

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:

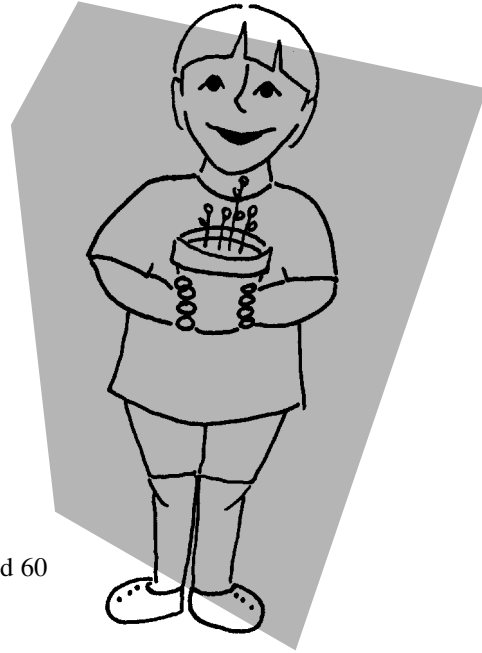
6 to 8 children per adult volunteer.

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.



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 VOLUNTEERS

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:

I. GETTING STARTED

☀ **ACTIVITY:** "How Are They Alike" (3 - 5 minutes)

Grade Level: K - 3

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 - 3

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

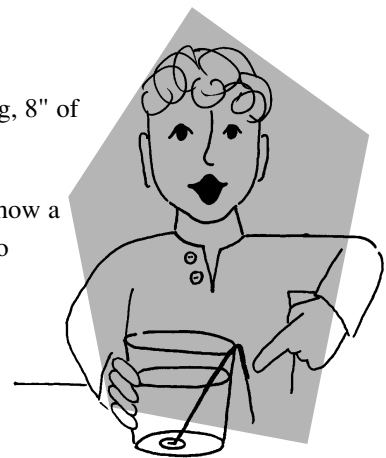
Application: Look through your house. Can you find other items that started out as a seed?

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

Grade Level: K - 3

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 - 5 minutes)

Grade Level: K - 3

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")

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

☀ **ACTIVITY:** "Seed Mosaic" (7 - 9 minutes)

Grade Level: K - 3

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.

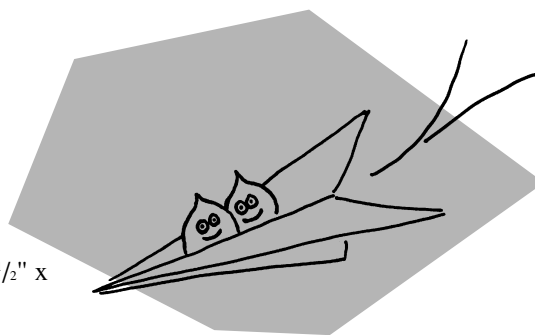
Note to the Volunteer: Have the children make extra mosaics to use in the Art Exhibit and Cloverbud Display lessons in the subject area of Community Expressive Arts.



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

Grade Level: K - 3

Materials: maple seed, seed pods or "helicopters," piece of 8½" x 11" paper, scissors, and a large paper clip.



Advisor's note: 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 - 3

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 - 3

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 - 3

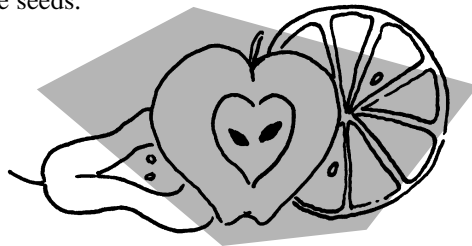
Materials: newspaper, slices of apples, oranges or lemons, several colors of tempera paint, styrofoam meat trays, and construction paper.

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 - 3

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?



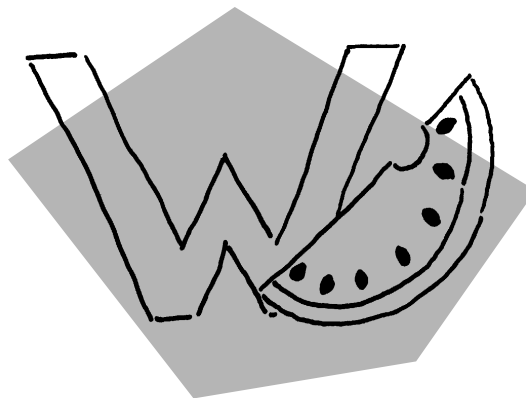
IV. BRINGING CLOSURE



ACTIVITY: "An Alphabet Game"

Grade Level: K - 3

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