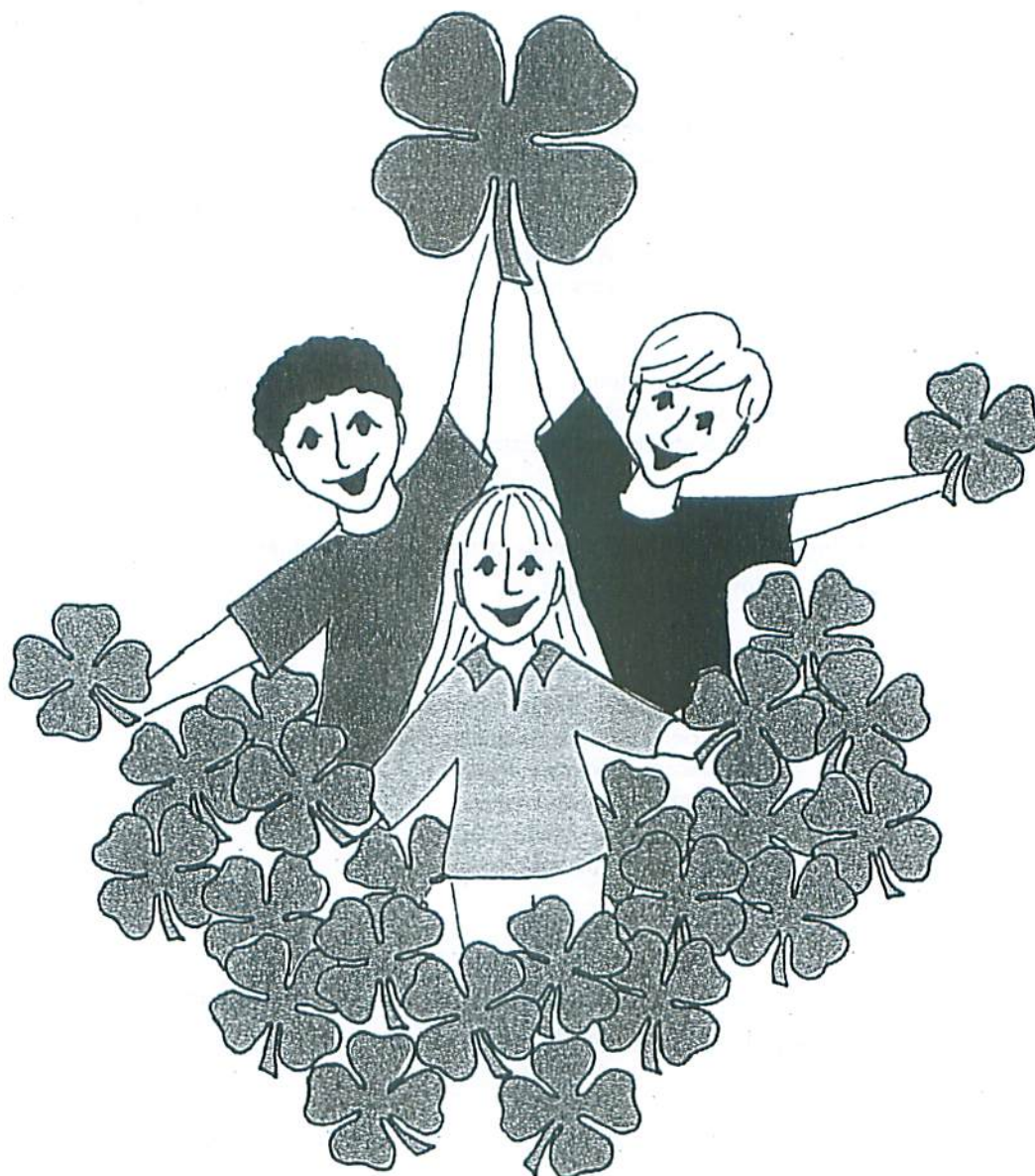


OHIO – K through 2

Cloverbud Program



Curriculum Instructional Materials

The Cloverbud Curriculum from Ohio State is older, so some of the information may be out of date. This being said, we hope you may find it a good resource to get ideas from.

– Riley County Extension

Ohio K-2 Cloverbud Curriculum

Publication of the Ohio K-2 Cloverbud curriculum was made possible through an Innovative Program Grant sponsored by Ohio State University Extension and a grant through the Ohio 4-H Foundation. This project was designed to meet the needs of youth in kindergarten through the second grade. It is an eclectic, broad based approach focusing on cooperative learning in a non-competitive environment. The following individuals have given leadership to the development of the Ohio K-2 Cloverbud curriculum:

- ☀ **Senior Writer:** Bobbie Grawemeyer, Consultant
Worthington, Ohio
- ☀ **Project Coordinator & Editor:** Gary Gibbons, Associate Professor
Ohio State University Extension
- ☀ **Curriculum Consultant & Editor:** Robert L. Horton, Ph.D.
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A special thanks to the following individuals for their involvement in the original task force which established much of the foundation for the Ohio K-2 Cloverbud curriculum:

Duane Plymale - District Specialist, 4-H
Chuck Bell - District Specialist, 4-H
Steve Joseph - County Agent
Barb Phares - County Agent
Ken Lafontaine - County Agent
Robert Horton - State Specialist, 4-H

Please note that each lesson may have a contributing author listed on the final page. Our appreciation to all faculty and staff whose creative talents helped to make this publication possible.

DEDICATION:

This publication is dedicated to the memory of Steve Joseph. We hope it will serve as a lasting reminder of his dedication and contribution of the future direction of Ohio's K-2 Cloverbud program.



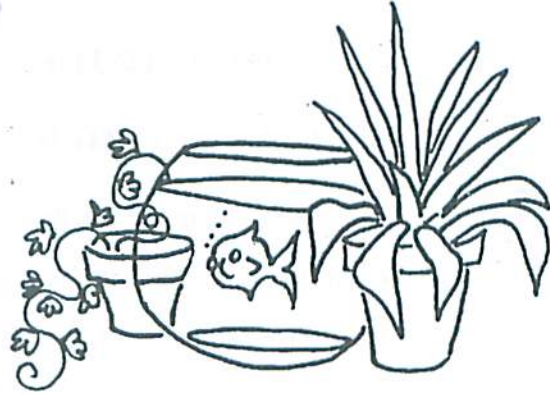
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PETS



OBJECTIVES:

- To develop an awareness of the responsibilities of owning a pet.
- To develop in children an attitude of caring and pride regarding their own pets.

GROUP SIZE:

6 to 8 children per adult volunteer.

TIME FRAME:

This lesson is designed for a group meeting between 30 and 60 minutes.

BACKGROUND:

Most children are fascinated by animals. Help develop this fascination into an attitude of responsibility and caring for their pets. Through the games and activities children will learn about different kinds of pets and the care they require. Children will have fun and develop a sense of pride and responsibility by participating in the pet parade and show. Encourage children to appreciate how special it is to own a pet.

LIFE SKILL AREAS

Children will develop social skills through the group discussions and by taking part in the team relay game. Decision making skills will be developed through discussions about choices concerning pets and their care. Large motor skills will be developed through active games. Small motor skills and eye-hand coordination will be developed by constructing a "pet" using scissors, glue and markers.

HELPS TO THE VOLUNTEER

Try these suggestions:

- Choose one or two of the following activities from each section.
- Try to create appropriate atmosphere by decorating the room with posters and props, using costumes related to the activity, pre-meeting preparation by the 4-H members, thinking about special seating arrangements, and playing background music.



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Author: Bobbie Grawemeyer
Contributing Author: Vicki L. Reed, Extension Agent, Muskingum County

LEARNING ACTIVITIES

I. GETTING STARTED

☼ ACTIVITY "What's In The Bag" (3 - 5 minutes)

Grade Level: K - 2

Materials: A pillow case filled with pet items such as dog bones, pet toys, fish net, water bottle or bowl.

Pass the pillow case around and ask the children to feel inside without peeking. Ask them to see if they can guess what the items are and what they have in common. Ask them to keep their ideas to themselves until everyone has had a chance to feel inside the pillow case. When everyone has had an opportunity to feel the items, ask what kinds of things they felt. Give them clues and hints to help them discover what the items have in common.



Application: Ask the children to look at home for different kinds of pet items. How many can they find? What are they used for? If the child has no pets at home, encourage them to look at a friend's home or in the grocery store where pet food is displayed.

☼ ACTIVITY "Pet Survey" (4 - 6 minutes)

Grade Level: K - 2

Materials: Large piece of paper, marker.

Write "PETS" at the top of the paper. Tell the children you want to do a survey of all the different kinds of pets that they own. Ask each child what pets they have at home. Make a list of the different animals and their names on the paper. After each child tells about their pet, ask the rest of the group to tell you, by a show of hands, how many have the same kind of pet. Record this number by making check marks opposite the animal's name on the paper. Talk about the following:

- Which type of pet is the most common?
- What are the names of the pets?
- What is special about each pet?

Application: Encourage the children to be aware of the different pets their friends and neighbors have.

- What kind of pet is the most common?
- Why do you think so?



☀️ ACTIVITY "You're Acting Like an Animal!" (5 -7 minutes)

Grade Level: K - 2

Materials: None.

Ask the children to think about all the different ways they have seen animals act. What happens when they are scared, tired, hungry or excited? Invite the children as a group to use their wildest imaginations and act out how they think the following animals would act:

- a happy cat
- a hot dog
- a hungry fish
- an angry cat
- an excited hamster
- an angry dog
- a scared horse`
- a frightened bird
- an angry parakeet
- a tired bunny



Application: Ask the children to observe their pets and see if they can determine what a pet is feeling or what they need by the way the pet is behaving.

II. DIGGING DEEPER

☀️ ACTIVITY "Pet Riddles" (3 -5 minutes)

Grade Level: K - 2

Materials: None.

Ask the children to put on their thinking caps and see if they can figure out the following pets:

- I sleep in the day and like to stuff my mouth. (hamster)
- I have 9 lives. (cat)
- I can whistle and I like to preen my feathers. (bird)
- I wag my tail when I'm happy. (dog)
- I like to sun myself and carry my own house on my back. (turtle)
- I use gills to breathe. (fish)
- I can change colors to camouflage myself. (chameleon)
- I shed my skin and have no legs. (snake)
- I eat hay and am strong enough for you to ride on me. (horse)

Note to the Volunteer: Have the children make extra spinners to use in the Art Exhibit and Cloverbud Display lessons in the subject area of Community Expressive Arts.

❁ **ACTIVITY** Fingerplay "There Was a Little Turtle" (3 to 5 minutes)

Grade Level: K - 2

Materials: None.

Enjoy this fingerplay with the children.

"There Was a Little Turtle"
by Vachel Lindsay

- There was a little turtle. (make small circle with hands)
- He lived in a box. (shape hands into a square)
- He swam in a puddle. (put hands on top of each other and "paddle" thumbs)
- He climbed on the rocks. (use fingers of one hand to crawl onto the other)

- He snapped at a mosquito. (clap)
- He snapped at a flea. (clap)
- He snapped at a minnow. (clap)
- He snapped at me! (clap)

- He caught the mosquito. (grab, and snap hands shut)
- He caught the flea. (grab, and snap hands shut)
- He caught the minnow. (grab, and snap hands shut)
- But he didn't catch me! (wag pointer finger, then touch chest with finger)

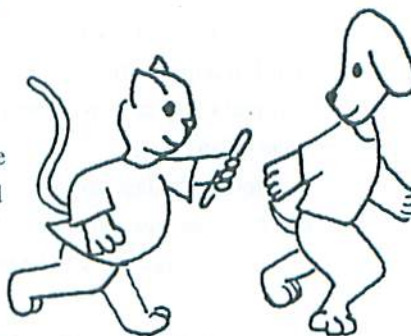
❁ **ACTIVITY:** "Animal Relay" (6 to 8 minutes)

Grade Level: K - 2

Materials: None.

Divide the group into teams of six or less. Explain that the teams will be doing a relay. Each team member will move in a special "animal" way to the other end of the room and back.

Line the teams up. Have the first child in each line hop like a rabbit to the end of the room and back. The second child will walk like a crab; the third child will waddle like a duck. Repeat the sequence until all children have had a turn. Emphasize that this is not a race or contest; there will be no winners or losers. Encourage all team members to clap and cheer for everyone. When everyone is finished, have the group give themselves a standing ovation!



Application: Ask the children to think about all the ways animals move. Encourage them to observe their pets at home and animals outside or at the zoo.

III. LOOKING WITHIN

ACTIVITY "Create a Pet" (9- 11 minutes)

Grade Level: K - 2

Materials: Newspaper, shoe boxes, paper rolls, milk cartons, yarn, masking tape, construction paper, scissors and glue.

Ask the children to use their imaginations and creativity to make an imaginary pet. Let them decide how many legs, tails and even heads it has! Help them roll newspaper into shapes and secure it with masking tape. Encourage them to use the boxes, yarn, and paper rolls and construction paper any way they wish to complete their pet. Ask them to think of a name of their pet as they make it.



Note to the Volunteer: Have the children make extra "pets" to use in the Art Exhibit and Cloverbud Display lessons in the subject area of Community Expressive Arts.

Application: Ask the children to use their imaginations to make something for a pet. Would a kitten enjoy a special box to play in? Would a dog play with a new toy?

ACTIVITY "Pet Parade and Show" (10 - 15 minutes)

Grade Level: K - 2

Materials: "Pets" for each child (one they have made, or a stuffed animal from home), a record or tape player, and music selections with an animal theme.

Help the "pets" and their owners line up; start the music and let the parade begin! Encourage the children to march around the room to the beat of the music. When the music ends, have the children line their pets up and, one by one, introduce them. Have them demonstrate "tricks," or share any special stories or information about their "pets."



ACTIVITY "Awards Ceremony" (7 - 9 minutes)

Grade Level: K - 2

Materials: Award "ribbons" made from construction paper (one for each child), a marker, and a camera.

Before beginning, fill out an award ribbon for each child. Everyone will win first place in something (biggest, cutest, funniest, etc.). Gather the children in a circle and have them sit with their "pets." Congratulate them for the great job on the pet parade and pet show. Provide lots of positive feedback about their pets. Present each with their ribbon and a handshake. Take a group photo after everyone has received their award.

Application: Encourage children to take pride in their pets at home by grooming them and keeping where they live clean and comfortable.



IV. BRINGING CLOSURE

 **ACTIVITY** Song "Old MacDonald Variation" (5- 7 minutes)

Grade Level: K - 2

Materials: None.

Everybody knows this old favorite! Substitute children's first and last names for "MacDonald" and ask them to supply the name of a pet. Make sure each child gets to lead a verse of the song!

Old (childs' first and last name) had a farm.

E - I - E - I - O!

And on his farm he had a (child's choice of pet) .

E - I - E - I - O!

With a (sound) (sound) here

And a (sound) (sound) there

Here a (sound) there a (sound)

Everywhere a (sound) (sound)

Old (childs' first and last name) had a farm.

E - I - E - I - O!



V. GOING BEYOND

- 1 Visit a pet shop. Ask the shopkeeper to show you different kinds of pets and what is needed to care for them.
- 2 Make a pet collage. Cut out pictures of animals from magazines and calendars. Glue the pictures to a piece of construction paper. Give your pets names and write their names on the paper.

Reading Adventures

This listing of reading materials can be used by you as background, or for sharing before to set the stage for the lesson or for sharing afterwards to reinforce the lesson.

Pet Show! by Ezra Jack Keats

Sesame Street Pet Show, by Emily Perl Kingsley

Our Feathered Friends

OBJECTIVES:

- To develop an interest in local birds and their habits.
- To develop an attitude of caring towards birds and all animals.

GROUP SIZE:

6 to 8 children per adult volunteer.

TIME FRAME:

This lesson is designed for a group meeting between 30 and 60 minutes.

BACKGROUND:

Help children become familiar with local birds and develop an attitude of caring toward them. Have the children take a hike to identify birds by appearance and song. Encourage an interest in avian feeding habits by making bird feeders.



LIFE SKILL AREAS

Social skills and decision making will be developed through group games and discussions. Gross motor skills will be developed by playing group games.

Fine motor skills will be developed by tearing paper for the collage and using their fingers to manipulate nesting materials.

HELPS TO THE VOLUNTEER

Try these suggestions:

- Choose one or two of the following activities from each section.
- Try to create appropriate atmosphere by decorating the room with posters and props, using costumes related to the activity, pre-meeting preparation by the 4-H members, thinking about special seating arrangements, and playing background music.



LEARNING ACTIVITIES

1. GETTING STARTED

ACTIVITY "What's Missing?" (4 - 6 minutes)

Grade Level: K - 2

Materials: A tray with a Field Guide to Birds, a piece of bread, sandwich bag of bird seed, a feather, piece of string, an eggshell, any other item related to birds, and a dish towel.

Let the children examine the tray. Identify the objects by name and ask if anyone knows what the items have in common. If necessary, tell them the items are all related to birds. Encourage them to play a game to see how good their memories are. Let them study the tray for a minute or so and then "secretly" take away one item. See if anyone can remember what it was. Let the children take turns removing the objects.

Application: Ask the children to think of other items they have seen that are also related to birds.



ACTIVITY "Bird Identification Hike" (4 - 6 minutes)

Grade Level: K - 2

Materials: A bird identification book such as "Peterson's Field Guide to Birds," binoculars, paper, pencil.

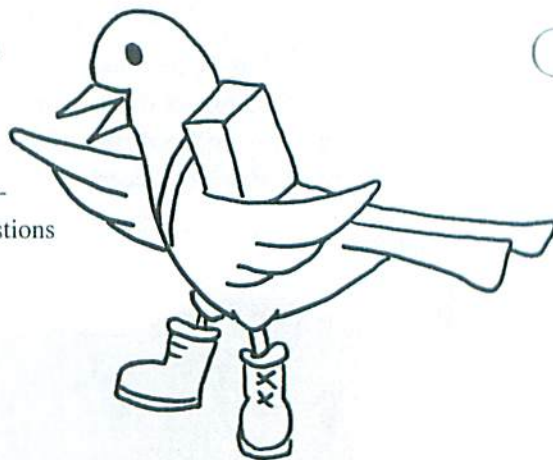
Ask the children to think of all the birds they see every-day. Can they identify them by name? Help out by showing pictures of common birds in the field guide. Ask questions about what they know about these birds such as:

- Where do you see them?
- Where do they live?
- What do they eat?
- Do you know their song?

Share information from the book on a few of the birds the children know.

Take a walk outside, looking for some of the birds you have talked about. Let the children take turns looking through the binoculars. Record the kinds of birds you see.

Application: Ask the children to see how many different kinds of birds they can identify the next time they go for a walk.



II. DIGGING DEEPER

☀️ **ACTIVITY** "Pinecone Bird Feeders" (7 -9 minutes)

Grade Level: K - 2

Materials: Large pinecones, peanut butter, mixed bird seed, scissors, string, wax paper.

Birds will love this treat! Give each child a pinecone and instruct them to cover it with peanut butter, inside and out. Make sure they roll up their sleeves since this can get messy! When the pinecone is covered with peanut butter, roll it in the bird seed, taking care to cover it with as much seed as possible. Help the children tie a string to the end and it's ready to hang outside! Wrap in wax paper for the trip home.

Application: Encourage the children to watch the birds in their yards. What kinds of things do they eat? Do animals other than birds come to their bird feeder?

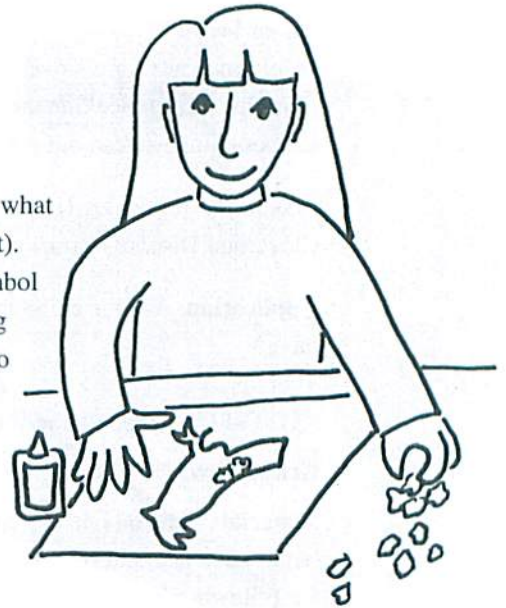
☀️ **ACTIVITY** "Cardinal Collage" (6 -8 minutes)

Grade Level: K - 2

Materials: White, red, black and yellow construction paper, glue and cardinal pattern.

Ask if anyone knows anything about cardinals. Ask what color they are, what they eat (berries, seeds) and what the pointed thing is on their head (a tuft). Point out that the cardinal is the state bird of Ohio. That means it's a symbol of our state. Encourage the children to make a cardinal collage by tearing bits of red paper into pieces about the size of a nickel. Show them how to spread the glue on the outlined cardinal and stick the little pieces of paper to it. Help them finish their picture by tearing tiny pieces of black for the eyes and area around the bill. Use one piece of yellow for the beak, and long thin strips of yellow for the legs.

Application: Ask the children to be on the look out for their state bird anytime they are outside and see if they can hear his "song."



☀️ **ACTIVITY:** Duck, Duck, Goose" (5 to 7 minutes)

Grade Level: K - 2

Materials: None.

Have the children sit in a large circle on the floor. Select one child to begin the game by going around the outside of the circle, saying "duck" as he taps each head. At some point he will say "goose" instead of "duck." This will be the signal for the "goose" to get up and chase the "duck" around the circle. If he makes it around the circle and back to the "goose's" place, he may sit and the new "goose" continues the game; however, if he is caught, he must try again. Encourage the "tappers" to choose a "goose" who has not been chosen yet. Play until everyone has had a turn.

III. LOOKING WITHIN

☀️ **ACTIVITY** "Where They Live: Make a Bird Nest" (7 to 9 minutes)

Grade Level: K - 2

Materials: Dirt or potting soil, straw, small twigs, grass, string, dryer lint, dried leaves, other natural materials, water, newspaper, large pan.

Birds live in a variety of settings and build many different kinds of nests. One of the most common is known as a "cup" nest because of its shape. Many familiar birds build this type of nest, including robins and cardinals. Encourage the children to try building a nest, just like the birds do. Help the children mix the soil with a small amount of water to make thick mud. Let them choose from the other materials to mix with the mud. Help them form their nests into the shape of a cup. As they work, share these fun facts about birds:

- Woodpeckers dig out nesting holes inside dead tree trunks.
- Robins finish the insides of their nests with a layer of mud, smearing it around with their breasts.
- Goldfinch nests are woven so tightly that they can hold water.
- Orioles and titmice line their nests entirely with animal hair.
- A hummingbird can build an entire nest in three hours.

Note to the Volunteer: Have the children make extra examples to use in the Art Exhibit and Cloverbud Display lessons in the subject area of Community Expressive Arts.

Application: Ask the children to look for bird nests near their homes. Can they identify who lives there?

☀️ **ACTIVITY** "Feeding the Birds: They Like Peanut Butter Too!" (7- 9 minutes)

Grade Level: K - 2

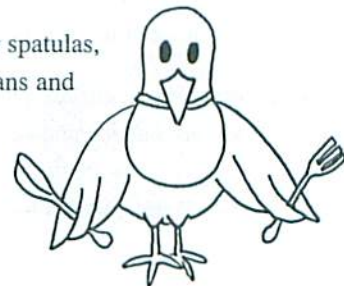
Materials: Several one cup measures, mixing bowl, wooden spoons or spatulas, large sauce pan, hot plate or stove, empty tuna fish or small cat food cans and the following ingredients:

- 2 cups ground white beef suet (available from the butcher)
- 1 cup peanut butter
- 2 cups yellow corn meal
- 2 cups fine cracked corn (available at feed or pet stores)

This recipe will fill 4 to 6 cans; double or triple the recipe as needed.

Birds enjoy special treats, particularly in the winter when food is not as plentiful as in other times of the year. This recipe will help provide nourishment necessary for winter survival. Chickadees and cardinals are two birds you are likely to attract to this bird banquet! Ask the children to measure the suet into the sauce pan. Carefully assist them in stirring and mixing as it melts over heat. Add the peanut butter, stirring to mix it thoroughly. Have the children measure out the corn meal and cracked corn into the bowl. When the heated mixture cools and thickens a bit, pour in the dry ingredients, mixing well. Let each child pour some into their can. Let them cool until hardened. Let the children place them in their backyards and see who comes to dinner.

Application: Ask the children to observe what kinds of birds enjoy this peanut buttery treat!



R

IV. BRINGING CLOSURE

★ ACTIVITY Finger Play "One Little Birdie" (7 - 9 minutes)

Grade Level: K - 2

Materials: None.

Share the following finger play with the group. Try leaving off the last word of each couplet to see if they can guess it!

One little birdie who knew just what to do	(hold up one finger)
He called to his friend, then there were two!	(two fingers)
Two little birdies happy as could be	
Another came to join them, then there were three!	(three fingers)
Three little birdies wishing there were more	
Along came another, then there were four!	(four fingers)
Four little birdies so glad to be alive	
They invited one more friend, then there were five!	(five fingers)

Application: Ask the children to see how many birds they can count in one tree or on one telephone wire when they are outside.

V. GOING BEYOND

- 1 Invite a 4-H member to bring a pet bird to share. Have the children observe it. What does it eat? What does it like to do? Is it tame? Encourage the owner to talk about having a bird for a pet and what care needs to be given on a daily basis.
- 2 Visit a pet shop. Ask the owner to show you birds that are commonly purchased for pets. What kinds of supplies are needed to keep a bird? What is the cost involved? Is it easy to raise baby birds? What kinds of "exotic" birds can be sold? Where do they come from?

Reading Adventures

This listing of reading materials can be used by you as background, or for sharing before to set the stage for the lesson or for sharing afterwards to reinforce the lesson.

The Wish Workers, by Alikei

Baby Birds and How They Grow, by Jane McCauley

Horton Hatches the Egg, by Dr. Seuss

Bird's Nest, by Barrie Watts

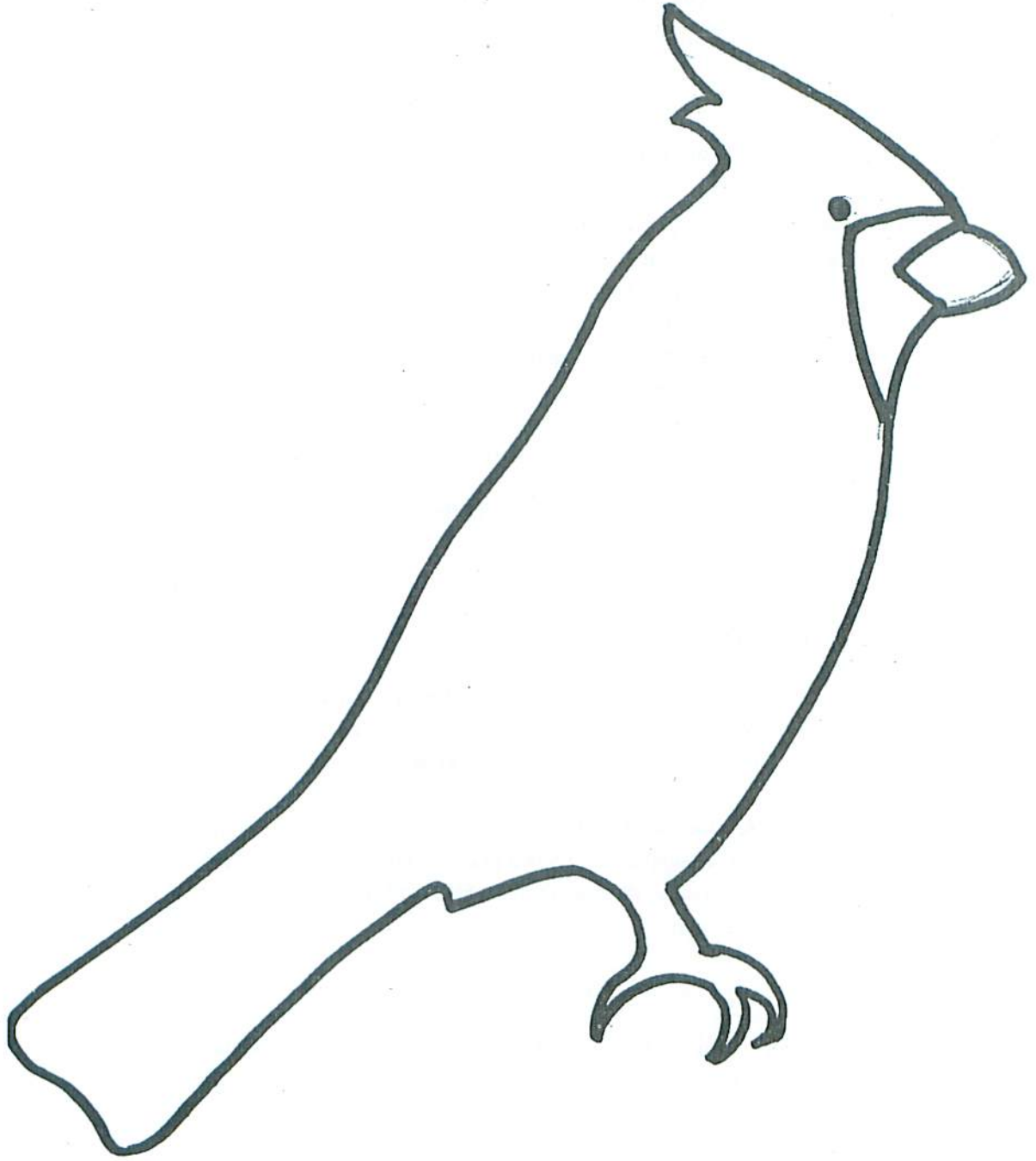
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Super Seed Fun

OBJECTIVES:

- To learn what seeds need to grow.
- To observe how seeds can travel.
- To learn about seeds we eat.

GROUP SIZE:

6 to 8 children per adult volunteer.

TIME FRAME:

This lesson is designed for a group meeting between 30 and 60 minutes.

BACKGROUND:

Guide the children through these activities and help them discover all about seeds: what kinds of things grow from them, what they need to grow, how they travel, and the kinds of seeds we can eat.



Super Seed Fun

LIFE SKILL AREAS

The group games and discussions are a good way for children to develop social skills. Decision making opportunities will be provided by the hands on activities and experiments. Eye hand coordination and small motor skills can be developed through the use of scissors and manipulating materials. Large motor skill practice will be provided through participation in the games.

HELPS TO THE VOLUNTEER

Try these suggestions:

- Choose one or two of the following activities from each section.
- Try to create appropriate atmosphere by decorating the room with posters and props, using costumes related to the activity, pre-meeting preparation by the 4-H members, thinking about special seating arrangements, and playing background music.

Plants & Animals
Group Size: 6-8 children
per adult volunteer



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LEARNING ACTIVITIES

1. GETTING STARTED

★ ACTIVITY "How Are They Alike" (3 - 5 minutes)

Grade Level: K - 2

Materials: Tray, apple, leaf, flower, a large piece of newsprint or construction paper, a marker and tape.

Show the children a tray with a flower, an apple, and a leaf from a tree on it. Ask what these three things have in common. Use open ended questions to help them discover that the items all come from seeds. Ask them to think of other things that grow from seeds. Make a list and tape the list to the wall.

★ ACTIVITY "What Grows From Seeds?" (4 - 6 minutes)

Grade Level: K - 2

Materials: None.

Play a game to help children distinguish between things that grow from seeds and things that do not. Ask the children to listen carefully. When the name of an item that grows from a seed is called, they should stand up. When the name of an item that does not come from a seed is mentioned, they should sit down. Provide clues or hints for items they are hesitant to identify.

Suggested List of Items

cotton balls • wooden table • bale of straw • carrots • spoons • oak trees • shoes
oranges • door knobs • pumpkins • pencils • roses • toothbrushes
hot chocolate • lunch boxes • tomatoes • beans • strawberries • pine trees

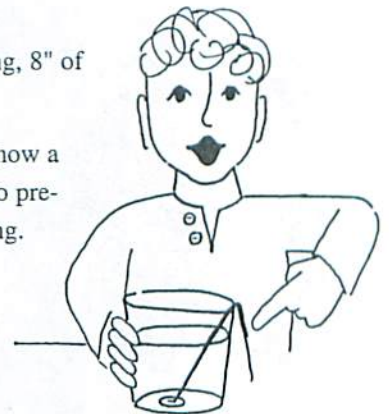
Application: Look through your house. Can you find other items that started out as a seed?

★ ACTIVITY "Seeds Have Needs: An Experiment with Water" (3 - 5 minutes)

Grade Level: K - 2

Materials: A weed with roots, clear glass jar or cup, water, food coloring, 8" of 100% cotton yarn or heavy string and a metal washer.

Show the weed to the children. Point out the roots. Explain that this is how a plant gets water, and that all seeds must have water to grow. Tell them to pretend that the cotton string is a root. Tie the washer to the end of the string. Fill the glass jar with about one inch of water. Mix in one half teaspoon of food coloring. Carefully place the washer end of the string into the water. Drape the other end of the string over the side of the glass jar. Watch the string. What happens to the "root?" Water travels up the string. Because the water has been colored, it is easy to see it move up. Roots absorb water from the soil. The water travels up through the roots to the rest of the plant.



Application: Plants that have enough water look firm and green. Look around.

- Can you see plants that are getting enough water?
- Can you see any that aren't?
- What happens if plants don't get enough water?

❁ ACTIVITY: Song "I'm A Little Seed Pod" (3 to 5 minutes)

Grade Level: K - 2

Materials: None.

Teach the following song, encouraging children to do the corresponding actions.

I'm A Little Seed Pod
(sung to the tune of "I'm A Little Teapot")

I'm a little seed pod Ready to grow	(hold out hands, palms up, as if you are holding seeds)
Plant me in the soil And watch me grow	(pretend to plant and cover with soil)
I need lots of water And bright sunshine	(hold hands up, wiggle fingers, and lower hands slowly; put arms up over head and clasp hands, making a circle)
When I have all of these I'll grow just fine	(cup one hand around fist of other hand and move fist up, opening hand)



II. DIGGING DEEPER

❁ ACTIVITY "Seed Mosaic" (7 - 9 minutes)

Grade Level: K - 2

Materials: Various kinds of seeds (sunflower, grass, bird seed, etc.), construction paper, glue

Give each child a piece of paper. Let them create a design using different seeds. Encourage them to experiment with the shapes and colors of the seeds.

Note to the Volunteer: Have the children make extra mosaics to use in the Art Exhibit and Cloverbud Display lessons in the subject area of Community Expressive Arts.

ACTIVITY "How Do Seeds Travel?" (5 - 7 minutes)

Grade Level: K - 2

Materials: Maple seed, seed pods or "helicopters", piece of 8 1/2 x 11" paper, scissors, and a large paper clip.



Note to the Volunteer: This activity is most effective when done in the fall after plants have gone to seed.

Show the seeds to the group. Demonstrate how they "fly." Have each child try it. Open one up and expose the seed. Explain that if the seed lands in just the right spot after its flight, it will open up, sending roots into the soil. If the conditions are good, a tiny new maple tree will begin to grow.

Help the children make a paper "helicopter" that flies by using the same principle as the maple tree seeds. Cut the paper in half lengthwise. Fold it lengthwise. Fold it lengthwise again. Now fold it in half (each half will measure about four inches). Fold each half so that the paper looks like the letter "M". Attach a paper clip to the bottom in the center to give your helicopter some weight. Now take it outside (or into a room with a very high ceiling) and toss it up in the air. Watch it turn and spin as it floats down. After everyone has had a chance to "fly" their "helicopter" ask the following questions:

- What happened when you threw your helicopter in the air?
- If it didn't work, were you able to make adjustments so that it would?
- Did it travel very far?
- What do you think would happen if you threw it into a strong wind?
- What would happen if you removed the paper clip?
- Can you think of other ways seeds travel?

Application: When you go outside, look for other examples of seed travelers. Some blow in the wind; others "hitchhike." How many can you find?

ACTIVITY "Sunshine and Rain Help Us Grow" Creative Movement (5 - 7 minutes)

Grade Level: K - 2

Materials: Record or tape player, slow instrumental music, and a sprayer or mist bottle with water.

In this creative movement activity the children will "grow" from a seed into a flower, fruit, or vegetable. Tell them to think of what they want to grow into but to keep it a secret until they are "fully grown." Ask the children to crouch down and become a tiny seed pod. Remind them that seeds need sunlight and water to grow and that they grow very, very slowly. Turn down the lights. Start the music. Tell them the sun is coming out as you turn up the lights. Encourage the "seeds" to start growing. Walk through the "garden" and lightly spray them with water. When they have finished growing, ask each child what flower, fruit, or vegetable they have grown up to be.

Application: Look at seeds as they sprout, in a garden or in fields of crops.

- What happens when there is not enough rain?
- What if there is too much rain?

III. LOOKING WITHIN

☀️ **ACTIVITY** "Seed Sprouts: Does Light Make a Difference" (3 - 5 minutes)

Grade Level: K - 2

Materials: Sandwich bags, paper towels, navy beans, permanent marker, and a sprayer or mist bottle with water.

Give each child two bags, two paper towels, and six to eight navy beans. Help them label their bags. Label one bag "with light" and label the other bag "without light." Fold the paper towels to fit inside each bag. Spray with water until the paper towels are saturated. Place several seeds in each bag. Seal the bags. Ask the children to take the bags home; tape one to a window and put the other one in a closet or somewhere with no light. Keep the paper towels damp. Check on the seeds daily. What happens?

Application: Take a grown-up on a walk with you. Look under rocks or logs for seeds that have sprouted without the help of sunlight.

- What do they look like?
- What do you think will happen if they are kept in the sun?

☀️ **ACTIVITY** "Fruity Prints" (7 - 9 minutes)

Grade Level: K - 2

Materials: Newspaper, slices of apples, oranges or lemons, several colors of tempera paint, styrofoam meat trays, and construction paper.

Let the children examine the fruit slices. Point out the seeds. Invite the children to make prints using the slices. Pour the paint onto the styrofoam trays. Dip the fruit into the paint, wiping the excess off. Print on the construction paper. Encourage children to experiment with color and pattern. Look at the prints. Can you tell what kind of fruit it is?

Note to the Volunteer: Have the children make extra prints to use in the Art Exhibit and Cloverbud Display lessons in the subject area of Community Expressive Arts.

Application: The next time you eat a piece of fruit, look for the seeds.

- Do all fruits have seeds that you can see?
- Are there seeds in some fruits that you can eat?



☀️ **ACTIVITY** "A Sweet and Seedy Snack" (6 - 8 minutes)

Grade Level: K - 2

Materials: Equal amounts of sunflower seeds (shelled), honey, peanut butter, cocoa powder, one box of sesame seeds; bowl, spatula, wooden spoon, mixing cups, wax paper.

Make sure that the children wash their hands before making this yummy snack! Mix equal parts of all of the ingredients except the sesame seeds. Using your hands, roll into balls about one inch in diameter; place on the wax paper. Roll in sesame seeds and enjoy!

Application: Look at the grocery store for other examples of seeds we eat. Some are eaten whole like shelled sunflower seeds and sesame seeds. Others are ground up to use in cooking and baking. How many can you find?



IV. BRINGING CLOSURE



ACTIVITY: "An Alphabet Game"

Grade Level: K - 2

Materials: None.

Play an alphabet game using names of things that grow from seeds. Let the children think of flowers, fruits, vegetables or trees that start with each letter of the alphabet. Have the children sit in a circle. The first child thinks of something that starts with the letter "A". Continue around the circle, going through the alphabet. When the group has completed all of the alphabet, go around the circle again and see if the children can remember each item.

V. GOING BEYOND

1. Go on a hike through a field or wooded area with a friend. See how many different kinds of seeds stick to your clothing. After the hike, review the seeds and examine them. Can you tell what kind of plant they came from?
2. Make a leaf collection. Look for different kinds of leaves from trees. Mount them on paper and draw outlines. Using a tree identification book, see if you can correctly name the trees that your leaves fell from.

Reading Adventures

This listing of reading materials can be used by you as background, or for sharing before to set the stage for the lesson or for sharing afterwards to reinforce the lesson.

The Tiny Seed, by Eric Carle

From Seed to Plant, by Gail Gibbons

The Carrot Seed, by Ruth Kraus