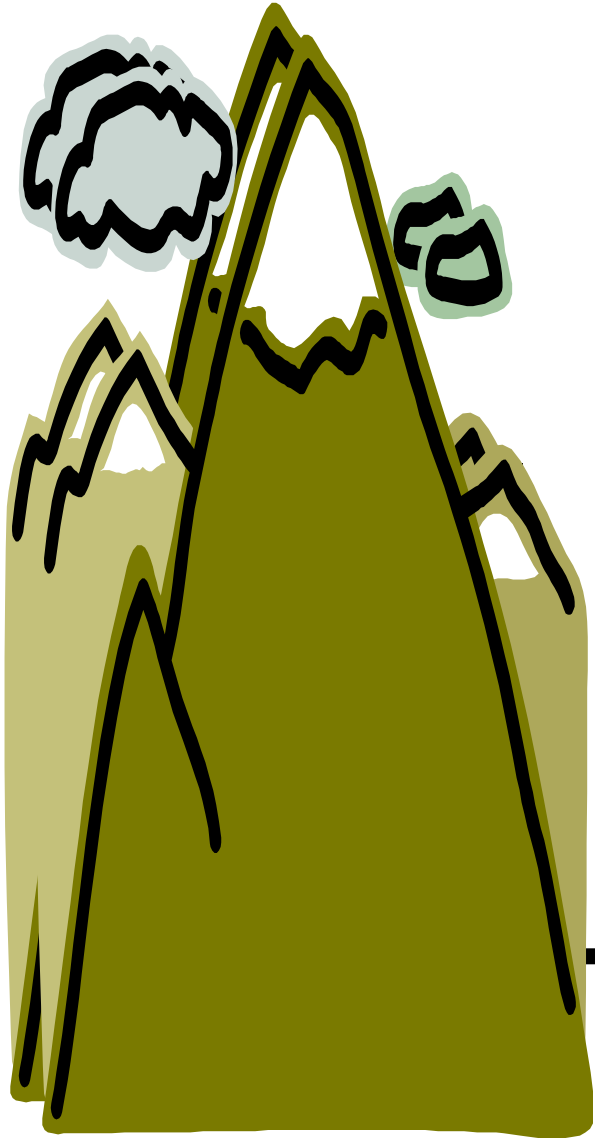
Stomp through a puddle. (stamp feet) 

Swim through a lake. (swimming motions) 

Oops—there's the bear—run run run fast back home! (run)

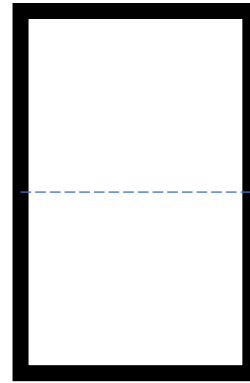
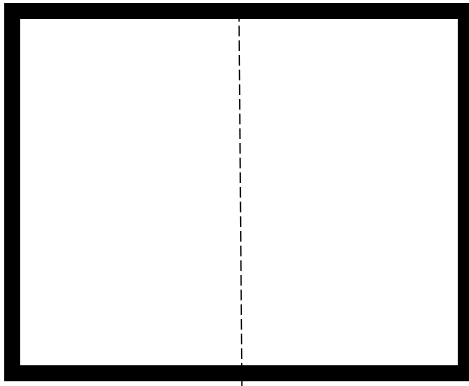


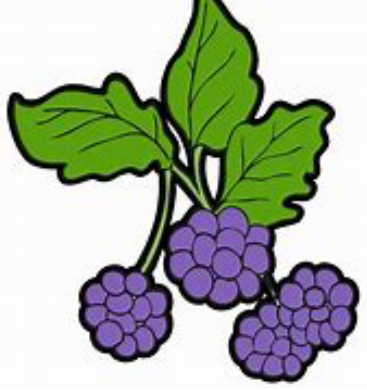
Bear Hunt Pictures



You can make a mini-book!

- Fold the paper in half
- Then in half again.

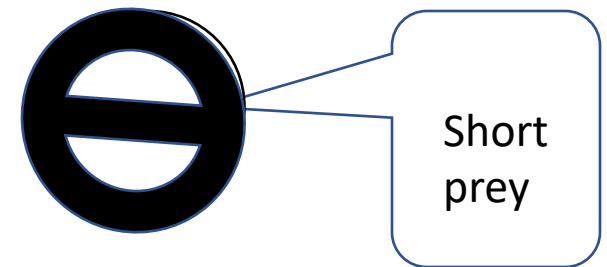
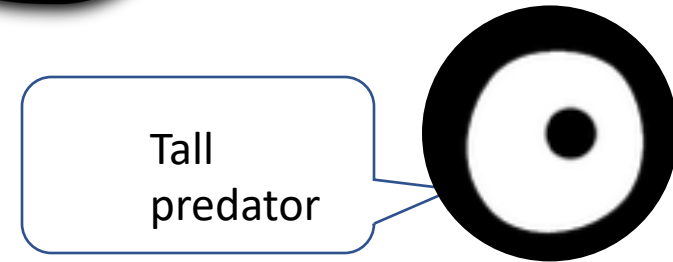




- Animals mouth parts and movement patterns—even the position of their eyes,— are all adapted for what they eat and how they obtain food.



- Vertical pupils=predators, diurnal and nocturnal
- Horizontal pupils=prey



- Birds have different bills to be able to eat different foods.
- They have different movement patterns to be able to collect the food they need.

Bird Beak Functions—bird beaks are adapted for gathering and eating different kinds of foods. What things can you find around the house that are like different kinds of beaks? Try out the things you find with beans, rice, seeds, pieces of cotton or paper and discover which “beak” works with which food,

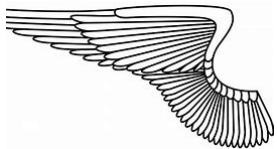
- Long and hollow for nectar
- Long and pointed to find food in mud
- Cone shaped to crack seeds and shells
- Pouch to scoop fish
- Strainer to filter tiny plants and animals
- Gaping to trap insects
- Sharp pointed to pick insects from bark
- Long thick to pick fruit
- Strong sharp and pointed to chisel bark
- Long to hunt for fish in water



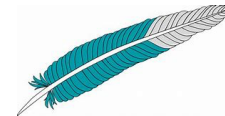
Birdie Pokey (Hokey Pokey)



- *You put your right wing (arm) in.
You put your left wing out.
You put your right wing (arm) in,
And you shake it all about.
You do the birdie pokey
And you turn your self around.
That's what it's all about.*



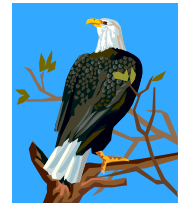
- *You put your beak (head) in.
You put your beak (head) out.
You put your tail feathers (bottom) in,
And you shake it all about.
You do the birdie pokey
And you turn your self around.
That's what it's all about*



Birds move in different ways to find food, depending on the kind of food they eat.

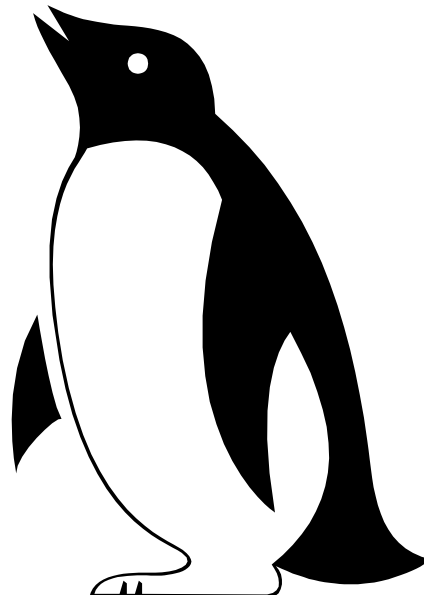
You can learn to “fly” like different birds:

- Swim like a penguin
- Arms out in a V like a vulture
- Arms straight out like an eagle
- Rollercoaster up and down like a woodpecker
- Back and forth like a hummingbird
- Stand on you toes like a flamingo
- Dive with elbows up like an osprey
- Do the rooster dance
- Turn around like a pigeon



Penguin—stand=arms straight at sides,
swim=fly underwater, arms right angles

- Stand arms straight down at sides, swim arms at right angles and bend over to swim
- Eat fish



Turkey vulture--tip in V, diurnal=day, eat carrion, rise on thermals

- V side to side
- Eat dead animals



Bald eagle-- side to side, fly 75-90mph, eat live prey, see a rabbit at 2 miles, dive 125-200 mph

- Wing to sides arms straight out to sides and look around
- Eat vertebrates



Woodpecker-- flap hands up and down, eat bugs in tree bark, and rollercoaster to bark

- Roller coaster wavy S movements up and down
- Eat insects



Hummingbird-- fast hands and back and forth, 70-80x per second, nectar

- Figure 8 back and forth hands at shoulders flapping fast
- Drink nectar



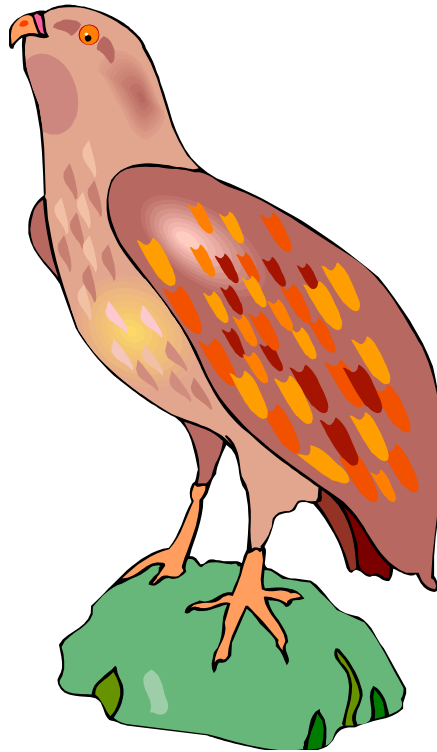
Flamingo--stand on one toe each side

- Stand on toes
- Eat plants and animals in the water



Osprey--M arms and dive, eat fish

- Dive, arms at shoulders in an M
- Eat fish



Rooster--One wing up>step step step and shake tail

- One wing up (left arm bent at elbow to waist) , step step step right, other wing up (right arm bent at elbow to waist), step step step left, shake your tail (bottom)
- Eat grain, berries insects



Pigeon-- coo, bob neck and turn in circles; head bobbing improves slow vision

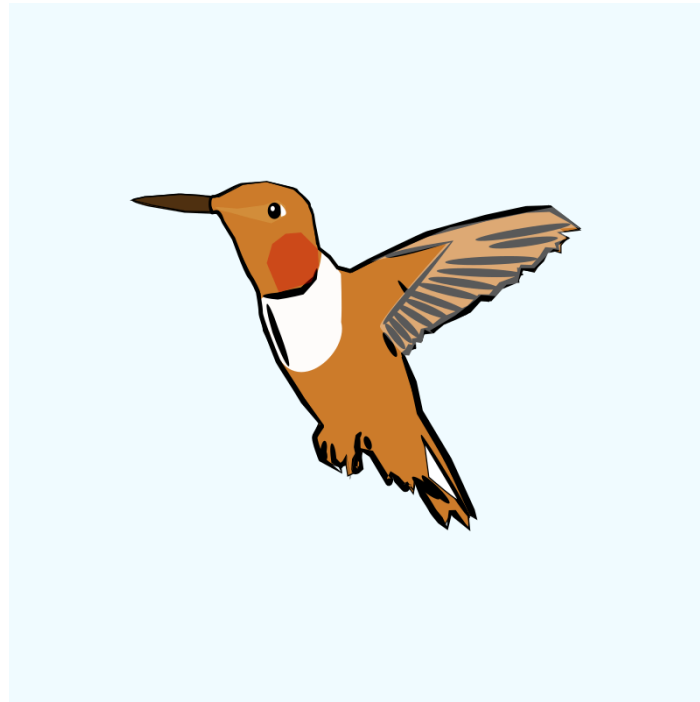
- Circle both ways, circle clockwise cooing and bobbing head, circle counterclockwise cooing and bobbing head
- Eat grains, insects, trash



You can read a story or
watch a slideshow.

The Bouncy Little Hummingbird

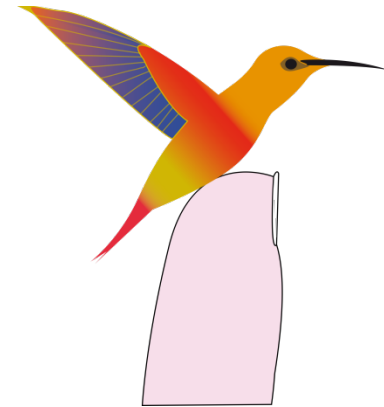
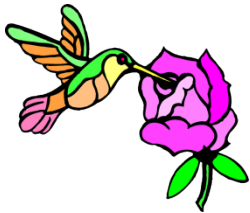
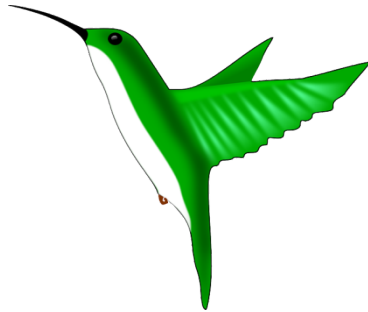
The Bouncy Little Hummingbird



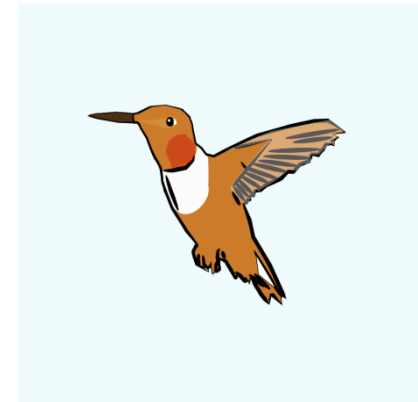
Once there was a hummingbird—he was a brown rufous hummingbird named Rufa. All the other hummingbirds were brightly colored, and they made fun of Rufa because he was brown.. Rufa was sad.



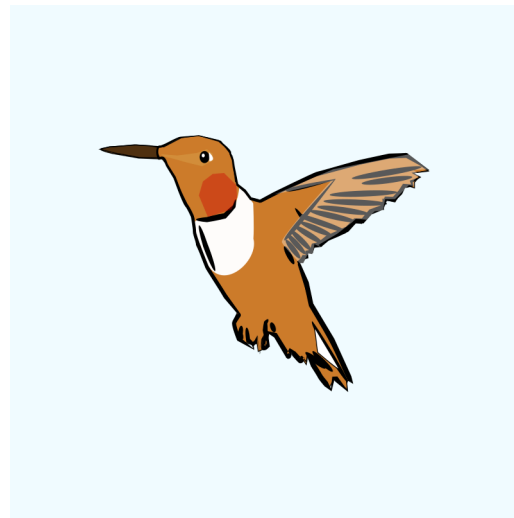
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But Rufa had a secret talent—you see Rufa was a bouncy little hummingbird—in fact, Rufa was the bounciest little hummingbird in the garden and everyone knows that hummingbirds need to bounce to make their nests.

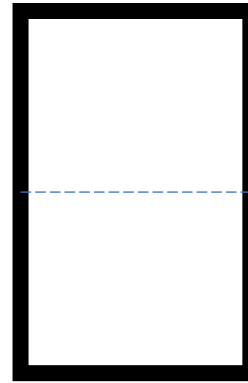
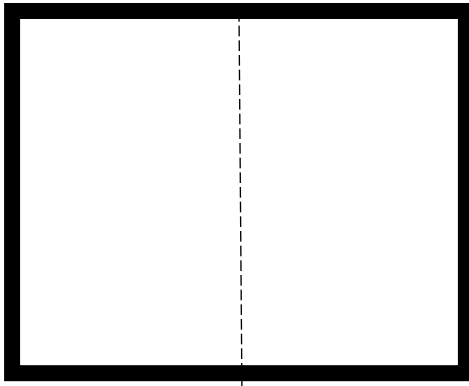


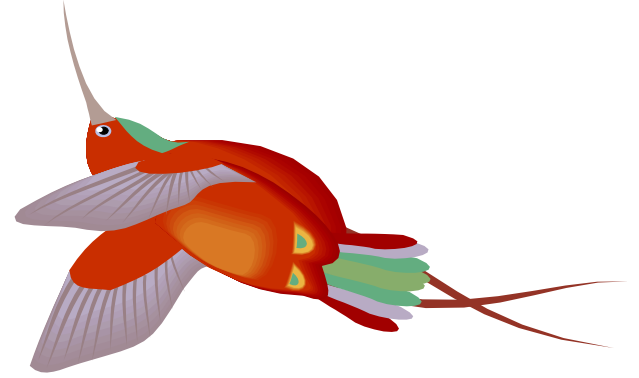
And so when it came to the important job of nest building Rufa was the best-est hummingbird of all!



You can make a mini-book!

- Fold the paper in half
- Then in half again.





You can take a discovery walk!

- Where is the water in your house? Where is the food? What kinds of shelter do you have? Is there space enough for each person?
- Can you find water, food and shelter for animals, birds and insects around your house?
- What foods do you have inside or outside your house that a carnivore, herbivore or insectivore might like to eat?
- Now think of birds. What things are in your house that birds eat? What kind of beak would the birds need to eat it?
- What things are outside that a bird might like to eat? What kinds of beaks would they need to eat those foods?



Be a nature chef!

- Make a meal for a bear!
What do you have at home that a bear would like to eat?



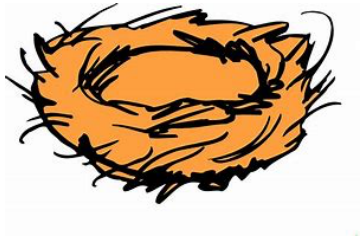
- Make a meal for a bird!
What kind of bird are you?
What kind of beak do you have? What foods do you have for your bird? What utensils will you use to eat those foods?



Be a nature architect!

What can you use to design a bird nest or bird house?

- Will you use grass and twigs?
- Will you use a box or can?



What can you use to design a beehive or butterfly house?

- Will you use playdoh or clay?
- Will you use rolls of paper?

