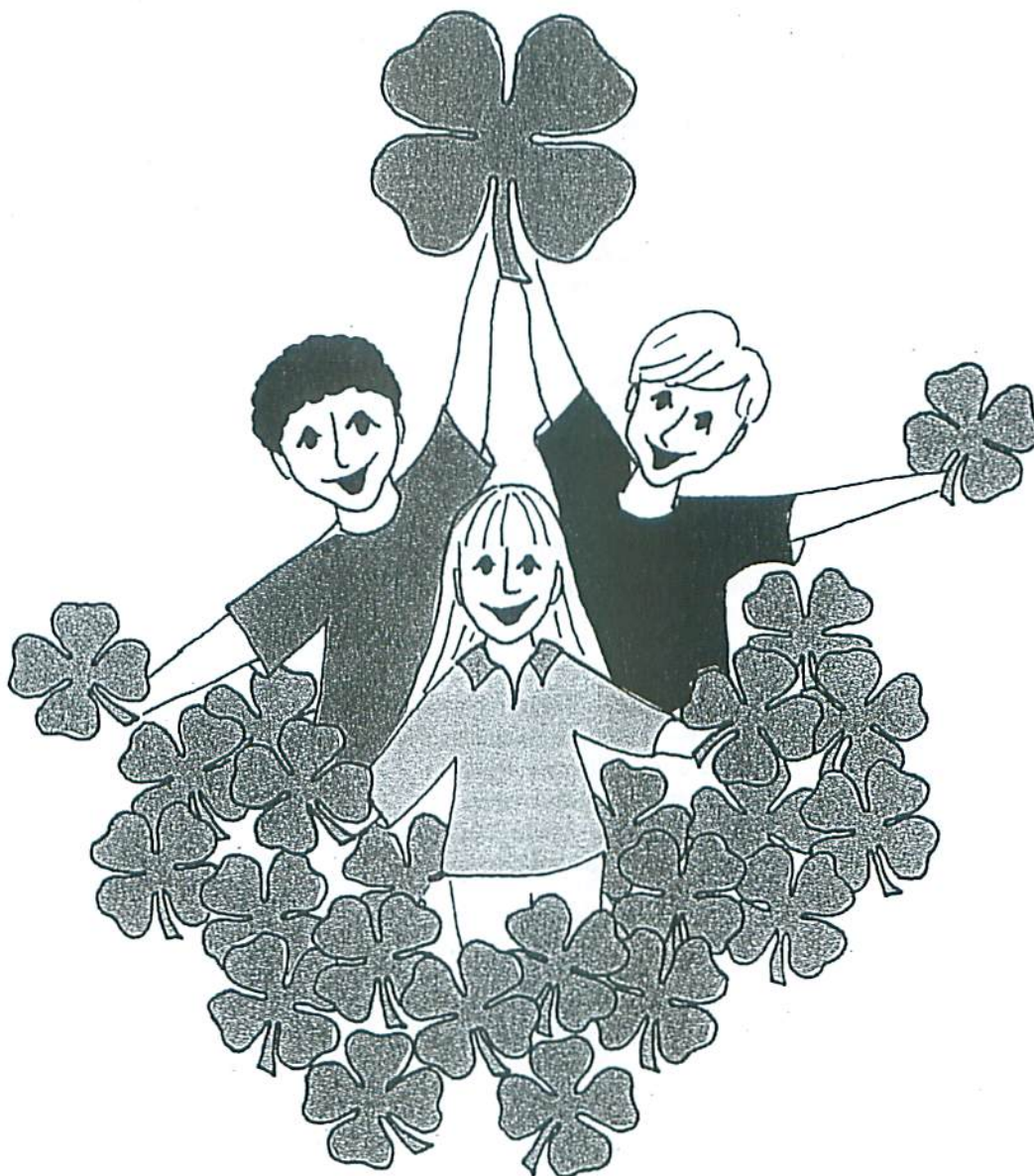


OHIO – K through 2

# 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The Cloverbud Curriculum from Ohio State is older, so some of the information may be out of date.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.  
Assistant Professor  
Ohio State University Extension

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.



 For-sale publication

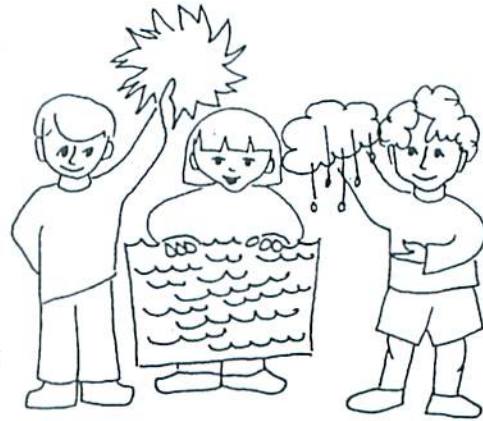
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Keith L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension

TDD No. 800-589-8292 (Ohio only) or 614-292-1868

Reprinted 11/03—1.5M—206348

# Weather Fun



## OBJECTIVES:

- To understand basic weather concepts.
- To be aware of how weather changes affect daily decisions on the clothing we wear and the activities we can do.
- To realize the importance of weather safety.

## 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 discover the importance of weather and seasonal changes. The games, activities and hands-on experiences are designed to teach basic weather concepts and to help develop respect for weather safety.

### LIFE SKILL AREAS

Group discussion, games and role playing will help develop social skills. Opportunities for developing decision making skills will be provided by the games. Cutting and making weather related items will provide practice in fine motor skills and eye-hand coordination. Large motor development will be fostered by the creative movement activity and snowball game.

### 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 "Weather Mystery Bags" (4 - 6 minutes)

**Grade Level:** K - 2

**Materials:** Two grocery bags ("mystery bags") - one with a weather forecast and map from the daily paper and the other with a variety of items associated with different kinds of weather (umbrella, sunglasses, mittens, boots, sunblock, fan).

Gather the group into a circle. Show them the first mystery bag. Tell them the mystery item has something to do with weather. Ask them to guess what it is. Give clues until someone guesses correctly. Show them the weather map and forecast. See if they can name different kinds of information included in the weather report. Ask them to describe today's weather.

Show the second mystery bag. Randomly select children to pull out an item and tell what kind of weather the item would be used for. Encourage them to think creatively by asking them questions such as "Are sunglasses worn only in the summer?" or "Is there another kind of weather condition that an umbrella could be used for?"

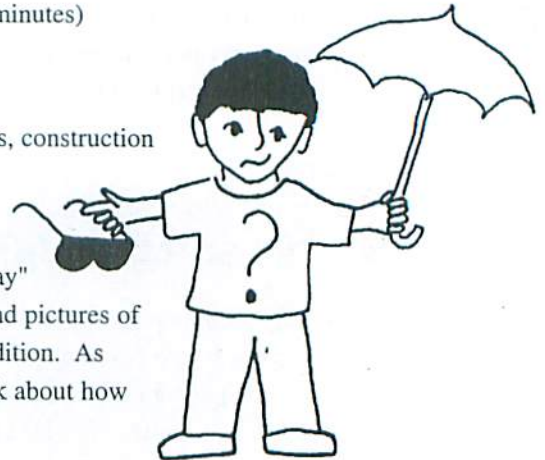
**Application:** Ask the children to think about other examples of items that we use for different weather conditions. Encourage them to be on the lookout for examples at home, school, at the store, and when outside.

#### ACTIVITY "What Should I Wear Today?" (8 - 10 minutes)

**Grade Level:** K - 2

**Materials:** Old clothing catalogs, magazines, scissors, construction paper and glue.

Fold the construction paper in half. Label the top of one side "It's Cold Today." Write "It's Not Cold Today" on the other side of the paper. Ask the children to find pictures of clothing that would be suitable for each weather condition. As they cut out and glue the pictures on their papers, talk about how weather affects what we wear.



*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:** Encourage the children to read the weather forecast for the week and think about the types of clothing they might need for each day.

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Keth L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension

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Curriculum Consultant & Editor: Robert L. Horton, Ph.D., Assistant Professor, Ohio State University Extension

Author: Bobbie Grawmeyer  
Contributing Author: Julie Dalzell, Extension Agent, Butler County

☀ **ACTIVITY** "Safe or Not Safe" Weather Safety Game (6 - 8 minutes)

✓ **Grade Level:** K - 2

**Materials:** None.

Tell the children you are going to read some situations regarding the weather. When they hear an action that is true about weather safety they will jump and shout "That's Safe!" When they hear a statement that is false they will sit down and shout "Not Safe!" Discuss each example, asking the children to tell why the statements are true (+) or false (-).

**Safe or Not Safe**

- Talking on the phone when there is thunder and lightening (-)
- Putting sunscreen on before going out in the sun (+)
- Playing outside during a tornado warning (-)
- Standing under a tree during a thunderstorm (-)
- Wearing a coat, hat, and gloves in very cold weather (+)
- After a storm, staying away from downed power lines (+)
- Playing on loose tree branches that broke during a storm (-)
- Going into the basement during a tornado warning (+)
- Staying out in the hot sun all day long (-)
- Wading in deep puddles or streams after a rainstorm (-)

**Application:** Look for examples of weather safety situations in the newspaper or on television. Did the people involved do the safe thing? What happened?

**II. DIGGING DEEPER**

☀ **ACTIVITY** "Stovetop Rainstorm" (7 - 8 minutes)

**Grade Level:** K - 2

**Materials:** Large sauce pan, with lid, water, and stove or hot plate.

Explain to the children that clouds are formed when water evaporates. When the vapor rises it cools and condenses or changes into millions of very small water droplets that form a cloud. When the droplets collect more moisture, the clouds become very heavy and raindrops start to fall.



Boil the water in the pan. The steam that rises or evaporates is like the vapor that makes clouds. Collect the droplets by holding the pan lid about six inches above the steam from the boiling water. As the steam hits the lid, it cools down and changes back into water. When enough water has collected on the lid, it will drip down, making a stovetop rainstorm.

**Application:** Look at the sky the next time it rains. You can see dark, heavy rain clouds. Watch the sky for several days. Can you predict if it's going to rain?

✧ ACTIVITY: "A Moving Experience with Weather" (4 - 6 minutes)

**Grade Level:** K - 2

**Materials:** None.

Invite the children to stand and spread out. Ask them to use their imaginations and creativity to pretend they are different kinds of weather. Ask them what they think the following weather would look and sound like:

- warm gentle breezes begin blowing on a sunny day
- the wind becomes stronger and starts to howl
- *raindrops start to fall* lightly
- the rain becomes a steady downpour
- lightening and thunder fill the sky
- a tornado develops
- the tornado calms down, slower and slower and finally stops
- snowflakes begin to dance in the sky
- the snowfall becomes heavy
- the snowstorm slows down
- the last snowflake falls to the ground

**Application:** The next time you are outside, look and listen carefully to how many different ways the weather can look and sound.

✧ ACTIVITY "Rain Paint" (6 - 8 minutes)

**Grade Level:** K - 2

**Materials:** Paper, newspaper, powdered tempera paint, plastic spoon, spray bottle with water.

Cover the table with newspapers. Sprinkle a small amount of powdered tempera on a sheet of paper. Lightly spray the paper with "rain." What happens? Try two different colors. What are the results this time?

*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:** Look at the patterns rain makes on the ground after a storm. Watch for the designs that rain makes as it sprays windows or windshields and as it splashes into puddles.



### III. LOOKING WITHIN

★ ACTIVITY "Thermometer Fun" (5 - 7 minutes)

**Grade Level:** K - 2

**Materials:** Thermometer, two containers of water, one with hot water and one with cold water.

Show the thermometer to the group. Ask what thermometers are used for. Point out the current reading. Explain that the red colored liquid (mercury) expands, or gets longer, when it gets warm. Put the thermometer in the container with the cold water. What happens? What does the temperature read now? Put the thermometer in the container of hot water. Check the reading now. Let the children experiment. Record your findings.

**Application:** Thermostats have a kind of thermometer in them. Ask the children to look at the thermostats at home with their parents. What is the room temperature? What else can a thermostat do?

★ ACTIVITY "Make Your Own Thermometer " (5 - 7 minutes)

**Grade Level:** K - 2

**Materials:** Thermometer pattern, heavy paper or poster board (8 1/2 by 11"), glue, scissors, red and black markers, safety pins, and 12" strips of elastic.

Have the children cut their thermometers out and mount them on the poster board. Help the children cut two slits in the thermometer. Color half of the elastic red. Thread it through the poster board and pin it in the back. Have the children experiment and make the temperature go up and down.

**Application:** Ask the children to be thermometer and temperature detectives. Have them look around in their community for thermometers and temperature readings (outdoor temperature readings at banks, frozen food sections in grocery stores, radio and television reports).



★ ACTIVITY "WBUD, The Cloverbud Weather Channel" (5 - 7 minutes)

**Grade Level:** K - 2

**Materials:** None.

Ask the group if anyone knows what a meteorologist does (studies the weather and makes weather predictions). Talk about some of the words meteorologists use (precipitation, relative humidity, pollen count, etc.). Help the children pretend they are meteorologists and give a short weather forecast. The forecast should include the current temperature, direction the wind is coming from and its speed, and the relative humidity (is it damp or raining?). Don't forget to close your report with, "It looks like it will be a good day to ..." Give weather reports for your community for the spring, summer, fall and, of course, winter.

**Application:** Watch the weather report on television. What other kinds of things are included in the report?



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## IV. BRINGING CLOSURE

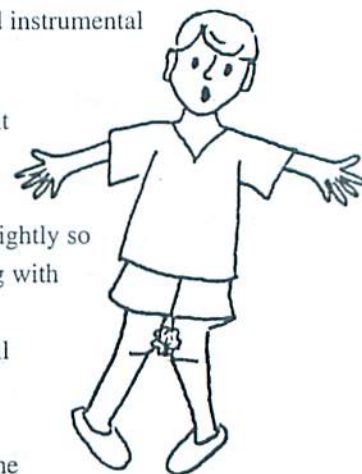
ACTIVITY "What Can You Do With a Snowball?" (5 - 7 minutes)

Grade Level: K - 2

Materials: Paper to crumple into "snowballs," cassette tape or record player, and instrumental music.

Explain to the group that if the temperature drops below 32 degrees Fahrenheit, it is cold enough to snow, if the weather conditions are right. If you made thermometers, set the temperature at a reading somewhere below the freezing point of water (32 degrees). Make pretend snowballs from the paper. Crumple them tightly so they don't "melt." Turn on the music and see if the children can do the following with their "snowballs":

- walk around the room with the snowball under their chin
- balance the snowball on their head
- jump around the room with the snowball between their knees
- get on hands and knees and blow the snowballs on the floor from one end of the room to the other
- use baby steps to walk around the room with the snowball between their feet
- throw their snowball into the trash can



## V. GOING BEYOND

ACTIVITY "After the Rain Scavenger Hunt"

Grade Level: K - 2

Materials: None.

Take a hike outside after a rainstorm. Look for clues that let you know it has rained.

Can you find:

- a puddle
- raindrops on leaves
- leaves that have blown off during the rain
- a dry spot protected by leaves or branches
- raindrops on a spider web
- earthworms on the ground
- birds looking for food
- a watermark left after water drained away or evaporated
- insect or worm trails in the mud
- an asphalt "rainbow" (oil and water)

Application: Try this activity after a snowfall. What kinds of things can you find caused by the snow?

### 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 Cloud Book, by Tomie dePaola

Where Does the Butterfly Go When It Rains? by May Garelick

First Snow, by Emily Arnold McCully

A Walk in the Rain, by Ursel Scheffler



# Experimenting With the 5 Senses

## OBJECTIVES:

- To understand what our senses do.
- To gain an appreciation of how our senses enrich our lives.

## GROUP SIZE:

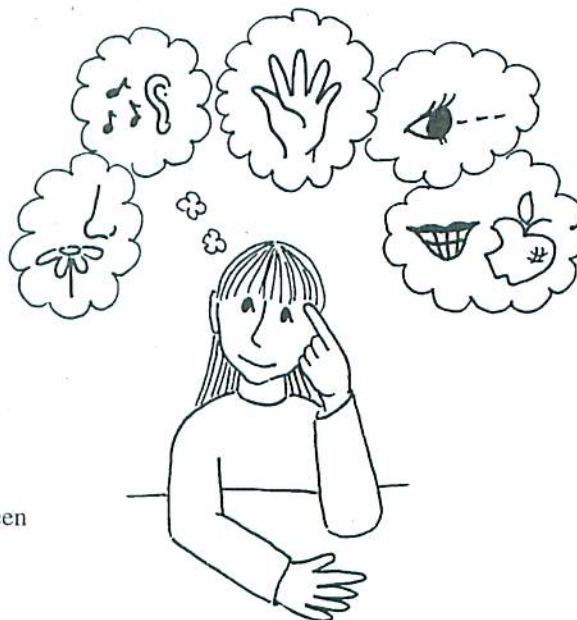
6 to 8 children per adult volunteer.

## TIME FRAME:

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

## BACKGROUND:

Help children discover how incredible our five senses are. These activities and games will develop an appreciation for our ability to see, hear, taste, touch, and smell.



Experimenting With  
the 5 Senses

### LIFE SKILL AREAS

The group discussions and experiments are a good way for children to develop social skills and decision making skills. Fine motor skills and eye-hand coordination can be developed through tearing paper and using chalk.

### 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.

Science/Technology  
Group Size: 6-8 children per  
adult volunteer



## LEARNING ACTIVITIES

### GETTING STARTED

#### ACTIVITY "Hide the Glasses" (7 - 9 minutes)

**Grade Level:** K - 2

**Materials:** A pair of glasses.

Help the children discover how valuable our gift of sight is. Select one child to hide the glasses while the rest of the group leaves the room. The glasses must be hidden so they are visible (they are not under or inside anything). Invite the group back in to find the glasses. The first one to find them gets to hide them for the next game. Talk about how our eyesight makes our lives special. Discuss the questions:

- Do you think you could find the glasses if you were blindfolded?
- What do you think it would be like if you couldn't see at all?
- Can you imagine what it would be like to only see things in black and white?
- Can you think of ways that poor vision can be corrected?
- Do you know anyone who has had their vision corrected?

**Application:** Encourage the children to be aware of their precious gift of sight. Have them try to tie their shoes with their eyes closed. Have them try again with their eyes open. Does being able to see make a difference? How?

#### ACTIVITY "Rainbow and Sunset Art" (5 - 7 minutes)

**Grade Level:** K - 2

**Materials:** Newsprint, white construction paper, colored chalk or pastels, and cotton balls.

Encourage children to think of beautiful things their eyes can see. Talk about beauty in nature. Ask if anyone has ever enjoyed a sunset or a rainbow. Help the children create their own sunsets and rainbows with colored chalk. Show them how to tear strips of newsprint and color the edge of it with chalk. Place the colored strip on top of the white construction paper. Rub the colored dust off the newsprint onto the construction paper with the cotton balls. Repeat, tearing new strips of newsprint and using different colors of chalk. The jagged edges where the newsprint is torn make the color rubbed on the construction paper really look like the sky at dusk.

**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:** Encourage the children to look for beautiful things in their environment. Ask them to invite their family to enjoy a sunset with them or perhaps a sunrise.



ACTIVITY "What's That Sound?" (7 to 9 minutes)

Grade Level: K - 2

**Materials:** Two chairs, a sheet, familiar household objects such as a stapler, hand vacuum, measuring spoons, paper in spiral notebook to tear out, popcorn in a plastic jar, jar with metal lid to unscrew, dog leash or collar, handful of change, etc., and a brown paper grocery bag to keep items hidden from view.

Drape the sheet over the two chairs to make a curtain to keep all of the sounds out of sight. Make one sound at a time, asking the children to identify it after listening carefully. Give hints if the selection is too difficult ("You might find it on a desk," or "You use it to fasten papers together.") Repeat until everyone has had an opportunity to identify a sound.

**Application:** Encourage the children to use their sense of hearing at home and school to identify things they can hear but not see.

ACTIVITY "Animal Ears" (4 -6 minutes)

Grade Level: K - 2

**Materials:** Paper or styrofoam cups, with the bottoms cut out.

Ask if anyone has ever noticed that animals have larger ears than people; have them name some. Ask what they think it would be like to have "animal ears." Show them how to put the ears on (if the cups don't stay, the children can hold them to their ears). Experiment with whispering, talking, and singing with their "animal ears."



**Application:** Have the children observe their pets or other animals. What happens when the animals hear a loud noise, or a noise behind them? What can they do with their ears that people can't?

## II. DIGGING DEEPER

ACTIVITY "You Can Be a Texture Detective" (5 -7 minutes)

Grade Level: K - 2

**Materials:** Common household items with various textures such as cotton balls, crinkled foil, fabric swatches, fresh whole pineapple, aluminum screen, rough edged rocks or stones, marbles, etc., and a large brown grocery bag.

Talk to the group about different ways things can feel (soft, hard, rough, smooth, etc.). Show the children the bag of "mystery items." Ask one child at a time to reach into the bag, without looking, and grasp one item (do not remove from bag). Ask the child to describe the item by the way it feels and if they can identify it by touch. Have the child remove the item from the bag and see if they were an effective "texture detective."

**Application:** Invite the children to explore their textile environment at home. How do the following different things feel?

- bathtub
- sweater
- pets
- ice cubes
- house plants
- hair
- cement
- carpeting

★ **ACTIVITY:** "Texture Rubbings" (5 to 7 minutes)

**Grade Level:** K - 2

**Materials:** Small pieces of screen, lace, corrugated cardboard, paper doilies, sandpaper, fabric, plain newsprint, tape, and crayons or colored chalk.



Show the children samples of the different textures; let them feel each one. Talk about how each texture feels. Have each child place a piece of paper over their textures. Tape the paper down. Using the side of a crayon or chalk, have each child rub gently on the paper over the textures. Move the paper around, using different textures. Try different colors, too!

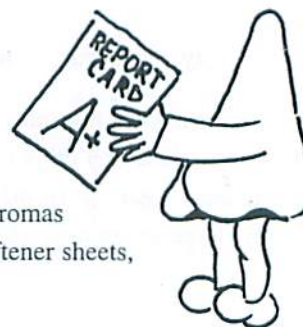
*Note to the Volunteer:* Have the children make extra rubbings to use in the Art Exhibit and Cloverbud Display lessons in the subject area of Community Expressive Arts.

**Application:** Have the children look around their environment at home, school, and outside. How many different textures can they feel?

★ **ACTIVITY:** "How Smart Is Your Nose?" (4 to 6 minutes)

**Grade Level:** K - 2

**Materials:** Sandwich bags containing various items with strong, identifiable aromas (e.g. peppermint candy, toothpaste, coffee, onions, perfume, pickles, fabric softener sheets, moist soil), large paper grocery bag, and scarf to use as a blindfold.



Blindfold the children one at a time. Remove one "aroma" bag from the grocery bag and let the child smell the contents. See if the child can identify the aroma. Give hints if the smell is too difficult to identify. Let each child try to identify an aroma.

**Application:** Ask children to see if they can tell what is cooking for dinner by using only their sense of smell.

★ **ACTIVITY** "What Does It Taste Like?" (6 - 8 minutes)

**Grade Level:** 2

**Materials:** Three different kinds of fruit juices, paper cups, and a scarf to be used as a blindfold.

With the children, pour a small amount of each kind of juice into a small paper cup. Identify, talk about, and describe each juice as it is being poured. Blindfold one child at a time and let them taste each sample. Ask if they can identify each juice. Repeat the activity, only this time have the child hold his/her nose while tasting the juice. Ask the child to identify each juice.

Ask the children if it was harder to tell when they could not smell. Explain that taste and smell are two senses that go together. That's why we sometimes get hungry when we smell food. It's also why sometimes when we have a cold (and have a stuffy nose), it's hard to taste things.

**Application:** Ask the children to pay attention to food they smell. Does it make them hungry?

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le



### III. LOOKING WITHIN

#### ★ ACTIVITY "You Can Be A Taste Detective" (6 - 8 minutes)

**Grade Level:** K - 2

**Materials:** A variety of foods such as pretzels, breakfast cereals, raisins, grapes, marshmallows, chips, etc., napkins and a handkerchief or scarf to use as a blindfold.



Explain to the group that it is possible to identify foods without actually seeing them. Simply by using their taste buds, they can be a "taste detective." Blindfold one child at a time. Ask them to keep their hands in their lap. Have an adult place a taste of one of the food samples in the child's mouth. Ask the child if they can identify the food. Repeat the process for each child in the group.

**Application:** Encourage the children to think about all the food they taste at breakfast, lunch, and dinner. How do the different things taste - sweet, sour, salty? What kinds of food taste the best?

#### ★ ACTIVITY "Sweet Plus Sour Equals Lemonade" (8 - 10 minutes)

**Grade Level:** K - 2

**Materials:** Lemons, sugar, pitcher of water, ice cubes, measuring cups (2 cups, 1 cup, and 1/4 cup), strainer, drinking cups, and paper towels.

Making lemonade from scratch provides plenty of opportunities for hands on investigation. Children can learn a variety of skills and concepts; not only will they learn to measure, mix and pour, but to experiment with taste too! Discover how two very different tastes combine to make a delicious treat.

Give each child a lemon half to squeeze into the 2 cup measure (the seeds and pulp will be removed later). Collect approximately 1 to 1 1/2 cups of squeezed lemon juice. Using a strainer, pour the lemon juice into the pitcher of water; discard the seeds and pulp. Stir the lemon juice and water thoroughly. Add ice cubes. Have an adult pour just a taste into paper cups for each child and have children taste the sample. Ask how it tastes and what does it need to become lemonade? Add 1/4 cup of sugar at a time, stirring thoroughly after each addition. Encourage children to do a taste test again; let the children decide if the mixture is sweet or sour. Add enough sugar until the lemonade is "just right." Have each child pour their own to drink and enjoy.

**Application:** Encourage children to help their parents at home with cooking. Have them use their sense of taste to season the food until it is just right!



## IV. BRINGING CLOSURE

★ ACTIVITY "What If We Had No Senses?" (5 - 7 minutes)

**Grade Level:** K - 2

**Materials:** None.

Gather children in a circle. Review the activities and experiments you have tried. Emphasize the importance of our wonderful senses. Discuss with the children the following questions:

- If you couldn't see, what would you be unable to enjoy?
- What couldn't you do?
- If you couldn't hear, what would you miss out on?
- What would it be like if you couldn't feel anything?
- How would your day be different if you couldn't smell or taste?
- What would you miss out on?

## V. GOING BEYOND

- 1 Encourage the children to appreciate their sense of hearing by having them listen to all the sounds in the environment for 45 seconds. When the time is up, ask them to list all the sounds they heard.
- 2 Have the children list 15 to 20 of their favorite foods. Help them categorize them by taste. Are they sweet, sour, salty or bitter?

### 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.

My Five Senses, by Alik

Arthur's Eyes, by Marc Brown

Brown Bear, Brown Bear, What Do You See? by Bill Martin

Polar Bear, Polar Bear, What Do You Hear, by Bill Martin

What? by Leo Lionni

# Making Air Work



## OBJECTIVES:

- To stimulate our curiosity about how air power works
- To learn how air can be used to do many things that make our lives easier.

## 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 more aware of what a wonderful resource air is. Encourage them to discover for themselves the many different jobs air can do - not only to make our lives easier, but to help us have fun, too! The hands-on activities will help them experience first hand how valuable air can be.

### ▶ LIFE SKILL AREAS

There will be opportunities for decision making and building social skills when working together in teams as well as in group discussion and sharing. Eye-hand coordination and fine motor skills will be promoted by cutting and using markers to decorate the pinwheels.

### ▶ 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

### I GETTING STARTED

★ ACTIVITY "What Am I?" Riddles About Air and Wind (4 - 5 minutes)

**Grade Level:** K - 2

**Materials:** None.

Invite the children to sit in a circle around you. Explain that air is everywhere and there are lots of things air can do. Ask them to put on their thinking caps and try to figure out these riddles about air and wind:

- I use wind to fly through the sky; I have a long tail and a very long string.  
What am I? (A kite)
- I am a machine that uses warm air to tumble wet things inside me around so they will dry. What am I? (A clothes dryer)
- I am part of a living thing and depend on the wind to blow me to a new place so I can grow. What am I? (A seed)
- I float through the clouds. I am very big and colorful and full of warm air. I use the wind to take me places. What am I? (A hot air balloon)
- Sometimes you see me in fields. I have paddles that turn in the wind. What am I?  
(A windmill)
- When I am plugged in and turned on, I help keep people cool. What am I?  
(An electric fan)
- I cruise up and down rivers and lakes and use wind power to get me where I'm going.  
What am I? (A sailboat)
- I am an electric appliance that people use in the bathroom. I am very loud and blow something to get it dry. What am I? (A hair dryer)
- I make a loud noise when air is blown in me. Lifeguards and sports coaches sometimes wear me around their necks. What am I? (A whistle)
- I can be seen up in the sky. I use jets of air and gasses under pressure to push me where I'm going. What am I? (A jet airplane)
- I can be found in the kitchen and I am used to make a special treat by using very hot air. What am I? (A hot air popcorn popper)

Ask the children if they can think of other things the wind does.



❄️ **ACTIVITY** "Spinning Pinwheels" (7 - 9 minutes)

**Grade Level:** K - 2

**Materials:** Pinwheel patterns, scissors, markers, pins, straws, tape.

Give each child the materials needed to make a pinwheel. Ask them to cut the pinwheel out, cutting only on the solid lines. Invite them to decorate their pinwheel with markers. Encourage them to use bright colors and to cover all of the paper on both sides. Because the paper will be folded, geometric designs work better than drawing people or things. As the children finish decorating, help them bend the blades into the center, on the fold lines.

Remember not to crease the blades or the pinwheel will not spin. Help them place a straw directly in the back of the center where the four corners meet. While they hold it, stick a pin through the corners and the straw. Bend the point down and wrap with tape. Now take it for a spin!



After the children have made a "test spin," talk about the following:

- Sometimes pinwheels don't work at first. What might make this happen?
- How many different ways can you think of to get it to spin? (Blow on it, wave it through the air, hold it in the wind, put it in front of a fan)
- Why do you think the pinwheel can spin?
- Can you make your pinwheel spin in the opposite direction? How?
- Do you think the pinwheel will spin if only two wings are pinned down? Try it and see.

❄️ **ACTIVITY** Song "The Strong and Blustery Wind" (7 - 9 minutes)

**Grade Level:** K - 2

**Materials:** None.

Have the children form a circle. The circle should rotate as the children sing. Randomly fill in a child's name at the appropriate time. The child then "blows away," into the center of the circle. Repeat until all children are in the middle.

The Strong and Blustery Wind  
(sung to the tune of "The Farmer in the Dell")

The strong and blustery wind,  
The strong and blustery wind,  
It chose (child's name) today, and blew him (her) away,  
The strong and blustery wind.

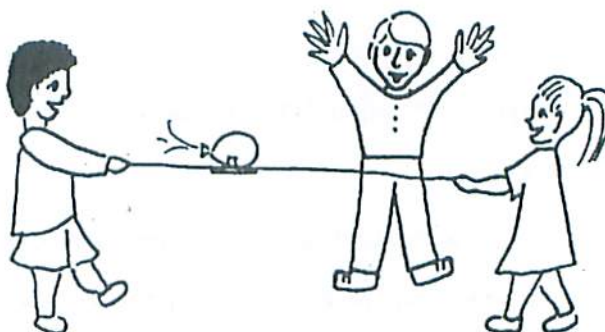


## II. DIGGING DEEPER

### ACTIVITY "Balloon Rockets" (6 - 8 minutes)

Grade Level: K - 2

**Materials:** Six foot pieces of string, scissors, balloon, straw, tape.



Explain that you are going to try an experiment using air under pressure. Divide the children into teams of three. Give each team the materials needed. Have one team member blow up the balloon and pinch it closed (do not tie it). Have the other two team members lace the string through the straw. (If the string is moistened and straightened, it will thread more easily). While the first team member continues to pinch the balloon closed, the other team members will tape the straw (with the string through it) lengthwise to the top of the balloon. The two team members should each take an end of the string and pull it taut. The child pinching the balloon closed can now slide it (pinched end first) down to the end of the string. Now the fun begins! Let the balloon go and see what happens!

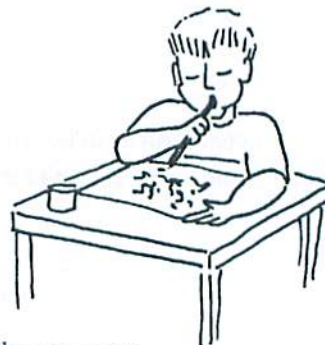
After each team has had an opportunity to launch the balloon rocket, discuss the following:

- Did the balloon do what you thought it would?
- If your rocket had problems, were you able to repair it?
- Did anything different happen when the balloons had different amounts of air in them?
- What do you think would happen if only one end of the string was being held?
- What would happen if you blew a balloon up (with no straw or strings) and let it go?

### ACTIVITY "Blow Painting" (6 - 8 minutes)

Grade Level: K - 2

**Materials:** White construction paper, straws, spoons, liquid tempera paint, cardboard box lid (8 1/2 x 11" or larger), newspaper.



Demonstrate for the children how air can be used to create a blow painting. Place a piece of paper in the box lid and drop a spoonful of paint on the paper. Using a straw, carefully flow the paint around the paper. Invite the children to create their own blow painting. Remind them to use only a small spoonful of paint, and that straws may be used for blaring paint only on the inside of the boxes. Encourage the children to experiment with different colors, strength of air blown, placing the paint in different spots on the paper and the direction that the air is blown from.

As the children create their works of art, ask them the following questions:

- What do you think might happen if you blew through two straws?
- Can you think of a way to make a new color from two colors already on your paper?
- What happens if you put spoonfuls of paint in two different places on the paper?
- Can you cover the whole page?
- User your imagination. Can you "see" anything in your painting?
- What happens when you blow without using a straw?

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

### III. LOOKING WITHIN

★ ACTIVITY "Creative Movement - Moving in the Wind" (5 - 7 minutes)

**Grade Level:** K - 2

**Materials:** A record or tape player and a recording of classical music; "Escape from Witch Mountain," from Disney's "Fantasia" is a good choice.

Set the stage by having the children imagine they are trees in the forest. Begin the music. Ask them to pretend they are blowing in the wind. Use the tempo of the music to determine how the wind is moving. Ask the children the following questions:

- How would a tree move in a gentle breeze?
- What if the rain began to fall and the wind became stronger?
- How would trees look in a tornado?

★ ACTIVITY "Hot Air Popcorn" (9 - 10 minutes)

**Grade Level:** K - 2

**Materials:** Hot air popper, popcorn, large bowl, napkins, extension cord.

Use this snack time activity as an opportunity to find out how hot air can make a great treat!

Gather the children in a circle around the popcorn popper. Let the children help prepare the popcorn. As the popper warms up, let the children feel the warm air. As the popcorn is popping ask the children why they think the corn pops (when the moisture in the kernel of corn heats up, it explodes). After the corn has stopped popping, examine the bowl of popcorn. Are there any unpopped kernels of corn? Ask the children why they think it didn't pop (some kernels have too little moisture to pop and because they are not heavy like the other kernels, the hot air is able to blow them out of the popper).

As the children are eating, ask the following questions:

- How do you think this hot air popper works? (A fan blows very hot air on the popcorn causing it to move around until it is hot enough to pop and light enough to be blown into the bowl.)
- What other ways are there to make popcorn?
- Why do you suppose people think using a hot air popper is better than other kinds of poppers? (No oil is needed; less fat and is healthier.)

### IV. BRINGING CLOSURE

After the children have finished their popcorn, have them join you in the following finger play about wind:

The Wind Came Out to Play Today

The wind came out to play today	(stand up quickly from a crouched position)
It swept the clouds out of its way	(wave arms in the air)
It blew the leaves and away they flew	(flutter fingers)
The trees bent low and branches did too	(bend over, stretch arms)
The wind blew the big sailing ships at sea	(stand up, wave arms in the air)
That wind blew my kite away from me.	(look up and wave good-bye)

Author Unknown



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.

Gilberto and the Wind, by Marie Hall Ets, 1963

The Wind Blew, by Pat Hutchins, 1974

The Hat, by Tomi Ungerer

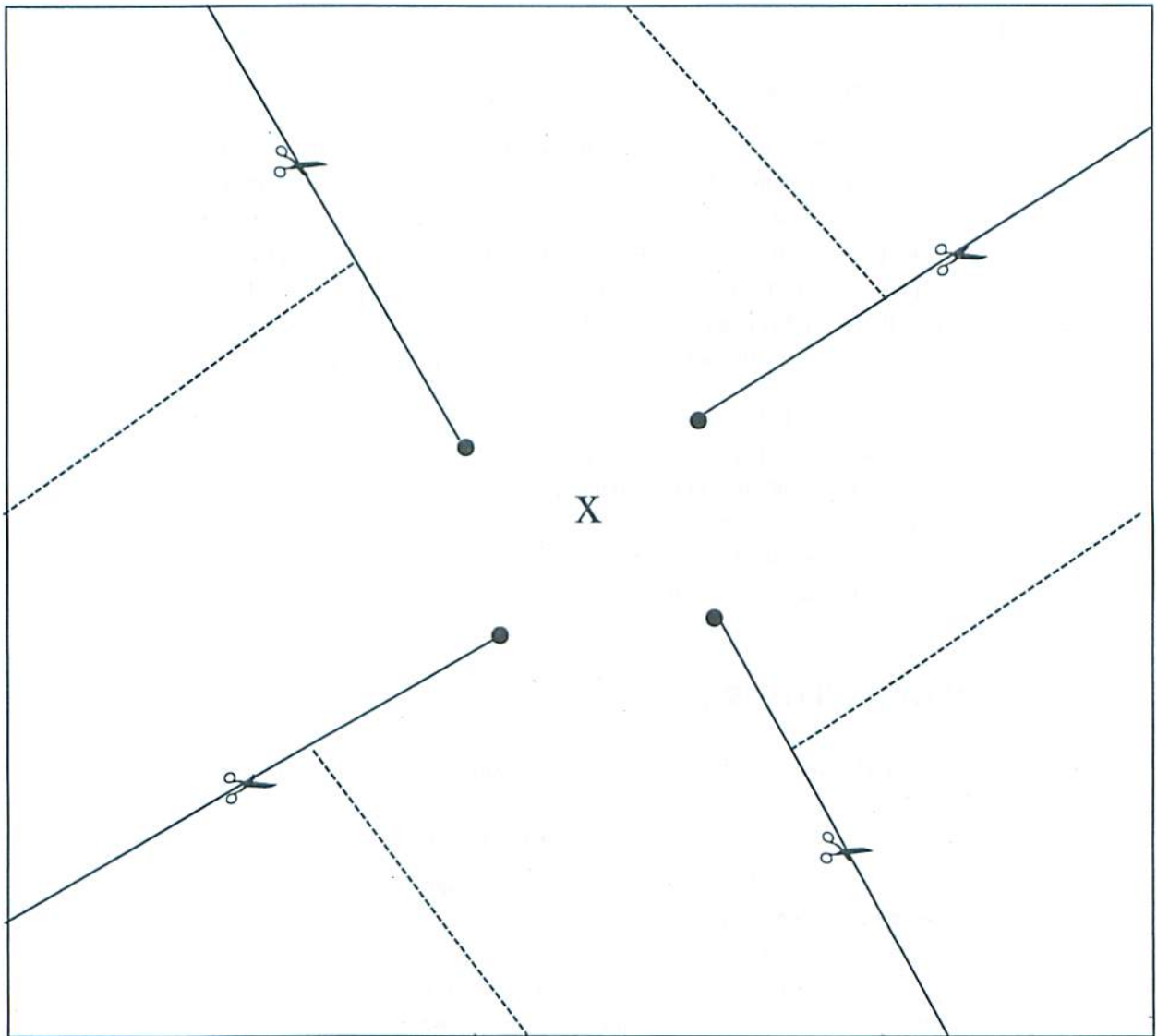
When the Wind Blew, by Margaret Wise Brown

The Winds That Blow, by Brenda Thompson

## Pinwheel Pattern

Directions:

1. Cut out square.
2. Cut the four solid lines, stopping at the perpendicular line near the center.
3. Fold the dotted lines, securing all four points in the middle with a straight pin.
4. Mount on a straw, bend pin, and secure with tape.



*Note to the Volunteer:* Have the children make extras for the Cloverbud Display lesson in the subject area of Community Expressive Arts.