Farm Animals on the Dollinger Family Farm

Goals:

- -Discuss the daily happenings on a farm.
- -Learn where food comes from.
- -Learn the by-products from the farm.
- -Explore everything about the farm animals.

 Compare and Contrast different body parts of animals.

 Learn animal sounds and familiar names

 Discuss all that we get from each animals
- -Practice counting skills, beginning sounds of animal
- -Learn new vocabulary, donkey, cow, sheep, pig, duck, chicken, pygmy goats, rabbit,



Information/Questions

What is a farm?
Have you been to a farm?
What goes on at a farm?
What grows on a farm? Corn, beans, hay, pumpkins, all the animals

What are some of your favorite foods?
Where do you get your food?
Where do the grocery stores get their food? If it weren't for farmers, we wouldn't have products in the grocery store.

Let's talk about the animals you might see at the Dollinger Family Farm.

On each animal, compare their nose, mouth, ears, hands, and feet to yours.

Do you know what animal this is? miniature donkey



How tall do you think they get? They only get to be 32-36 inches.
How tall are you? Maybe compare to a yardstick.
What is a momma donkey called? Jenny
Daddy? Jack Baby? Foal
What are donkey's feet called? Hoof/hooves
What sound does a donkey make? hee-haw

Donkeys can be used to carry things.



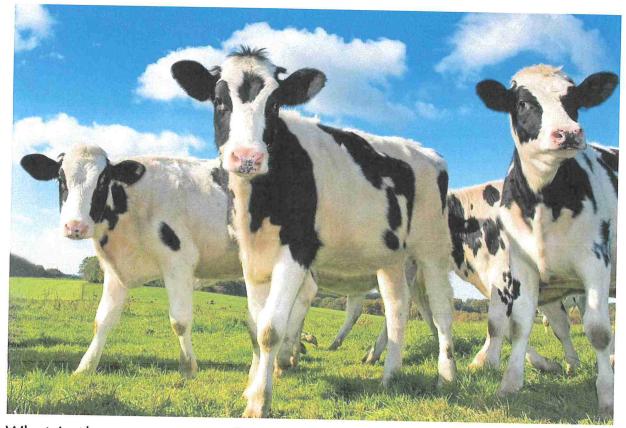


Donkeys stay in herds.

They are cuddly like a puppy.

Why do we have donkeys? They can protect the herds from predators(wild animals).

What animal is this? cow



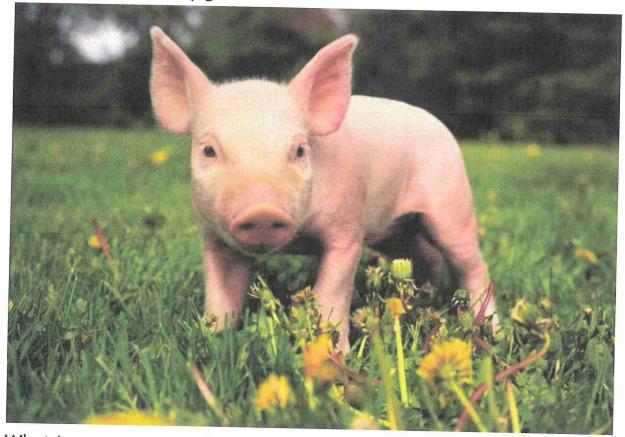
What is the momma cow called? cow Daddy? bull Baby? Calf What sound does a cow make? moo

There are different kinds of cows, some are dairy cows, some are beef. What would we get from a dairy cow? *milk, cheese, sour cream, yogurt...* What meat do we get from a cow? beef, *hamburger*, steak,

Guess what else we make from cows!! candles, cosmetic, crayons, perfume, mouthwash, toothpaste, shaving cream, soap and deodorants, even marshmallows.

Remember, even if all of the farm animals are oh, so cute, we grow them for many different things.

What is this animal? pig



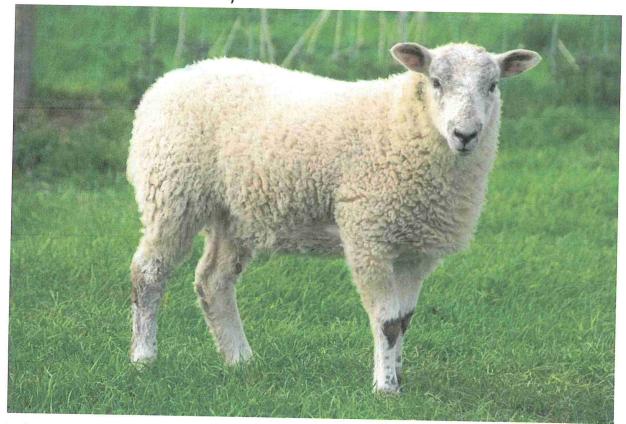
What is a momma pig called? sow Daddy? boar Baby? Piglet
What do we get from pigs? pork, ham, bacon, pork chops, lard,
insulation, rubber, antifreeze, certain plastics, floor
waxes, crayons, chalk, adhesives and fertilizer

Notice the pig only has 4 toes. How many do you have? The pig only walks on 2 of his toes.

Pigs are very smart, they learn to communicate with their mother very early.

What sound does a pig make? squeal and grunt This is how they talk.

What is this animal? sheep



What is the momma called? ewe Daddy? buck, ram Baby? Lamb What sound does a sheep make? baa-baa

Notice the difference in the skin/fur on the sheep.

What do we make out of the fur on the sheep? wool, yarn, sweaters, mittens

This "shearing" doesn't hurt the sheep at all. It's like you're getting a haircut. They shave the fur off of the sheep and it grows more. What else do we get from sheep? Meat called mutton, lamb chops, milk and cheese.

Unusual fact: Look at the eyes of your friend. What shape is the black part(pupil)? It is round. The pupil of a sheep is a rectangle.

What are these animals? chickens



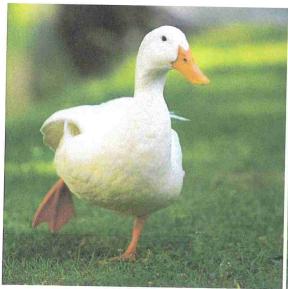


What is a momma chicken called? hen Daddy? rooster Baby? Chick What sound does a chicken make?

Chickens are in the bird family. When it comes to birds, the male birds are more colorful and pretty. The second picture is a rooster.

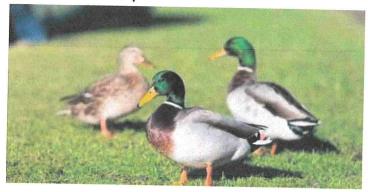
What do we get from chickens? chicken, so chicken nuggets, eggs Look at the chickens feet, how are they different from yours?

What is this animal? duck





What is a momma duck called? duck Daddy? drake Baby? duckling What sound does a duck make? Quack-quack Notice the ducks feet. Compare to the chickens. Ducks are also in the bird family. The ducks feet are webbed. This helps them swim. There are many kinds of ducks.



These are mallard ducks. Like birds, the male birds are prettier, thus have the green head.

What is this animal? pygmy goat



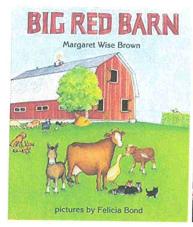
This is a picture of the ones that you can pet at the Dollinger Family Farm.

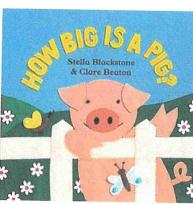


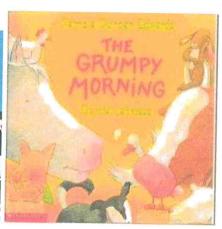
What is a momma goat called? doe Daddy? billy Baby? kid What sound does a goat make?

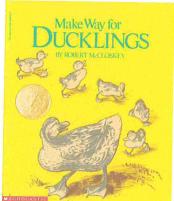
Pygmy goats give us milk and meat. They are playful to have on the farm.

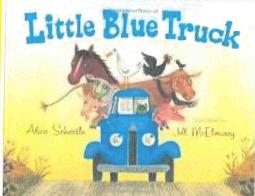
Related Books:

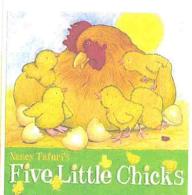


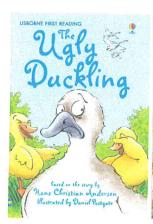


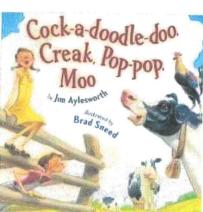


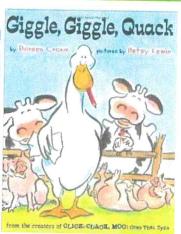












This is a link to watch <u>The Ugly Duckling</u>. https://www.youtube.com/watch?v=TyrmcD8Ym10

Activities/Links

Old MacDonald Had a Farm song

https://www.youtube.com/watch?v=dpnUYVezBVw

Baa Baa Black Sheep song

https://www.youtube.com/watch?v=CRHvTTOR8Ns

Little Red Hen read along

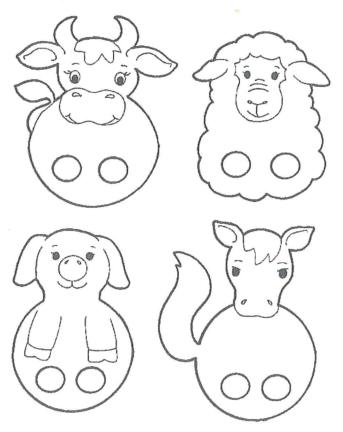
https://www.youtube.com/watch?v=2E72TZyOLNo

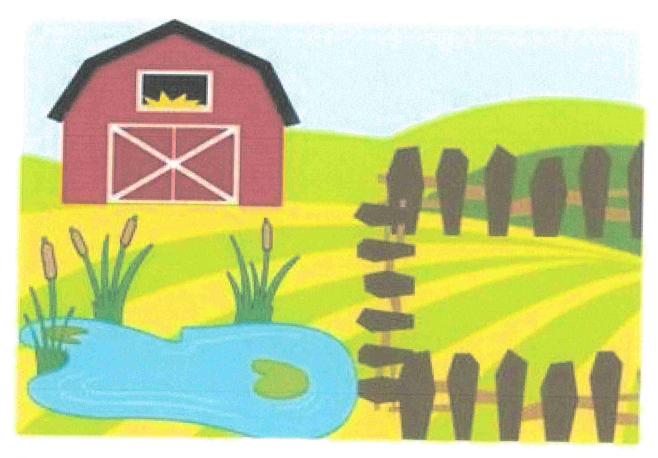
https://www.kidsparkz.com/uploads/5/2/3/4/52340669/farm_vocabulary_list_18.pdf

https://www.kidsparkz.com/uploads/5/2/3/4/52340669/farm_initial_sounds_freebie1.pdf

https://www.kidsparkz.com/uploads/5/2/3/4/52340669/farms_which_is_different_realistic_animals.pdf

Pattern for making finger puppets. Use cardstock and make into a full size sheet.





Farm Map Math:

Reproduce this farm map for each child (8x10). Give each child some play-doh. Have them make ten little balls of play-doh to practice counting. Ask the children to put three balls where the ducks live. Put two balls where the cows might be. (Etc.)...taking off and putting on more, when necessary.







Learning About Pumpkins at the Dollinger Family Farm

Come to our farm to see the pumpkin plants in various growing stages.

Find your favorite pumpkin too!

How a Pumpkin Grows

Goals:

- -Discuss the steps to growing a pumpkin
- -Learn new vocabulary (seed, sprout, seedling, vine, bulb, sprawl, nectar, pollen, pollination, harvest, rind)
- -Discuss shapes (round/sphere & oval/cylinder) and colors of pumpkins
- -Discover the many uses of pumpkins

Steps to Growing a Pumpkin:

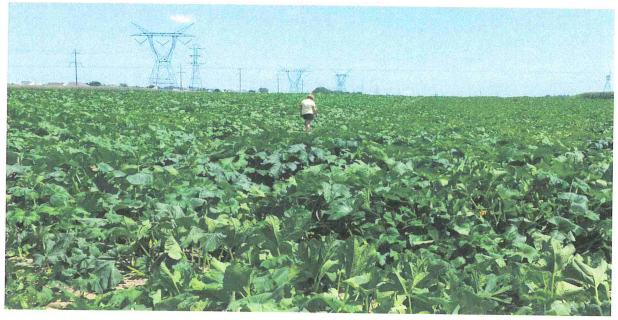
1) A pumpkin starts with a **seed**. (Have you ever looked inside a pumpkin? What did you see? (Tons of seeds!)

Question- what does a seed need to grow well?

water (pumpkins need an inch a week), soil (may need fertilizer)

sunlight (plant in a spot with full sun)

Pumpkins need a lot of space to grow so plant seeds far apart so the plant can spread out. You can plant in a garden or open field called a pumpkin patch. Here's Dollinger's huge pumpkin patch:



Some gardeners will soak their pumpkin seed in water for a few hours before planting. This will help the next step occur more quickly.. (possible experiment-soak seeds) It takes 100-120 days from seed to harvest. Plant the seeds from April 25 to May 25 (chant the months aloud and stand up when we say April & May..sit for the rest)

2) Next the seed will **sprout** and become a **seedling**.

(baby plant like a baby duck is a duckling) Given the proper amount of water and sun, the seed will begin to grow.



.3) A long green **vine** will begin to grow. As the pumpkin plant grows, it will get big leaves. (almost like elephant ears...how big do you think that is?). Big leaves means more pumpkins will grow.

It can **sprawl** (vocab word- to spread far) They can grow 20 feet+ ...figure out how far 20 feet is in your classroom

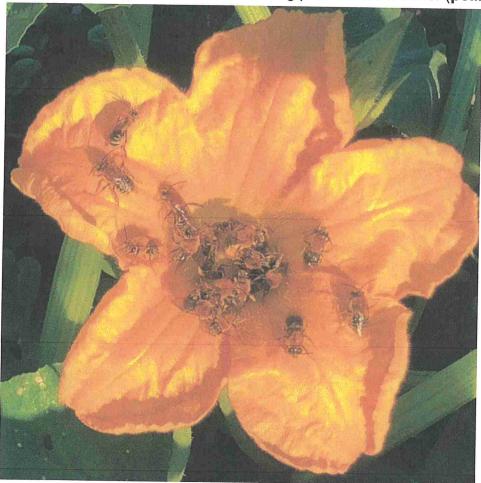




Then the vine will form little bulbs that will turn into flowers. (Can you find the bulbs in the picture below? What color and shape are they?)



4) Pumpkins plants need bees. Flowers have **pollen** (sticky material inside). Bees love pollen and fly from flower to flower leaving pollen in each flower (**pollination**)



Bees will get two things from the flower: **nectar** to make honey & the pollen to eat The flowers slowly die and tiny pumpkins will take their place. (What are two things that bees get from flowers?)

(another section is included for more information about bees)



5) It is growing time for the pumpkins! (What do they need to grow...let's review that from the beginning? In the pictures below, what color and shapes are the pumpkins?)

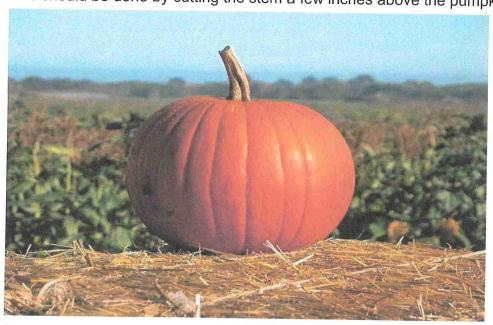


A gardener may spread mulch or straw under the little pumpkins.



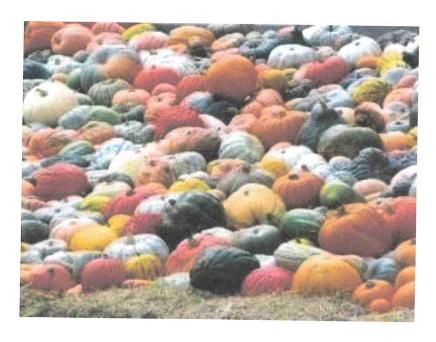
Most pumpkins begin a bright yellow color and as it grows, it turns pale yellow with finally ending in its orange color. Harvest or pick when the rind (vocab- outer skin) becomes hard and the color of choice.

6) **Harvest** (or picking) time! This should be done by cutting the stem a few inches above the pumpkin.



On big pumpkin farms, they use machines to do this step. It will need to be done before the first heavy frost or the pumpkin will get damaged.

What is the most common color for the pumpkin? (orange) It also can be found in six other colors... (can play "Guess the color" if you give them the beginning letter) Green, white, yellow, red, blue and tan.



Pumpkins can be many sizes but most are typically 15-30 pounds.

The world's heaviest pumpkin weighed in at 2,624 pounds.

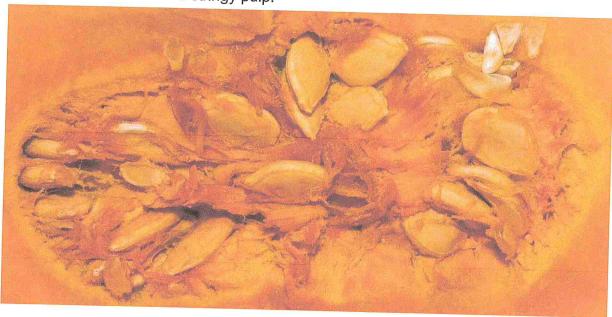
The tiniest pumpkin was 2.3 ounces, was smaller than a tennis ball and fit in your pocket.

What shapes are most pumpkins?
Round like a basketball (sphere)
Oval like an egg (or possible cylinder)

What is inside of a pumpkin?

It is almost hollow. Its weight comes mostly from the rind/shell.

The center has seeds and stringy pulp.



How do people use pumpkins?

Brainstorm things made from pumpkin...

Pie, butter, bread/muffins/cake, soup,roasted seeds, animal feed, decoration (jack o' lanterns)



Interesting facts:

Our state, Illinois, is the <u>largest</u> producer of pumpkins.(use map)

Pumpkins are grown ALL over the world....on six out of seven continents (not Antarctica) (use map or globe)

Plants can be fruits or vegetables.

Pumpkins are fruits.

Do you know any other plants that grow on a vine like a pumpkin?

They belong to the same plant families as watermelon, cucumbers, and zucchini.

Activities

- 1) Place pumpkin seed in a baggie with a wet paper towel. Watch the seed sprout.
- 2) Class pumpkin investigation- describe the outside; How many "unifix cubes" tall is it? Record guesses. Measure. How many ribs.lines on it? Record guesses. Count. Will it sink or float? Write down predictions. Place pumpkin in water. Guess number of seeds inside. Record guesses. Cut open/count.
- 3) Compare and contrast an apple and a pumpkin.
- Label pumpkin parts.
 Leaves, stem, seeds, pulp, fibrous strands
 Tendrils, ribs, rind, stem, blossom end
- 5) Make a ChartHow Does it.....

 Outside? Inside?
 - ...feel?
 - ...look?
 - ...smell?
 - ...sound?
 - ...taste?
- 6) Faces on Jack O'lanterns...discuss using shapes... triangles, circles, etc. Discuss feelings and facial expressions.

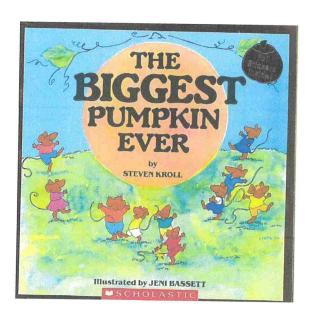
Suggested Books

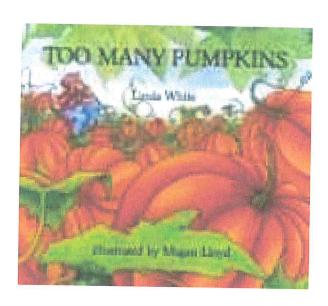
Gerver, Jane. Grow a Pumpkin Pie! Scholastic Inc. New York, NY 2000

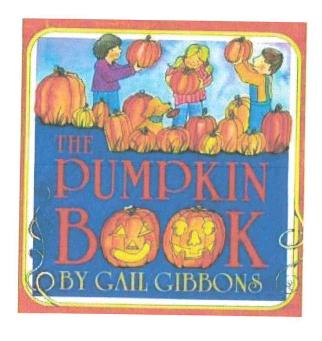
Ransom, Candice. Pumpkin Day! Scholastic Inc. New York, NY 2015

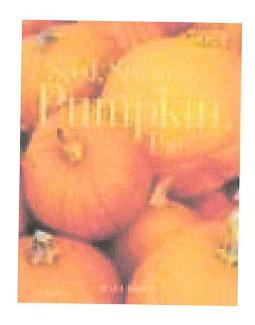
Smath, Jerry. I Like Pumpkins. Scholastic Inc. New York, NY 2003

Stone, Lynn M. Pumpkins: Harvest to Home. Rouke Publishing. Vero Beach, FL 2002













Come on out and visit us!

Native Americans at Dollinger's Pumpkin Farm

Goals

Discuss various types of homes/shelters.

Identify and name common shapes, compare 2 dimensional and 3 dimensional

Discuss family dynamics, understanding that each of us belongs to a family and recognizes that families differ

Describe and compare basic needs of living things

Describe common jobs and what is needed to perform them

Learn new vocabulary: triangle, cone, teepee(tipi), Native American, native, tribes, shelter, ceremonies

This is a picture of the teepee(tipi) at Dollinger's Pumpkin Farm. You may go explore the inside at the farm.



Information/Questions

Who do you think lives inside? Native Americans

- -Young children still may say Indians, just quickly touch that they are the same as Native Americans but prefer to go by Native Americans now.
- -Reference that Native Americans were here before Christopher Columbus.
- -Native means that they were born here and here before any of us. The Native Americans are who taught us how to farm the land and hunt and fish and take care of ourselves.

What city do you live in? State? Quickly touch on the Midwest and that Illinois is part of the Midwest.

- -Native Americans lived in big families called Tribes.
- -The tribe that lived around here were the Potawatomi. (Originally from Wisconsin and Michigan) (Many Potawatomi actually lived in wigwams)

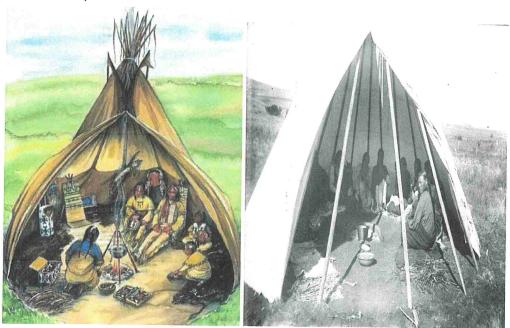
What did we say this is a picture of? Teepee or tipi This is the home or shelter for the Native Americans. What do you live in?

What shape is this teepee? Triangle or Cone will be probable answers.

Triangle is a 2 Dimensional shape, Cone is a 3 Dimensional shape.

Difference is like when you go to a 3D movie when you wear funny glasses and things pop out at you.

A cone shape is pointed at the top but a circle on the bottom. It's easier to see when you go inside a teepee



How do they make a teepee?

https://www.youtube.com/results?search_query=building+a+teepee

What do you see at the top of the teepee? Sticks

Are they big or little? Big

So would we get big sticks from a big tree or a little tree?

How would they get the big sticks to where they wanted to build?

Compare then and now. No trucks Plus the Native Americans that lived in the Midwest did not have horses, so they had to drag them out to where they wanted to build their homes.

What do you think the outside of the teepee is made of? Deerskin

Also, notice the top of the teepee can open up.

Why do you think that is? What's it called? They have fires inside to stay warm.

It's called a smoke flap. They can close it when it's raining and they don't have a fire going. They do most of the cooking on outside fires.

Do you have a fire in your house? Where is it? Fireplace Where does the smoke go? Chimney

Let's think about who all lives in the teepee.

Hold up with your fingers how many people live in your house. (no pets)

In the teepee, they live with their grandma and grandpa, aunts and uncles and cousins. Would that be fun? Kids would probably love it!!

Inside the teepee, do you see a bedroom? kitchen? living room? bathroom?

They all lived in one big room. Probably have to discuss the outdoor bathroom.

They spent most of their time outside so it was okay to have this many people in their teepee.

Jobs of each family member

Extra Info for teacher to share.

Women were in charge of deciding where the teepee would be built.

Men were in charge of the outside of the teepee, including bringing back the animal skins for the outside.

People slept on buffalo skins inside the teepee.

Who do you think did all of the cooking? The women

Who do you think did all of the gardening? The women

What do you think the women did with the kids while they worked? The bigger ones helped. If they had a baby, she carried it on her back. They didn't have strollers, etc. It was like a back pack. Do you know what they called it? It was a papoose board. They just strapped the baby in.





What do you grow in a garden?

What did they grow in their garden? Corn, beans, pumpkins, squash, tobacco(used for medicine)etc

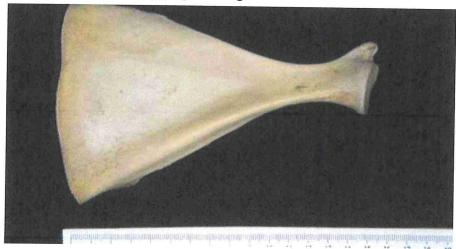
They had to grow everything they wanted to eat. They did not have any Walmarts, Targets or Jewels.

So, if the women did all of that, what did the men do? Hunted, fished What do you think they hunted? Deer, turkeys, buffalo, elk, wild birds.

They did not have guns,

How do you think they got the deer? Bows and arrows

When they did kill a deer, it was because they had to. They would eat the meat. Use the skin to make clothes, tepees, rugs. They would use their bones (Scapula) as a tool for digging in the gardens.



Entertainment

The Native Americans did have ceremonies sometimes.

What do you think a ceremony is? Party of sorts, however, ceremonies have seriousness to them.

They would put on fancier clothes and sing and dance around a fire.



Men would wear a head dress!

Have you ever seen anyone have a haircut that is just down the middle of their head? What's that called? *Mohawk* There headdresses were similar in shape to a mohawk at times. Some were fancier.

They made all of their own musical instruments.

What do you think they used?

Drums and tambourines out of deerskin.

Whistles out of hollowed out sticks Like a recorder

Would sing songs, also (one little, two little, natives)

Maracas out of gourds. If you let gourds dry out, over the winter, the seeds inside will shake like Maracas.



Play

We do a lot of things different than they did. But let's think about what we do for fun. What games do you play outside? Soccer, baseball, bikes, scooters What games do you play if you have no toys? Tag,

They also had a game with a ball and a stick. What might that be?

They had one called shiny(shin-nee). It was like hockey with a ball.



The parents also turned chores into games. Parents would place an object in one hand and nothing in the other and hold behind their back. So, say they were deciding who had to take out the garbage. One child picks a hand, if it had the object in it, they had to take out the garbage. It was just a fun way to do chores.

Storytime.

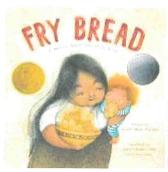
Do you all like storytime? Who tells you stories at home?

The grandpas in the tribe would tell stories at night around the fire.

Example: The Tortoise and the Hare

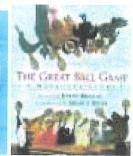
That's how fairy tales were passed down generations.

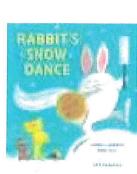
Related Books

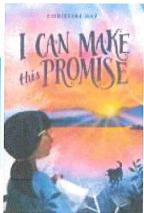




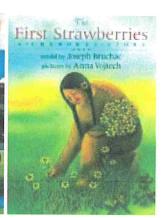




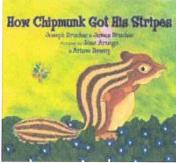












Activities:

Finger play and songs:

To the tune of "Ten Little (Indians)"

Sing: One little, two little, three little Natives.

Four little, five little, six little Natives.

Seven little, eight little, nine little Natives.

Ten little Native kids.

Ten little, nine little, eight little Natives.

Seven little, six little, five little Natives.

Four little, three little, two little Natives.

One little Native kid.



Traditionally Rain sticks were made out of hollowed and dried cacti which had their exterior thorns removed and hammered back in. Small lava pebbles were inserted, the ends covered with wood, and when the tube was rotated they cascaded over the thorns creating a lovely rain- like sound. They were then used to call upon the gods to provide rain in what were very dry climates.

Making a rainstick is easy to do and great to explore sounds. For kids, you can just fill the tube with rice, beans, pebbles, coins and some small foil balls—this gives the different sounds wanted to mimic rain.



Paper Bag Teepee

Instructions

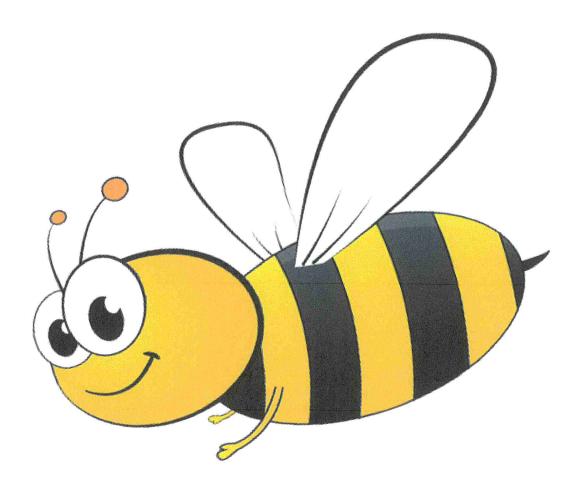
Decorate a paper lunch bag with crayons, markers, or oil pastels. Draw a triangle on the lower portion of the bag to serve as your entrance. This should be done on the side that does not have a fold. Use a pencil to poke a hole at the top point of the triangle and at one side. Poke scissors into holes to cut out the triangle along one side and along the bottom. Fold this piece over to reveal the entrance. Cut small slits across the top side of the paper bag. Open bag and then twist top. Secure with a rubber band. You may choose to tie a piece of yarn around the rubber band to add some color to the design.

Other Resources

https://www.storylineonline.net/books/knots-on-a-counting-rope/

https://www.raz-kids.com/

Many leveled books on Native Americans and/or folktales.



Learning about Honeybees



Bees on the Pumpkin Farm

Goals:

- -introduce students to basic knowledge about bees
- -compare a bee to a person
- -investigate the nest of a bee and jobs of honey bees
- -discuss the need for flowers and pollination
- -gain an understanding of the beekeeper's job

There are many bees on the Dollinger Pumpkin Farm and we are going to find out today why we absolutely need and welcome them. Visit the pumpkin farm to see our Bee Barn.

Bees fly from flower to flower looking for <u>nectar</u> and <u>pollen</u>

Nectar is a sweet juice and pollen is a powder. They take these back to their homes.

What is the name of a bee's home?

If it is something already found in nature, like a log or in a tree, it is called a <u>nest.</u> If it is home built by people, it is usually called a <u>hive</u>.





Let's begin by comparing a honeybee to ourselves...

How many eyes do you have? The honeybee has...

Five eyes!...two on their sides to see *(point with me)* front, back, above, and below & all around, three little ones on top for guiding themselves to light. Red is the one color bees cannot see.

Do you have antennae coming out of your head? :) The honeybees have... Two antennae- used for their senses of touch and smell

Look at the skin on your arm closely....what do you see? (light, fine hair)
The honeybee's body is covered with feathery hairs too. Pollen will stick to these hairs.

How many wings do you have? :) The honeybee has... Four wings...(two pairs)...they can fly up to three miles from their home...fly up to 15mph

How many legs do you have? Guess how many the bee has...(count with me..up to six!). Six legs...for walking & standing.



What do you have on your back when you come to school? (backpack). On a bee's hind legs they have something similar that can be called "little backpacks" or pollen baskets. They pack pollen here to take back to their home.



Can you stick out your tongue? Can you "roll" it to make a straw?

The honeybees have a long tongue like that (also called a proboscis) to drink nectar.



Bees also have a stinger. They don't want to sting you but if they feel scared or their home is threatened, they will... but they lose their stinger and will die shortly after.





Let's investigate the bees' home...

Have you ever heard the phrase "busy as a bee"?

There are thousands of workers at the hive..all busy doing their various jobs.

Today I'm pretending to be the **queen bee**...there is usually only one queen in a hive...when I start getting old, they may bring in another one...the queen's job is to lay eggs in the cells..2,000 eggs a day! I am very busy!

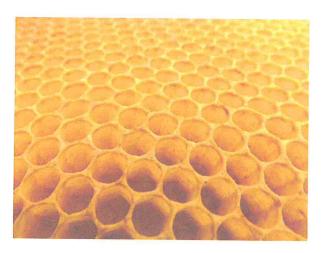


(As you talk about the types of bees, assign each job to a few students to be that type so everyone has a job in your beehive).

The **worker bees** do everything in the beehive.

Some worker bees called wax making bees work together to build and repair honeycomb from the nectar they gather. House Bees clean and polish the honeycomb cells. Honey is stored in these wax cells.

Guess the shape as I draw the honeycomb. (Hexagon)



Bees bring nectar back to the nest and pass it to the **honeymaker bees**. This bee chews and chews the nectar and turns it into honey and stores it in honeycomb. The honey is food for all the bees in the colony.



Drone bees are in the hive to work closely (mate) with the Queen so she can lay eggs in the honeycomb cells.

Nurse Bees feed the eggs that the Queen lays...they are fed "bee bread', a mixture of nectar and pollen.

A few bees are in the **Queens Court** and their job is to care for her. She only eats "royal jelly".



Guard bees will chase away strangers with their stingers. They alert others in their hive by spreading a special scent that means danger is near.

A bee is a flower's best friend. **Forager or Gathering Bees** go from flower to flower sipping nectar for honey making. Pollen sticks to the feathery hairs of the bee and is carried to other flowers...this is called <u>pollination</u>. The pollen helps the flower make the fruit and crops we eat.

This is why we need the bees on our Dollinger Pumpkin Farm to help our pumpkins form.

When their "backpacks" of pollen are full, they head back to the hive. The bees feed the pollen to their baby bees.



Bees need to visit 10,000 flowers a day to get the nectar that they need to make honey. What can we do to help bees? (plant many many flowers!)

Bees are great dancers! They are known for doing <u>special dances</u> when they return to the hive. (<u>let's stand and do these</u>)

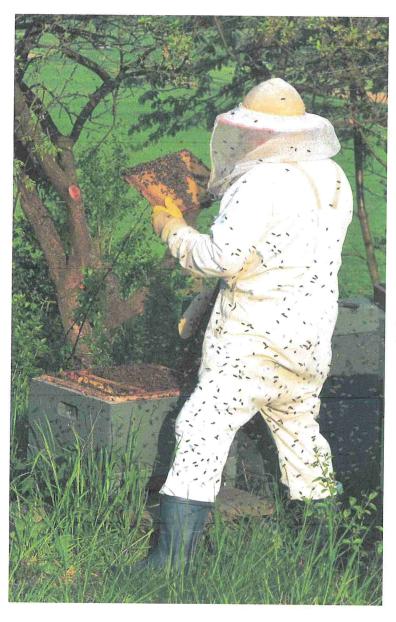
<u>Circle dance</u>- circle in one direction, turn around and circle in another direction. This tells the other bees that new flowers are nearby.

<u>Waggle dance</u>- dance in a figure eight shape and waggle in the middle. These flowers are farther away..

What is a Beekeeper?

Beekeepers provide a home for the bees called a beehive.

We have some of these beehives up on the hill on Dollinger's farm.



Beekeepers put on protective clothes (why?)

- -always white,
- -cover every part
- -long gloves up the arm with tight elastic

They gather honey from the hive but always leave honey for the bees.

They use a tool called a smoker that puts smoke in the hive.
This does not harm the bees but calms them.



When you visit
Dollinger
Pumpkin Farm,
you can go to
the Bee Barn
and see this
observation
hive, and other
tools
beekeepers will
use with their
hive.





.Possible Activities:

- -design a class flower garden together to help our local bee population. (daisy, lavender, bluebell, hollyhock, clover, etc)
- -using hexagons, make your own honeycomb
- -honeybee & flower ABC match game
- -explore life cycle of bees
- -label parts of a bee
- -investigate other bugs & insects
- -make a honeybee puppet from paper bag (tell another about life as a bee)



Suggested Books:

Esbaum, Jill. <u>HoneyBees</u>. Scholastic/National Geographic Partners, New York, NY 2017

Gibbons, Gail. The Honey Makers. Morrow Junior Books, New York, NY. 1997

Goldish, Meish. Killer Bees. Bearport Publishing, New York, New York. 2008

Loewen, Nancy. <u>Busy Buzzers: Bees in Your Backyard</u>.Picture Window Books, Minneapolis, MN, 2004

Neye, Emily. HoneyBees. Golden Books Publishing Company, New York, NY. 2002.

Peterson, Megan Cooley. <u>Look Inside a BeeHive.</u> Capstone Press, Ithaca, New York, 2012

Unstead, Sue. Amazing Bees. Penguin Random House, New York, NY. 2016











