

# Just Outside the Door Leader's Guide

A Unit of Kaleidoscope  
The Michigan 4-H Youth Programs  
5- to 8-Year-Old Curriculum



4-H Youth Development  
Children, Youth, Families & Communities  
Michigan State University Extension

# Just Outside the Door

## A Unit of Kaleidoscope The Michigan 4-H Youth Programs 5- to 8-Year-Old Curriculum

### Project Director:

Christine Nelson, Ph.D.  
Assistant Professor/Extension  
Specialist  
Department of Family and  
Child Ecology

### Project Assistant:

Lynn Marshall Darling  
Ph.D. Candidate  
Department of Family and  
Child Ecology

### Contributing Authors:

Jo Bush-Glenn  
Graduate Student  
Department of Family and  
Child Ecology

Shari L. Dann  
Extension Specialist  
Department of Fisheries  
and Wildlife

J. Lee Taylor, Ph.D.  
Extension Specialist  
Department of Horticulture

Gary A. Dunn  
Extension Specialist  
Department of Entomology

Joanne Schultink  
Extension Specialist  
Department of Human Environment  
and Design

### Editor:

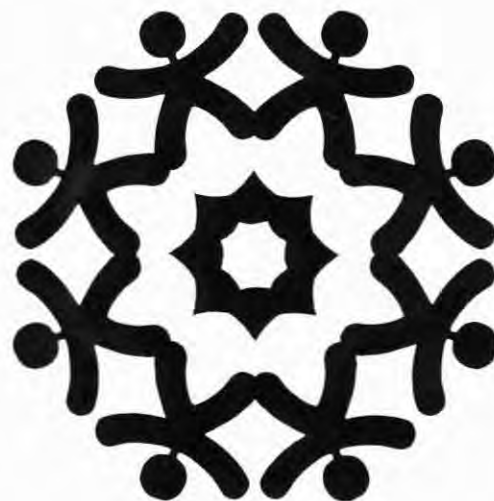
Janet R. Olsen  
Associate Program Leader for  
Curriculum Development  
4-H Youth Programs

### Artist:

Marian M. Reiter  
Graphic Artist  
4-H Youth Programs

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# Using "Just Outside the Door"

**J**ust Outside the Door is part of **Kaleidoscope**, the Michigan 4-H Youth Programs curriculum for 5- to 8-year-olds. This leader's guide provides a variety of activities designed to help children to learn more about the world that exists "just outside their door"—water, plants, other people, insects and appropriate clothing for being outside. It also provides activities which help children increase their observation skills and learn more about themselves. Because of the seasonal nature of what can happen and be learned about what is just outside the door, other leader's guides are planned on this topic. This set of activities has been prepared to be used in the summer, although some activities could be adapted to other seasons.

The **Just Outside the Door** materials consist of this **Just**

**Outside the Door Leader's Guide** (4-H 1460) and the **Just Outside the Door Member's Packet** (4-H 1461). These materials are available through your county Cooperative Extension Service office.

This leader's guide has plans for meetings on 12 different topics. Details about the format for each meeting are included in **Kaleidoscope—An Overview of the Michigan 4-H Youth Programs 5- to 8-Year-Old Curriculum** (4-H 1459). The format allows for both leaders and children to make decisions about how children learn through activities, stories, poems, drama, movement games, card games, songs, arts and crafts, snack preparation, trips and science experiments. The overview guide also contains information about the

development of children who are 5- to 8-year-olds and how to work most effectively with them. It is recommended that each leader who works with this age group have a copy of the overview guide.

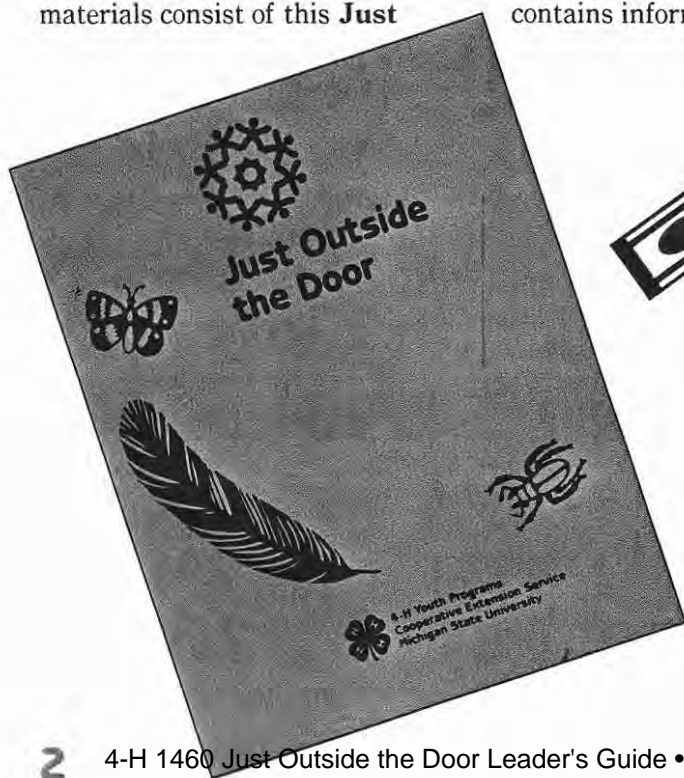
A brief description of the meeting topics for **Just Outside the Door** is provided on page 3:

The member's packet includes a "My Thoughts and Feelings" sheet and mini-poster for parents for each meeting. It also includes an "About Me" sheet for the "I Know How to Be a Friend" meeting, and "About Me" sheet for the "Working Together" meeting, and a "More Than Flying—What Birds Do" sheet for the "Birds of a Feather" meeting.

You will need to obtain a member's packet in order to have all the information you need to plan and conduct the meetings. It is recommended that each 4-H member be supplied with his or her own member's packet. It is also recommended that you keep all member packets until the final meeting to ensure that each child always has his or her packet during the meetings. The mini-poster is sent home with the child at the end of each meeting, however.

## Sharing "Just Outside the Door" With Others

Any of the **Just Outside the Door** activity products can be shared with others on bulletin boards, at county recognition events



such as achievement days, at the fair, or at other special community times when you would like to highlight the work of your young 4-H'ers. These might be the arts and crafts activities like the Treasure Hunt Collage. Also consider having the children sing the songs or do the creative dramatics to show off what they have learned. Another way that you can show what your 4-H'ers have done is to take photographs and create a poster. The children could even be involved in taking the photos!



## Meeting Topic

## What Children Learn

### Just Outside My Door\*

Helps children think about what is outside their homes and how these things are similar to or different from other children's outside areas. Includes a treasure hunt to increase the children's observation skills.

### I Know How to Be a Friend

What makes a friend a friend and what kind of friend children are to others.

### My Clothing and the Weather

What kinds of clothing are appropriate in different kinds of weather and why.

### Billions of Insects

Basic information about insects (body parts and types).

### Insect Catcher's Safari

Where insects live and other places where they can be found.

### An Insect's Life

How insects grow, develop and communicate.

### Working Together

Why cooperation is important.

### Fabulous Fruits

What a fruit is and where fruits can be found.

### Surprising Seeds

What a seed is, the seed parts and how seeds can be used.

### Oh, No! Stains!

How to avoid stains and what to do when common stains occur.

### Wet and Wonderful

Basic characteristics of water.

### Birds of a Feather

What makes a bird a bird, different kinds of birds and bird behaviors.

\*It is strongly recommended that this meeting plan be used first. The others can be done in any other order.

# Just Outside My Door

## Purposes

- To help children explore what kind of environment is outside of their door.
- To increase children's observation skills.
- To help children explore how their environment is similar to and different from other children's environments.
- To help children appreciate differences in people.

## Suggested Meeting Plan

1. Do "Major Activity I: A Mapping Activity." Talk to the children about "What Children Need to Know."
2. Do "Major Activity II: A Treasure Hunt."
3. Do any other activities that time allows from "Other Fun Things to Do."
4. Do the "Talk Abouts."
5. Plan for the next meeting by doing "Planning Ahead Together."
6. Send home the "Just Outside My Door Mini Poster."

## What Children Need to Know

- Children live in many different kinds of places.
- Depending on where children live, they have different kinds of things to see and do when they leave their homes. Some examples are:
  - Some children live in cities. When they go outside, they may have a small yard, a large yard or no yard! There are many

human-made things like houses and other buildings. There are paved streets. Often many people live close together in a small space. There may be many trees or just a few.

—Some children live in the country. When they go outside, they may have a yard, or they may not. There are usually no other houses close by. Sometimes the roads are dirt roads. Usually there are many trees and other natural things.

- Things found outside have different shapes, colors, sizes and patterns.
- Some things found outside are human-made (like houses), and some are natural (like trees).
- Some things outside are very easy to find because there are so many of them.
- Some things outside are very hard to find because there are not very many of them.
- When looking for objects outside, slowly look up, look down and look all around.

## Major Activity I—A Mapping Activity

(approximate time: 15-30 minutes)

You will need:

- Newsprint or a paper bag for each child
- Scissors
- Crayons or markers

1. If you plan to use paper bags, cut them before the meeting so they will lie flat.
2. Give each child a piece of newsprint or a paper bag. Ask the children to close their eyes and think

about what they see when they walk out of their door. Have them open their eyes and take turns telling everyone what they saw. Ask them to be very quiet and to close their eyes again. Tell them to take pictures in their minds of what they see when they walk out of their door.

3. Give the children some crayons or markers and ask them to draw (on their newsprint or paper bag) some of the pictures that they took in their minds that show what they see when they walk out of their door.
4. When everyone is done or almost done, have each child show his or her picture and talk about what he or she drew. Ask about their pictures. Are there children nearby to play with? Is there lots of space for running and playing games? Are there many or few trees and flowers? Think of other questions that will help the children see that living in different places provides a different experience for each child. Try to talk about the advantages and disadvantages of living in each situation.

**Note:** Keep in mind that different children (partially dependent on their ages) will do this activity in varying ways. Younger children may make many little pictures on the bag that have nothing to do with each other. As children get older, they will begin to make pictures in which the things are more related. Older children may do it just like a map—very carefully and specifically.

## Major Activity II— A Treasure Hunt

(approximate time: 20-40 minutes)

You will need:

- One copy of a Treasure Hunt List for each group (see suggested list below)
- Small plastic bags
- Extra adults for supervision

1. In this activity, the children will go on a treasure hunt to look for several natural and human-made items of different colors, shapes, sizes, types and patterns. You need to compile a Treasure Hunt List and choose an area in which the items on the list can be found. A Treasure Hunt List can include things that are:

Blue (very uncommon)	Hard
Alive	Green
An insect	Soft
From a plant	Brown
Dry	Smooth
Not living	Rough

**Caution:** Be certain that the adults on the treasure hunt know what **poison ivy**, **poison oak** and **poison sumac** look like so these things can be avoided.

**Also avoid allowing children to hold centipedes, large spiders, spiny caterpillars, bees, wasps and earwigs.**

Be sure to prevent the children from putting any objects in their mouths (especially berries or mushrooms).

2. Ask the children if they have ever gone on a treasure hunt. Tell them that today they will go on a special treasure hunt that will show them how to carefully explore outside. Tell them that when looking for treasures they must move very carefully so they don't miss anything. Tell them to slowly look up, look down and look all around. Tell the children exactly how far they may roam while looking for the items on their lists.

3. Divide the children into groups of no more than three or four people plus one adult. Give each group a list and one plastic bag for each person. Tell them what sound will be their signal that the hunt is over, and then demonstrate the sound. Send them on their hunt.

4. When the hunt is over, make sure every child has a chance to describe the "treasures" his or her group has found. Discuss which items were easy to find because there were so many of them. Talk about which items were harder to find because there were only a few of them.

5. Have the children count and sort their treasures. Did some of the groups collect some of the same things? Talk about why this might have happened. Let the children decide which of their treasures they would like to keep and which they would like to put back.

## Other Fun Things to Do

### ABOUT ME—A DISCUSSION AND DRAMA ACTIVITY

(approximate time: 10-15 minutes)

Have the children stand up so that they have some space around them. Tell them that they are going to act out how they feel when they go outside. Let them know that they will have different feelings. For example, some will feel joyous and some will feel scared. Tell them to pretend that they are at home and they are

walking outside. How do they feel? Tell them to act out how they feel. You may need to demonstrate ways that people use their faces and bodies to show their feelings.

Have them sit down in a circle with you. Ask them if they would like to share how they felt, one at a time. If the other children react negatively to one of the children's feelings, remind the group that we all have feelings. Our feelings are different from each other's and that's okay.

### TREASURE HUNT COLLAGE— AN ARTS AND CRAFTS ACTIVITY

(approximate time: 15-30 minutes)

You will need:

- Construction paper or paper plates
- Paste or "tacky" glue
- Treasure hunt items

Give each child a piece of construction paper or a paper plate and some paste or glue. Have them paste their treasure hunt items on the paper.

### TREASURE HUNT SORT— A GAME

(approximate time: 5-10 minutes)

You will need:

- Everyone's treasure hunt items

Put all of the treasure hunt materials in one large group on the floor. Have the children sit around the materials. Tell the children that they may all make a collection in front of them from the treasure



hunt pile. The rule is that everything in their collection needs to be the same in some way. For example, all the things may be blue or human-made or things that were once alive.

When everyone has a collection, have each child show his or her collection and have the other children guess what is the same about all of the things in the collection.

## BOOKS AND STORIES

**Reflections**, by Ann Jonas. New York: Green Willow Press, 1987. *This book, which is excellent for encouraging observation skills, explores a day at the seashore. At what is the end in most books, this book is turned over and read from back to front.*

## TRIPS OR WALKS

If most of the children in your group live in the same kind of environment, take a drive to another kind of environment. For example, if most of the children live on farms, take them to town and have them talk about the similarities and differences between where they live and the town environment.

## Talk Abouts

(approximate time: 10 minutes)

1. How are objects found outside different from one another?  
*They have different shapes, sizes, colors and patterns. Some are human-made. Some are natural.*
2. Why are some things easy to find outside?  
*There are many of them.*
3. Why are some things hard to find outside?  
*There aren't very many of them.*
4. How should we look for things?  
*Look slowly up, down and all around.*

## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Just Outside My Door" in their packet and put their names on them. Tell the children that at the end of each meeting they will record on these sheets what they have done and how they feel about it. Then the group will talk about what they'd like to do during the next meeting.

Hold up the "My Thoughts and Feelings" sheet and point to where it says "Just Outside My Door." Tell the children that the signs in the first column stand for activities and that everyone will circle the signs for the activities they did at the meeting. Circle the first activity that you did and have the children circle it on their sheet. Then tell them to circle the face next to it that shows how they felt about the activity. Did they dislike it, like it just okay or really like it? Continue to circle other activities and the faces until you have circled all of the activities (and a face for each) that the group completed. Read the words at the bottom and have the children draw a face that shows how they felt about the entire meeting.

When everyone is done, ask if anyone wants to talk about their faces and feelings. After any discussion, ask the children to give their sheets to you.

Next tell the children it is time to plan the next meeting and they will make decisions about what kinds of activities they will do. Offer them choices from activities you are willing to do. For example, you might ask, "Would you like to sing a song next time or read a story?" or

"Would you like to make a puppet or play a game?" You can also offer choices in the kinds of materials the children would like to use in a particular project or which snack they would like.

After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the "Just Outside My Door Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# I Know How to Be a Friend

## Purposes

- To help children understand what it means to be a friend and how friends behave with each other.
- To give children the opportunity to practice friendship skills such as doing things together, sharing, helping, listening, expressing affection and resolving conflicts.

## Suggested Meeting Plan

1. Do the "Prui" major activity and talk about friendship, using the information in "What Children Need to Know."
2. Do any other activities that time allows from "Other Fun Things to Do."
3. Do the "Talk Abouts."
4. Plan for the next meeting by doing "Planning Ahead Together."
5. Send home the "I Know How to Be a Friend Mini-Poster."

## What Children Need to Know

- Friends are people who:
  - Like each other.
  - Like to be near and play with each other.
  - Talk with each other.
  - Help each other do things.
- Friends may be in your family or outside your family, and they can be any age.
- Having a friend and being a friend make people feel good.
- Having a friend gives people someone with whom to play, work, and share ideas and feelings.

- People feel friendly toward people who are interested in them, share with them, listen to their ideas and help think of ways to solve problems.

## Major Activity—Prui\*

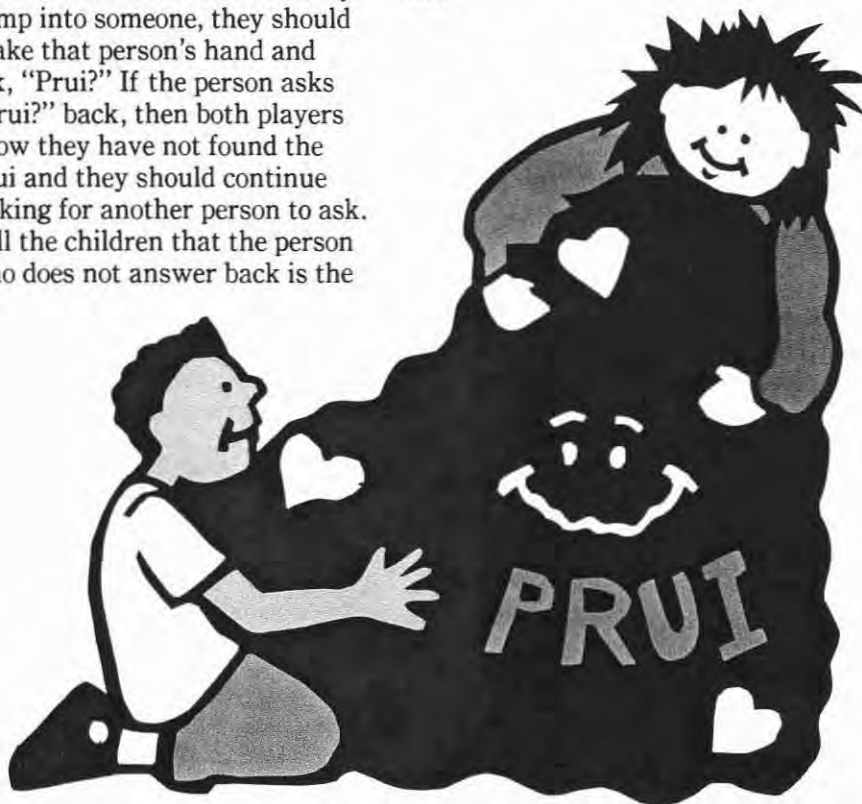
(approximate time: 10-15 minutes)

1. Tell the children that the Prui (pronounced PROO-ee) is a gentle, friendly creature that grows and that everybody wants to be a part of the Prui.
2. To begin a game, all the players will either close their eyes or be blindfolded. Then they stand in a group and start milling around. Tell the children that when they bump into someone, they should shake that person's hand and ask, "Prui?" If the person asks "Prui?" back, then both players know they have not found the Prui and they should continue looking for another person to ask. Tell the children that the person who does not answer back is the

Prui. The child asking must not speak and then must remove the blindfold (or open their eyes) and join hands with the Prui.

3. After the children have started milling around, choose one child to be the Prui.
4. When the last person becomes a part of the Prui, everyone should cheer and then sit in a circle. Tell the children that the Prui is like friendship. It can grow and grow. Talk about ideas in "What Children Need to Know." Have the children share their ideas about friendship.

\*This game is adapted from **The New Games Book** edited by Andrew Fluegelman. Garden City, N.Y.: Doubleday and Co., Inc., 1976.





## Other Fun Things to Do

### ABOUT ME— A DRAWING ACTIVITY

(approximate time: 10 minutes)

You will need:

- One "About Me—My Friend" sheet for each child (see the **Just Outside the Door Member's Packet**)
- Crayons or markers

Have each child draw a picture of one of his or her friends. Then tell them to write (or have an adult write) the friend's name and some things they like about their friend on the sheet.

### THE MORE WE GET TOGETHER—A SONG

(Sung to the tune of *Did You Ever See a Lassie*)

The more we get together, together,  
together,  
The more we get together,  
The happier we'll be.

For your friends are my friends and  
my friends are your friends.  
The more we get together,  
the happier we'll be.

### IF YOU'RE FRIENDLY AND YOU KNOW IT—A SONG

(Sung to the tune of *If You're Happy and You Know It*)

If you're friendly and you know it,  
say "hello."  
If you're friendly and you know it,  
say "hello."  
If you're friendly and you know it,  
then your face will surely show it.  
If you're friendly and you know it,  
say "hello."  
(Substitute "let's play" or your own ideas for "hello.")

### FRIENDSHIP COLLAGE—AN ARTS AND CRAFTS ACTIVITY

(approximate time: 20-30 minutes)

You will need:

- Large (12- by 18-inch) sheets of construction paper labeled "My Friends"
- Glue
- Paper circles (approximately 4 inches in diameter and of various skin colors—peach, light brown, dark brown, pink, etc.)
- Assorted collage materials (yarn, buttons, beads, fabric scraps, beans, macaroni, etc.).

Tell the children they're going to make pictures of their friends. Have them glue the paper circles onto the construction paper. They can use them as friends' faces and the collage materials for features and hair. Children can either write their friends' names or have an adult write for them.

### WATER BALLOON TOSS— A GAME

(approximate time: 15 minutes)

You will need:

- Balloons
- Water

Have the children choose a partner to be their friend and have each set of partners take turns tossing their balloons to each other. After each successful toss, each "friend" takes one step back. Let the children decide as a group beforehand what will happen if the balloon drops and breaks. For example, they may decide that the pair with the broken balloon sits down to watch the others or they may decide that they get to have another balloon.

### FRIENDSHIP SKIT—DRAMA

(approximate time: 10-15 minutes)

You will need:

- Two puppets

Adults can start out this game by pretending that two puppets are trying to make friends with each other and they can experiment with some different ways of doing this. For example, one puppet could say, "Hi, my name is Sam" or "Would you like to play?" After the puppets have been successful with this, try having the puppets work out some problems they might have with each other, such as sharing a toy or responding to an unfriendly act. Let the children take turns being the puppets while the others watch and comment on some of their successful friendship skills.

### BOOKS AND STORIES

**The Aminoal**, by Lorna Blain. Nashville: Alingdon Press, 1972. *When Patrick's friends find out he has found something, they create an increasingly larger and more fearful monster in their minds until they see what the "something" really is.*

**Best Friends**, by Miriam Cohen. New York: Macmillan Publishing Co., 1971.

*Jim and Paul are best friends until they have a minor disagreement. When they have to work together to save baby chicks, they discover that they are still best friends.*

**Will I Have a Friend?** by Miriam Cohen. New York: Macmillan Publishing Co., 1967.

*This is the story about Jim's first day at school and how he finds a new friend.*

**Best Friends for Frances**, by Russell Hoban. New York: Harper and Row, 1969.

*This is the story of Frances the badger and her friends.*

**Will You Be My Friend?** by Chihiro Iwasaki. New York: McGraw-Hill, 1970.

*Allison is just about to ask the new boy moving in next door to be her friend when the trouble begins.*

**A Friend is Someone Who Likes You**, by Joan Walsh Anglund. New York: Harcourt, Brace and World, Inc., 1958.

*This book shows that a friend can be a boy, a girl, a cat, a dog or even a white mouse.*

### TRIPS OR WALKS

- Visit a senior citizen center and present handmade friendship cards to elderly persons.
- Organize a mutual exchange project with another 4-H group. Exchange artwork, a cooperative snack, a skit, or a favorite story or puppet show.

## Talk Abouts

(approximate time: 10 minutes)

1. What is a friend?  
*A friend is someone who likes you and likes to be near you, to play with you, to talk with you and to help you.*
2. Who can be a friend?  
*A friend can be someone in your family or outside your family. An old person or a young person can be a friend.*
3. Why do people want to have a friend?  
*It makes them feel good.*
4. How can people show each other that they are friendly?  
*They can share, listen to each other's ideas and help each other solve problems.*

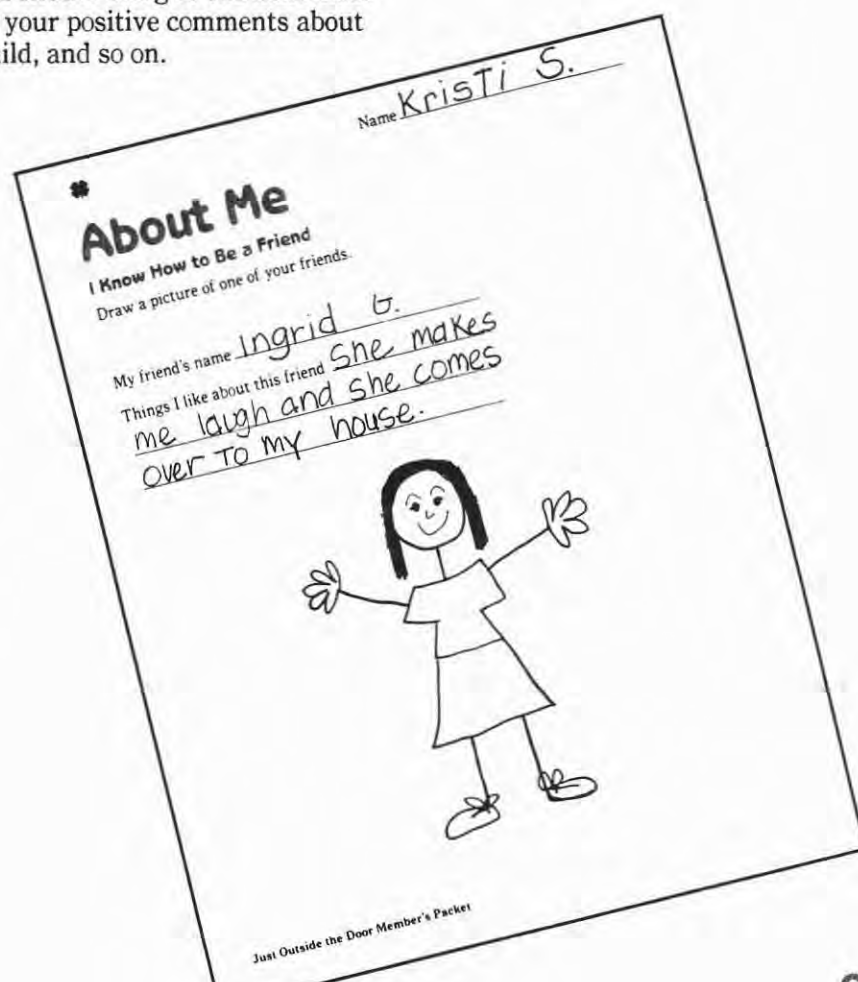
## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "I Know How to Be a Friend" in the packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the "I Know How to Be a Friend Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# My Clothing and the Weather

## Purposes

- To help children understand how clothing provides protection from the weather.
- To help children understand how to dress for the weather they will be in.

## Suggested Meeting Plan

1. Use the “About Me” discussion to introduce the topic of clothing and the weather and the information in “What Children Need to Know” (see “Other Fun Things to Do”).
2. Do the major activity (“Making Sandals” or “Experimenting With Heat and Moisture Absorption”) that is appropriate for the ages of the children in your group.
3. Do any other activities that time allows from “Other Fun Things to Do.”
4. Do the “Talk Abouts.”
5. Plan for the next meeting by doing “Planning Ahead Together.”
6. Send home the “My Clothing and the Weather Mini-Poster.”

## What Children Need to Know

- Clothing protects us from the sun, rain, wind and cold weather.
- Different types of clothing are best to wear in different kinds of weather.
- People can also protect themselves from the weather by shielding themselves with tents, umbrellas, sun visors or sunglasses.

## FOR OLDER OR MORE EXPERIENCED LEARNERS:

- Cotton fabric absorbs moisture and is comfortable to wear in hot weather.
- Polyester, nylon and other human-made fibers do not absorb moisture and are uncomfortable to wear in hot weather.
- Black or dark-colored clothing absorbs heat from the sun and is warmer to wear than white or light-colored clothing.

## Major Activity for Younger Children— Making Sandals

(approximate time: 20-30 minutes)

You will need:

- Brown wrapping paper
- Pencils
- Scissors
- Paste
- Thick cardboard (enough for two soles for each child)
- One large nail
- Shoelaces or pieces of heavy waxed twine (two for each child)
- You may also need an extra adult to help with this activity

1. Have the children carefully trace their feet (one at a time) on the wrapping paper and then cut out the outlines.
2. Have the children paste the outlines onto the cardboard and cut them out. You may need to help them with this if the cardboard is too thick for them to manage.
3. Draw four holes as shown in the illustration and have the children use the large nail to punch out the holes.

4. Show the children step-by-step how to insert the shoelaces and tie them onto their feet. Help children who find this too hard to do alone.
5. After all the children are wearing their sandals, ask about the type of weather in which they would wear sandals. Ask them what other kinds of clothing would be appropriate to wear with sandals.

## Major Activity for Older Children— Experimenting With Heat and Moisture Absorption

(approximate time: 20-30 minutes)

Start with Experiment 1. While you're waiting for the results, do Experiment 2.

### EXPERIMENT 1

You will need:

- Two thermometers
- A white or light-colored hat or piece of clothing
- A black or dark-colored hat or piece of clothing

1. Do this experiment in the sun. Put one thermometer under each of the hats or pieces of clothing. Wait 15 minutes.
2. Check to see if there has been an increase in the temperature. (The dark-colored hat or piece of clothing should have absorbed more heat and the temperature should be somewhat higher than the thermometer under the light-colored hat or piece of clothing.)

## EXPERIMENT 2

(approximate time: 10-15 minutes)

You will need:

- Large piece of plastic
- Assortment of clothes made of different fabrics (windbreaker or coated rain coat, 100 percent cotton T-shirt, polyester/cotton blend T-shirt, and fabric treated with a liquid repellent such as Scotchgard)
- Watering can
- Water

1. Spread the plastic on the ground and arrange the clothes on top of it.
2. Have the children carefully sprinkle each of the clothes with the water. Tell them to watch to see the difference in the amount of water that is absorbed. (With some garments, the water will soak right through to the plastic; with others, it will just sit on top.)
3. Discuss how the fabrics that absorbed the water are best to wear when you might get hot and sweaty, while the ones that do not absorb water would be better to wear in the rain or cooler weather.

## Other Fun Things to Do

### ABOUT ME— A DISCUSSION ACTIVITY

(approximate time: 10 minutes)

Start out with a discussion of what each child is wearing that day. Ask why they chose those particular items. If they do not mention weather, steer the discussion in that direction with questions like, "I noticed you wore a jacket today. Why did you choose that?" or "Why didn't you wear mittens and boots today?" Point out such things as shorts or pants, shoes or sandals, and shirts with long sleeves or short sleeves. For older children, you may also talk about dark or light clothing

or the types of fabrics in their clothes and how this relates to the weather.

### WEATHER/CLOTHING MATCH GAME

(approximate time: 10 minutes)

You will need:

- Large sheet of posterboard divided into four equal sections with a marker
- A large assortment of pictures cut from old books, magazines or catalogs representing clothing worn in different types of weather (sunny and warm, rainy, snowy, and cold and windy)
- Paste or glue sticks

Draw symbols in each corner of the four sections of your posterboard to represent the different types of weather (sunny and warm, rainy, snowy, and cold and windy). Place the assortment of pre-cut pictures in a box or bag and have the children take turns pasting the pictures onto the section of the posterboard that corresponds to the weather that's appropriate for the clothing. Talk about why the children placed the pictures where they did.

### RAIN ART—AN ARTS AND CRAFTS ACTIVITY

(approximate time: 10-15 minutes)

(This could be a choice offered to the children during the "Planning Ahead Together" portion of the preceding meeting.)

You will need:

- Paper
- Crayons, paints or colored chalk

Read the poem "Rain" (see below) and have the children do a drawing or painting of what they would like to do in the rain.

#### Rain

The rain is falling all around,  
It falls on field and tree,  
It rains on the umbrellas here,  
And on the ships at sea.

By Robert Louis Stevenson. From *A Child's Garden of Verses*, New York: Random House, 1978. Reprinted with permission.



## MAKING SUN VISORS—AN ARTS AND CRAFTS ACTIVITY

(approximate time: 20-30 minutes)

You will need:

- Paper plates
- Pencil
- Scissors
- Crayons or markers
- One piece of elastic for each child (about 10 inches—long enough to stretch around the back of each child's head)
- Stapler

Draw a quarter-moon shape on each plate. This will be the shading part of the visor. Have the children cut out this shape. Let the children use crayons or markers to decorate their "visors." Give each child a piece of elastic to staple to each end of the visor. Be sure each child's name is on his or her visor. Discuss how visors protect your face and eyes from the sunshine.

## COSTUME RELAY—A GAME

(approximate time: 15-20 minutes)

You will need:

- A variety of summer clothes in sizes large enough to be put on by all the children (Extra large clothing is fun!)
- Two paper bags or suitcases to hold the clothes

Divide the children into two teams. Pick a starting line for the teams to stand behind and put the bags or suitcases of clothes 20 feet away. Make sure each bag or suitcase contains the same number and types of clothes. At the "On your mark, get set, GO!" signal, one member of each team should run to the team's bag or suitcase and put on the clothes as quickly as he or she can, then take off the clothes and put them back in the bag and run back to the starting line. This should continue until each child has had a turn.

**Note:** For younger children, choose clothes that are easy to put on and take off. For example, avoid tiny buttons and tricky zippers.

## BOOKS AND STORIES

**Animals Should Definitely Not Wear Clothing**, by Judi Barrett. New York: Antheneum, 1973. *This book for young readers describes what might happen if animals wore clothes.*

**I Like Weather**, by Aileen Fisher. New York: Thomas Y. Crowell, 1963. *A child gives the reasons for liking all the seasons and types of weather.*

**Too Many Mittens**, by Florence Slobodkin. New York: Vanguard Press, 1958. *This story tells what happens when Donny loses a mitten.*

**Try On a Shoe**, by Jane Belk Moncure. Elgin, Ill.: The Child's World, 1973. *This book shows the wide variety of shoe styles from many different parts of the world.*

## Talk Abouts

(approximate time: 5-10 minutes)

1. Why is clothing useful?  
*It protects us from the sun, rain, wind and cold weather.*
2. What are other ways we can protect ourselves from the weather?  
*We can use tents, umbrellas, sun visors and sunglasses.*

## FOR OLDER OR MORE EXPERIENCED LEARNERS:

1. What fabric absorbs moisture and is comfortable to wear in hot weather?  
*Cotton*
2. What fabrics do not absorb moisture and are uncomfortable to wear in hot weather?  
*Human-made fibers such as polyester and nylon.*
3. Why is dark-colored clothing warmer to wear than light-colored clothing?  
*It absorbs heat from the sun.*

## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "My Clothing and the Weather" in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the "My Clothing and the Weather Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# Billions of Insects



## Purposes

- To help children see that insects come in many sizes, shapes and colors.
- To help children learn the basic body parts of an insect.
- To help children recognize the six most common kinds of insects.

## Suggested Meeting Plan

1. Use the insect picture on page 15 to talk with the children about the information in "What Children Need to Know." Talk about the sizes, shapes and colors of insects they have seen. Ask them if they have seen any of the body parts on real insects.
2. Have the children do the "Make an Insect Model" major activity.
3. Do any other activities that time allows from "Other Fun Things to Do."
4. Do the "Talk Abouts."
5. Plan for the next meeting by doing "Planning Ahead Together."
6. Send home the "Billions of Insects Mini-Poster."

## What Children Need to Know

- Insects come in many different sizes, shapes and colors.
- Insects **always** have six legs, one pair of antennae and three body sections. Some insects also have wings.
- Insects do not have bones inside their bodies. Instead, they have a hard covering or shell over their bodies. This is called an **exoskeleton**.

- Insects have three body sections. They are the **head**, the **thorax** and the **abdomen**. The head has the eyes, antennae and mouth-parts. The thorax has the legs and wings. The abdomen has the internal organs, such as the stomach and heart.
- Most insects belong to one of these six groups:
  - Beetles
  - Butterflies and moths
  - Ants, bees and wasps
  - Flies
  - Grasshoppers, crickets, roaches and mantids
  - Bugs

## Major Activity— Make an Insect Model

(approximate time: 20-30 minutes)

You will need:

- An assortment of as many items as possible—bottle caps, egg cartons, Styrofoam balls, buttons, pipe cleaners, construction paper, waxed paper, cardboard, clay-dough (see recipe below), yarn, cotton balls, thread, spools, beads, string, toothpicks, sequins and glitter
  - Glue
  - Scissors
  - Crayons
  - Markers
  - Paints
  - Stapler
1. Talk about how insects come in many sizes, shapes and colors, but still have the same basic body parts: head, thorax, abdomen, eyes, antennae, wings and so forth.

2. Have the children use their imaginations to create their very own insects using the materials suggested above. They can create model insects with the correct body parts or they can make their own "critters."
3. When the children are done making their insects, have them give the insects a name and show them to the rest of the group. Ask them to point out some of the body parts their critters have.

## RECIPE FOR HOMEMADE CLAY-DOUGH

### Ingredients:

- 1½ cups flour
- ½ cup salt
- ½ cup water
- ¼ cup vegetable oil or a few drops of liquid detergent
- Liquid food coloring (optional)

1. Mix the flour and salt in a bowl.
2. If you want to color your clay-dough, add the liquid food coloring to the water before mixing it with the flour and salt.
3. Slowly add the oil (or liquid detergent) and water until you get a dough-like consistency.
4. To store your dough, dust it with extra flour, place it in a plastic bag and wrap it tightly to keep out air. The dough may be stored in the refrigerator. Critters made from soft clay-dough will remain soft and pliable and can be reshaped later.
5. To harden critters made from clay-dough, place them on a cookie sheet and bake them in a 250°F oven until hard and dry. Turn the critters three or four times to prevent curling.

## Other Fun Things to Do

### ABOUT ME—

#### A DISCUSSION ACTIVITY

(approximate time: 5-10 minutes)

Ask the children the following questions:

- What is your favorite insect? Stand up and pretend to be that insect.
- What color, shape or size would you be if you were an insect?
- Are there any insects you don't like? Which insect do you like the least? Why?
- Would you like to have any insect body parts like antennae or wings? Pretend to have these body parts. What would you do with them?
- How are you different from insects? (For example, they have bones, two legs and no antennae.)

### CRICKETS AND BUGS— A GAME

(approximate time: 10 minutes)

This game should be played outdoors or in a large, sparsely furnished room. Divide the children into two teams—the Bugs and the Crickets. Choose a leader for each team. Make two goal lines about 25 yards apart. Have each team stand at their goal line, and have the Bugs stand with their backs to the Crickets. The Crickets should then silently creep up on the Bugs and stand behind them. Then the leader of the Crickets calls out, "Run, Crickets, run!" The Crickets hurry back to their goal line and the Bugs turn around and chase them. Then it is the Crickets' turn to stand with their backs to the Bugs. The Bugs should creep up on them and be chased by the Crickets back to their goal line. Have the teams take turns chasing each other until all the children have had a turn being the leader.

### BUSY BEE—A GAME

(approximate time: 10 minutes)

You need an odd number of children for this game. Each child has a partner except for one player who is "It." "It" waits while partners scatter and the leader calls out various commands, such as "Back to back," "Face each other," "Shake hands," "Flap your wings" and "Hop like a grasshopper." When the leader calls out "Busy Bee!" everyone has to get a new partner, including the child who is "It." The child who does not find a new partner becomes the new "It." Play until everyone has a turn being "It."

### BUG SWAP—A GAME

(approximate time: 10-15 minutes)  
(This game works best with older children.)

You will need:

- A small selection of insect pictures cut from magazines or Cooperative Extension Service bulletins. You can also include pictures of insect body parts, such as eyes, antennae and wings. There should be at least two pictures of insects from each of the six insect groups and each body part used. For example, you could have one picture of a butterfly and one of a moth, two pictures of antennae, two pictures of flies, one picture of a bee and one of an ant. You need enough pictures so each child has two pictures.

Ask the children to sit on the floor in a circle. Give each child two pictures. As you call out the name of an insect group or a body part, the children who have those pictures should change places with one another. Then call out another insect group or body part. Play until each child has had at least one turn.

### A FLY AND A FLEA— A TONGUE TWISTER

A fly and a flea got caught in a flue  
And they wondered what they  
should do.

Said the fly, "Let us flee." Said the  
flea, "Let us fly."

So they flew through a flaw in  
the flue.

### SHOO-FLY—A SONG

Shoo fly, don't bother me.

Shoo fly, don't bother me.

Shoo fly, don't bother me.

I belong to somebody.

I feel, I feel, I feel like a morning  
star.

I feel, I feel, I feel like a morning  
star.

Oh, shoo fly, don't bother me.

Shoo fly, don't bother me.

Shoo fly, don't bother me.

I belong to somebody.

Movement can be added as the children sing this song.

- Have the children pretend to brush away a fly as they sing the words "shoo fly." When they sing "I feel, I feel," have them pat their knees to the beat.
- Have the children stand in a circle holding hands. In the first part of the song, have the children circle to the left, walking. When they start singing "I feel, I feel," have them stand still and clap hands. Have them start circling again when the second "shoo fly" begins.

### HONEY-BUTTER SPREAD— A SNACK

(approximate time: 10-15 minutes)

You will need:

- Peanut butter
- Honey
- Graham crackers or slices of bread
- Paper cups or small bowls for mixing (one for each child)
- Plastic spoons and knives
- Measuring spoons

**Have the children wash their hands before starting this activity.** Have the honey and peanut butter at room temperature so they will be easy to mix. Give each child 2 tablespoons of peanut butter and 1 tablespoon of honey in his or her cup or bowl. Have the children use the spoons to mix these together until the mixture is smooth and creamy. Have the children use their knives to spread this mixture on crackers or bread. As they are enjoying their snack, talk about how honey is made by bees.

### BOOKS AND STORIES

**I Wish I Were a Butterfly**, by James How. San Diego: Harcourt Brace Jovanovich, 1987.

*A wise dragonfly helps a sad cricket realize he is special in his own way.*

**Never Say Ugh to a Bug**, by Norma Farber. New York: Greenwillow Books, 1979.

*Twenty short poems focus on insects, including the slug, maggot, fly and grub.*

**How Many Bugs in a Box?** by David Carter. New York: Simon and Schuster, 1988.

*This pop-up counting book is full of colorful, comical bugs.*

**An Insect's Body**, by Joanna Cole. New York: William Morrow and Co., 1984.

*This book provides a clear explanation of an insect's three major body parts: head, thorax and abdomen.*

### Talk Abouts

(approximate time: 5-10 minutes)

1. How are some insects different from other insects?  
*They come in many different sizes, shapes and colors.*
2. What do insects always have?  
*Three body sections, six legs and one pair of antennae.*

3. Some animals do not have bones inside their bodies. They have a hard shell covering instead. What is this shell called?

*Exoskeleton*

4. What are the three body sections of an insect?

*Head, thorax and abdomen.*

5. What are the six most common groups of insects?

- Beetles
- Butterflies and moths
- Flies
- Ants, bees and wasps
- Grasshoppers, crickets, roaches and mantids
- Bugs



### Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Billions of Insects" in their packets. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.



### Mini-Poster

Send the "Billions of Insects Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.





# Insect Catcher's Safari

## Purposes

- To help children recognize and learn about the habitats and homes of insects.
- To help children learn where and how to look for insects.
- To provide the fun and adventure of an insect safari in the children's own neighborhoods.

## Suggested Meeting Plan

1. Talk to the children about the information in "What Children Need to Know."
2. Do the "Insect Catcher's Safari" major activity.
3. Do any other activities that time allows from "Other Fun Things to Do."
4. Do the "Talk Abouts."
5. Plan for the next meeting by doing "Planning Ahead Together."
6. Send home the "Insect Catcher's Safari Mini-Poster."

## What Children Need to Know

- Insects can be found just about anywhere you might look: in the city and in the country, inside buildings and outdoors, in woods and in fields, in water and in sand, and on pets and animals.
- Insects can be found by looking up, looking down and looking all around. Then when you've finished looking in one area this way, look again—insects are always on the move!
- Most insects have a favorite place to live. Insects usually live in one

kind of place because they can find the things they need to live there. This might be on a special plant they like to eat or in an area with lots of sunlight, flowing water or sandy soil.

- Some insects build special homes for themselves. Two kinds of insects which do this are ants (which build ant hills) and wasps (which build nests).

## Major Activity— Insect Catcher's Safari

(approximate time: 30-45 minutes)

You will need:

- Plastic bottles with lids
- A few magnifying glasses, if possible
- An insect net (optional)

1. Choose a site for your safari ahead of time. A backyard, a vacant lot or a nearby park will do nicely.
2. Tell the children that even though insects can be found everywhere and are often very numerous, many people are unable to "see" insects because they don't know how to look for them. Insects are often "shy" and hard to see in their own environments, so it takes practice to actually see all the insects that are around us. Tell the group that they are going on an insect catcher's safari and that they are looking for insects, they should look up, look down and look all around.
3. Have the group begin looking around the site. When they have

finished looking in one area, tell them to look again because insects are always on the move. Tell the children to look under rocks, logs and debris; in the water; on and under leaves; on twigs and flowers; and in the air. Tell them that if they were to look in the same place at different times of day, they would find different kinds of insects.

4. Tell the children to collect the insects so they can take a closer look. Remind them that they can safely hold most insects in their hands, but **tell them to avoid holding centipedes, large spiders, spiny caterpillars, bees and wasps, and ear-wigs.** Have them use any type of clear plastic container to safely observe insects. Here are some pointers for using "bug bottles" to catch and temporarily house insects:
  - For safety, use plastic rather than glass.
  - Some insects will run up the sides of your bottle or fly into it if you place it over them. Others will drop into it if you hold it under them.
  - If you find an insect eating a certain kind of plant, include a small piece of the plant in the bottle, if possible.
  - Keep the bottle out of direct sunlight; the heat will kill the insects.
  - If you can, return the insects to the habitat where you found them when you have finished watching them.
5. Keep in mind that you can make insects come to your group by providing special attractions such

as certain types of flowers, food or lights (in the evening). In case of mosquitoes and other biting flies, **people** are the attraction so your group will have no problem attracting these insects. Following are some pointers for attracting insects.

- **Flowers**—Many types of butterflies, bees, flies and beetles are attracted to flowers. Look for New England aster, bergamot, cornflowers, ox-eye daisies, milkweed, goldenrod, impatiens, violets, fireweed, thistle and yarrow.
- **Foods**—Use overripe fruit, spoiled meat and fish and cereal grains to attract different kinds of insects.
- **Lights**—Many insects are attracted to lights at night. Look around porch lights, lighted signs, lanterns and street signs. (**Note:** Get permission if you are not on your own property.)

## Other Fun Things to Do

### ABOUT ME— A DISCUSSION ACTIVITY (approximate time: 5-10 minutes)

Ask the children the following questions:

- What kinds of insect homes would you like to live in? Would there be room for your families and pets?
- Choose an insect you would like to pretend to be, then draw a home to live in. (Encourage them to use their imaginations.)
- Where have you found insects before—in your homes, in parks, on pets? Where have you seen the most insects at one time?

### INSECT CATCHER'S ZOO— AN ACTIVITY (approximate time: 20-30 minutes)

You may want to start your own temporary insect zoo with some of

the insects you have collected on your safari.

You will need:

- Some large see-through containers (gallon jars, terrariums, etc.)
- Covers for the containers
- A few jar lids
- Some soil or sand
- Stones
- Wood or branches
- Some vegetation (If your insects were feeding when you captured them, include some of this.)
- Water
- Insects

Put some sand or soil in the containers along with some stones, branches, plants and a jar lid filled with water. The length of time you plan to keep your insects will determine how much effort you must put into the planning and making of your bug housing. If you plan on keeping them for just a few hours, a plain jar with a little soil and a few leaves will be fine. If you plan on keeping your critters for a longer time, you will need to create a miniature habitat that will meet all the needs of the insects (food, water, shelter, temperature, humidity and light).

Insects that do very well in insect zoos include praying mantids, ground beetles, leaf beetles, ladybird beetles, crickets, grasshoppers, wood roaches, many caterpillars, stink bugs and ants.

### WATERSCOPE FOR AQUATIC INSECTS—AN ACTIVITY (approximate time: 20-30 minutes)

If you are near water (creeks, rivers, lakes or ponds), your group can easily observe aquatic insects with this tool.

You will need for each waterscope:

- Large fruit juice can or half gallon milk carton
- A plastic bag or any piece of plastic big enough to cover the end of the carton or can

- Scissors or can opener
- Two elastic bands

Remove both the top and the bottom of the juice can or milk carton. Put the plastic over one end of the container and smooth it over the sides. Put the two elastic bands over the plastic to hold it in place (one near the end of the can and one near the edge of the plastic). To use the waterscope, place the end of the container with the plastic in the water. The plastic will act as a lens to help you see beneath the water's surface.

### THE ANTS CAME MARCHING ONE-BY-ONE—A SONG

In this song, the ants go on safari instead of people! (Sing this song to the tune of *When Johnny Comes Marching Home*.)

The ants came marching one by one.  
Hurrah! Hurrah!  
The ants came marching one by one.  
Hurrah! Hurrah!  
The ants came marching one by one,  
The little one stopped to suck his thumb.  
And they all came marching  
Down around the town.  
Boom, Boom, Boom!

### LADYBIRD—A RHYME

Ladybird, ladybird,  
Fly away home.  
Your house is on fire,  
And your children are gone.  
All except one  
And that's little Ann  
And she has crept under  
The warming pan.

### A SWARM OF BEES IN MAY— A RHYME

A swarm of bees in May  
is worth a load of hay.  
A swarm of bees in June  
is worth a silver spoon.  
A swarm of bees in July  
is not worth a fly.

## BOOKS AND STORIES

**A First Look at Insects**, by Millicent E. Selsam and Joyce Hunt. New York: Scholastic Book Services, 1974.

*This book includes lots of descriptions of insect parts, insects' eating habits and ways to catch insects.*

**Insects Build Their Homes**, by Gladys Conklin. New York: Holiday House, 1972.

*This book shows how insects build their homes and lay their eggs.*

## Talk Abouts

(approximate time: 5-10 minutes)

1. Name some of the places insects may be found.

*In the city, country, water, swamps, woods, fields, yards, parks, buildings, gardens and on animals.*

2. How do you find insects?

*Look up, look down, look all around and then look again. Look under things and in the air. Look in the water, on plants and on animals.*

3. Why do most insects usually live in one kind of place?

*They live in an area where they can find the food, water, soil or amount of sunlight that is just right for them.*

4. Some insects build special homes for themselves. What are two kinds of insects that do this?

*Ants and wasps.*

## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Insect Catcher's Safari" in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the "Insect Catcher's Safari Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# An Insect's Life

## Purposes

- To help children learn how insects grow and develop (the process of metamorphosis).

## Suggested Meeting Plan

1. Use the insect life stages pictures to talk with the children about the information given in "What Children Need to Know." (These pictures are part of the **Just Outside the Door** leader's package.)
2. Have the children do the "Life Stages Game" major activity.
3. Do any other activities that time allows from "Other Fun Things to Do."
4. Do the "Talk Abouts."
5. Plan for the next meeting by doing "Planning Ahead Together."
6. Send home "An Insect's Life Mini-Poster."

## What Children Need to Know

- Insects hatch from tiny eggs.
- Insects change shape as they grow. This is called "metamorphosis." They do this either by changing shape gradually, by shedding their skin as they grow bigger, or all at once with a very big change in how they look.

## Major Activity— Life Stages Game

(approximate time: 10-15 minutes)

You will need:

- The insect life stages pictures

that came with the **Just Outside the Door** leader's package

In this game, the children try to choose the correct order for the two kinds of insect life stages—gradual and all at once.

### GRADUAL CHANGE

1. Ask three children to volunteer to help show this change. Give each child one of the gradual change pictures (eggs, baby grasshopper [nymph] and adult grasshopper) to hold in front of them. Have the children hold the pictures in front of the rest of the group but make sure they are not standing with the pictures in the proper order. (For example, have them stand with the adult grasshopper first, the baby second and the eggs last.)
2. Ask the other children where they think baby grasshoppers come from. Have one child go to the children holding the pictures and move the child with the picture of the first life stage to the first position.
3. Ask the group what stage comes next. Have another child move the child with the second life stage picture next to the first life stage picture. Repeat this for the third stage.
4. When the pictures have been arranged in order, ask the group if this is the way they think baby grasshoppers start out and grow. If they think it is right (and if they are correct), congratulate them and move to the next part of the game. If they disagree with the order, have them rearrange the pictures until everyone agrees.

### SUDDEN CHANGE

1. Have four children hold the pictures of the butterfly life changes (eggs, caterpillar, cocoon [pupa] and butterfly). Make sure they are not standing in the correct order.
2. Have the other children rearrange the pictures until they agree they have the right order. After the pictures for both types of changes have been arranged, talk about the life stages while showing the pictures to the group. For example, say, "All insects hatch from tiny eggs," while showing the group the two pictures with eggs.

## Other Fun Things to Do

### ABOUT ME—

### A DISCUSSION ACTIVITY

(approximate time: 5-10 minutes)

Ask the children the following questions:

- Which kind of change (metamorphosis) do you like the best—gradual or sudden? Why?
- Pretend to be inside a cocoon and then come out as a butterfly.
- Pretend to be a caterpillar, a butterfly and a grasshopper. Which one is your favorite?



### AN INSECT LIFE MOBILE—AN ARTS AND CRAFTS ACTIVITY (approximate time: 30 minutes)

You will need:

- Unlined 5- by 7-inch index cards
- Scissors
- Crayons and/or markers
- String
- Paper punch

Decide if the mobile will be made by individuals or by small groups. Then have the children decide who will make the butterfly mobile and who will make the grasshopper mobile, or if they want to make both.

Prepare the parts for each mobile: eight eggs, four caterpillars (larvae), two cocoons (pupae), and one butterfly, and four eggs, two young grasshoppers (nymphs), and one adult grasshopper. These can be drawn free hand or made from patterns traced from the pictures provided in the **Just Outside the Door** leader's package. Have the children color the various life stages before assembling the mobile. Talk about how the butterfly has a sudden change (metamorphosis) and the grasshopper has a gradual change. Have the children talk about the life stages (how both insects start from eggs, etc.). Use the paper punch and string to assemble the mobiles.

Encourage the children to find a special place to display their mobile(s) and to talk about the various life stages.

### BUG MASKS—AN ARTS AND CRAFTS ACTIVITY (approximate time: 30 minutes)

You will need:

- Construction paper
- Scissors
- Glue
- String or elastic bands
- Crayons, colored pencils and/or markers
- Sequins, glitter, yarn, pipe-cleaners and buttons (optional)

Have each child cut a shape that is at least as large as his or her own face. Have the children use their imaginations to make their own insect face using the materials listed above. Remind them to make eyes. When they have finished decorating their masks, have them cut out the eyes (you may need to help the younger children). Then help them attach the string or elastic bands by making a tiny hole on each side of the mask and tying the ends of the string or elastic in a knot through each hole.

### CATERPILLAR RACE—A GAME

(approximate time: 15-20 minutes)

You will need:

- Two long, heavy ropes or poles

Play this game outdoors or in a large, mostly empty room. Divide the group into two teams of equal members. Have the members of each team straddle a rope (or pole) and grasp it with both hands. At a signal, the teams race to a goal line 15 yards away, cross it and come back. Play until both teams have crossed the finish line or until they tire of running.

### CATERPILLAR—A MOVEMENT ACTIVITY

(approximate time: 15-20 minutes)

Play this game either outdoors or in a large, mostly empty room. Have the children remove their shoes. Tell them to lie side-by-side on their stomachs. Make sure everyone is lying very close together and have very small children lie between two larger ones. Now have the child on one end of the line roll over onto his or her neighbor and keep rolling down the "road of bodies." When the child gets to the end of the line, he or she should lie on his or her stomach and the next child at the other end starts rolling. Continue this process until everyone has had at least one turn. As the game continues the caterpillar will advance over the ground, so make sure there's lots of room. If your group is large enough, have two or more caterpillars.

### FIREFLY—A SONG

(Sung to the tune of *Row, Row, Row Your Boat*)

Firefly, oh firefly,  
Flashing in the night.  
What a clever bug, you are  
Bringing your own light!



## ANTS ON A LOG—A SNACK (approximate time: 10-15 minutes)

You will need:

- Peanut butter in several small dishes
- Celery stalks, cleaned and cut into 3-inch pieces
- Raisins
- Plastic knives (one for each child)
- Paper plates (one for each child)
- Napkins or paper towels (one for each child)

**Have the children wash their hands before starting this activity.** Give each child a paper plate and a plastic knife. Have them spread peanut butter on pieces of celery and top with raisins placed in a row down the “log.” Eat and enjoy!

## BOOKS AND STORIES

**The Very Hungry Caterpillar**, by Eric Carle. New York: Philomel Books, 1979.

*Follow the progress of a very hungry caterpillar as he eats his way through a varied and very large quantity of food until, at last, he forms a cocoon around himself and goes to sleep.*

**Amazing World of Butterflies and Moths**, by Louis Sabin.

Mahwah, N.J.: Troll Associates, 1982.

*This book briefly describes the life cycle of the butterfly and moth.*

**Musical Insects**, by Bette J. Davis. New York: Lothrop, Lee and Shepard Co., 1971.

*This book follows four insects through their life cycles and describes how each makes its “songs.”*

## Talk Abouts

(approximate time: 5-10 minutes)

1. How do insects come into the world?  
*They hatch from tiny eggs.*
2. What are two ways that insects change?  
*Gradually or all at once.*

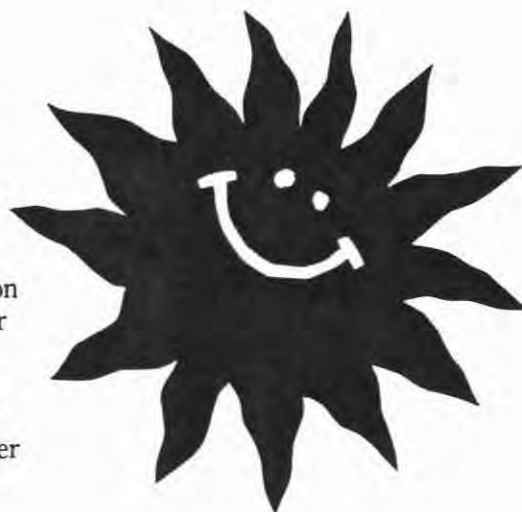
## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the “My Thoughts and Feelings” sheet for “An Insect’s Life” in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the “My Thoughts and Feelings” sheets, put each child’s in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send “An Insect’s Life Mini-Poster” home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# Working Together

## Purposes

- To help children understand the positive aspects of working together (cooperating).
- To provide children with the opportunity to do cooperative activities with each other.

## Suggested Meeting Plan

1. Use the "About Me" picture to talk about the information in "What Children Need to Know."
2. Have the children do the "Cooperative Fruit Salad" major activity.
3. Do any other activities that time allows from "Other Fun Things to Do."
4. Do the "Talk Abouts."
5. Plan for the next meeting by doing "Planning Ahead Together."
6. Send home the "Working Together Mini-Poster."

## What Children Need to Know

- Cooperation means people working together to get something done. This means they have a common goal.
- When people cooperate, they:
  - Listen to each other's ideas.
  - Take turns using things.
  - Take turns talking.
- Some things can be done better or more easily when people work together.
- Working together can make people feel good.

- Cooperating is a way for people to show they like each other.

## Major Activity— Cooperative Fruit Salad

(approximate time: 20 minutes)

**Note:** To do this activity, you need to arrange with parents ahead of time for each child to bring a different kind of fruit to the meeting.

You will need:

- Fruit
- Cutting boards
- Plastic forks, spoons and serrated knives (one for each child)
- Small paper bowls (one for each child)
- Paper towels
- Serving spoon

1. **Have the children wash their hands before starting this activity.**
2. Wash the fruit thoroughly before using and have the children cut up their fruits together and add them to the large bowl. Some children with firmer fruits will need your help cutting them into bite-sized pieces.
3. Have children serve themselves, eat and enjoy!
4. As the children eat the salad, you can talk about some of the concepts in "What Children Need to Know." You might say, "Imagine what it would have been like to cut up all this fruit by yourself. We really worked together to make this salad. We cooperated." Respond to the comments that they make about this.

## Other Fun Things to Do

**ABOUT ME—  
A DISCUSSION ACTIVITY**  
(approximate time: 5-10 minutes)

You will need:

- One "About Me" sheet for each child from their packet

Hold up the picture of the children working together. Ask the children what they see in the picture. Respond with something like, "Yes, these children are working together to make music. That's called cooperating. How do you think these children feel about this? Have you ever worked with someone else to do something? How did you feel about that? Today we will have a chance to do some cooperating." Tell the children that they will be able to take this picture home with them at the end of the meeting to color and show to their family.

**THE GREAT BIG ENORMOUS  
TURNIP—A DRAMA**  
(approximate time: 10-15 minutes)

You will need:

- The book **The Great Big Enormous Turnip** by Alexi Tolstoi (see "Books and Stories" on page 24)

Have the children pretend to be the characters in the story and act out what happens as you read. Then you can discuss how the characters finally did get the job done by helping one another.

**THREE-LEGGED RACE—  
A GAME**  
(approximate time: 10-15 minutes)

**Note:** This activity is most appropriate for older children.

You will need:

- Scarves to tie the children's legs together
- Rope or ribbon for the finish line

Have children form pairs and have each pair tie two of their legs together. After they have a chance to practice moving their legs in unison, have them run to the finish line. Make sure that each pair of children gets a turn.

**FARMER IN THE DELL—  
A SONG**

Have the children form a circle, holding hands. Have one child stand in the middle to be the "farmer." As you sing the song, the other characters will join the farmer in the center until the "cheese" is chosen. Then only the cheese stands alone in the middle. Repeat the song until everyone has had a turn inside the circle.

The farmer in the dell, the farmer  
in the dell,  
Hi, ho the dairy-o, the farmer  
in the dell.

The farmer takes a wife, the farmer  
takes a wife,  
Hi, ho the dairy-o, the farmer  
takes a wife.

The wife takes a child, the wife  
takes a child,  
Hi, ho the dairy-o, the wife  
takes a child.

The child takes a nurse, the child  
takes a nurse,  
Hi, ho the dairy-o, the child  
takes a nurse.

The nurse takes a dog, the nurse  
takes a dog,  
Hi, ho the dairy-o, the nurse  
takes a dog.

The dog takes a cat, the dog  
takes a cat,

Hi, ho the dairy-o, the dog  
takes a cat.

The cat takes a rat, the cat  
takes a rat,  
Hi, ho the dairy-o, the cat  
takes a rat.

The rat takes the cheese, the rat  
takes the cheese.  
Hi, ho the dairy-o, the rat  
takes the cheese.

The cheese stands alone, the cheese  
stands alone,  
Hi, ho the dairy-o, the cheese  
stands alone.

**RHYTHM INSTRUMENTS—  
A MUSICAL ACTIVITY**  
(approximate time: 15-20 minutes)

You will need:

- A favorite tape or record and a way to play it
- An assortment of rhythm instruments such as tambourines, maracas, cymbals, rhythm sticks, drums, bells, castanets or triangles. These can be purchased from school supply stores or borrowed from the children or a school. The following include excellent instructions on how to make your own instruments:
- I Saw a Purple Cow and 100 Other Recipes for Learning**, by Anne Cole, Carolyn Haas, Faith Bushnell and Betty Weinberger. Boston: Little, Brown and Company, 1972. (See pages 46-49 for instructions.)
- "Homemade Band," a record by Hap Palmer. New York: Activity Records, Inc., 1973.

Before you start the song, tell the children whether they will take turns or all play at the same time. You may want to divide them into two groups with different types of instruments and have each group play different parts of the song. For example, the group with tambourines and bells could play a chorus part, and the group with drums and rhythm sticks could play other parts. The children will probably need you to signal with your hand when it is time to switch. Afterwards, discuss how it sounded when they played together (cooperated). Did they like it?

**COOPERATIVE MURAL—AN  
ARTS AND CRAFTS ACTIVITY**  
(approximate time: 15-20 minutes)

You will need:

- Large sheet of butcher paper (available from art supply stores or schools) or paper grocery bags cut to lie flat and taped together to be as large as you like
- Assorted drawing materials (crayons, chalk, etc.)

Spread the paper on a large flat surface (table or floor) and have the children draw at the same time. They may want to try making one large picture in cooperation with the others or their own individual drawings for a collage effect. Give them feedback when they engage in cooperative behaviors such as listening to each other's ideas and sharing materials. For example, say, "You're sharing the crayons. That's part of cooperation."





## BOOKS AND STORIES

**Swimmy**, by Leo Lionni. New York: Pantheon, 1963.

*Through cooperation Swimmy and his friends are able to protect themselves from the bigger fish.*

### **The Great Big Enormous**

**Turnip**, by Alexi Tolstoi. New York: Franklin Watts, Inc., 1968.

*An entire family—an old man, old woman, little granddaughter, dog, cat and tiny mouse—unite in a tremendous effort to pull a huge turnip out of the ground.*

**Stone Soup: An Old Tale**, by Marcia Brown. New York: Charles Scribner's Sons, 1947.

*In this French folktale, cooperation and sharing lead three hungry soldiers and the villagers to eat a tasty soup made with stones.*

## Talk Abouts

(approximate time: 5-10 minutes)

1. What does it mean to cooperate?  
*To work together toward a common goal or to get something done.*
2. When people cooperate, what do they do?  
*They listen to each other's ideas, they take turns using things, and they take turns talking.*
3. Why do people cooperate?  
*Some things can be done better or more easily when people work together. Cooperating can make people feel good. Cooperating is a way to show others we like them.*

## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Working Together" in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the "Working Together Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# Fabulous Fruits

## Purposes

- To have children learn what a fruit is.
- To show children the variety of sizes, shapes, colors and tastes of fruits.
- To show children that many plants produce fruit that may be attached to the plant, found on the ground or found under the ground.

## Suggested Meeting Plan

1. Talk with the children about the information in “What Children Need to Know.”
2. Do the “Find the Seeds in the Fruit” major activity.
3. Do any other activities that time allows from “Other Fun Things to Do.”
4. Do the “Talk Abouts.”
5. Plan for the next meeting by doing “Planning Ahead Together.”
6. Send home the “Fabulous Fruits Mini-Poster.”

## What Children Need to Know

- A fruit is the part of a plant that seeds come in.
- Fruits come in many different sizes, shapes, colors and tastes.
- Fruits can be found in different places on a plant.
- Fruits can be eaten and are good for you.

## Major Activity— Find the Seeds in the Fruit

(approximate time: 10-20 minutes)

You will need:

- Fruits of different sizes, shapes and colors, and which have seeds in different places (for example, strawberries have small seeds on the outside, bananas and grapes have small seeds on the inside, melons have larger seeds, an avocado has a very large seed, and all these seeds are different colors, sizes and shapes) (at least one fruit for each child)
- Plastic serrated knives (one for each child)
- Paper towels or paper plates (one for each child)

1. **Have the children wash their hands before beginning this activity.**
2. Place the fruits on a table and have the children tell how they are different from one another. After they mention color, size and shape, tell them that the fruits are the same in one important way: they are all part of plants which have seeds.
3. Give each child a fruit to examine closely to find where the seeds are. Have them use the plastic knives to cut open the fruits. As the children find the seeds, have them tell how the seeds are different from one another and how they are similar (for example, the seeds will all grow into plants and they all have the same thing inside them—a baby plant).

4. Encourage the children to taste the fruit as they look for the seeds. Ask them if they normally eat any of the seeds as part of the fruit. Ask which seeds they remove before eating the fruit. Ask where the different fruits can be found on the parent plant. Do the fruits grow up high on the plant or do they grow on or under the ground?

## Other Fun Things to Do

**ABOUT ME—  
A DISCUSSION ACTIVITY**  
(approximate time: 5 minutes)

Ask the children the following questions:

- Which fruits are your favorites?
- What fruits do you eat often?  
What fruits have you eaten today?
- What fruit shapes do you like the best?

**MAKE YOUR OWN FRUIT—  
AN ARTS AND CRAFTS  
ACTIVITY**

(approximate time: 10-15 minutes)

You will need:

- Clay-dough in several different fruit colors (Use the recipe that appears on page 13.)
- Variety of seeds, such as poppy seeds, corn kernels, apple seeds or orange seeds

Let the children create their own favorite fruits. When they have finished, have them show the others their creation and tell where the seeds are found. If they can, have them tell where their fruit is found on the parent plant.

## FRUIT SALAD BOWL— A GAME

(approximate time: 10 minutes)

You will need:

- Bases of some sort (chalk circles work well) arranged in a circle (one for each child except for "It")

Have the players stand on the bases in a circle. The player chosen to be "It" should stand in the middle of the circle. Tell the other players to move slowly from base to base around "It." When "It" calls out "Fruit Salad," everyone must change places. "It" must try to get on a base, too. The player who does not get on a base is the new "It." Play until everyone has had a turn being "It."

## FRUIT MARKET—A GAME

(approximate time: 10 minutes)

Have the players stand in a circle and ask each one to choose the name of a different fruit. Choose one player to go to the middle of the circle to say, "I'm shopping in the fruit market, and I want an apple and a pear" (or whatever fruits he or she wants). The players with these names must then change places, and the player in the middle should try to take one of their empty places. The player left without a place goes to the middle and repeats the process. Play until everyone has had a turn being the shopper.

## BANANA BOB—A SNACK

(approximate time: 10-15 minutes)

You will need:

- Bananas, cut into 1-inch chunks
- Honey or orange juice
- Wheat germ or finely chopped nuts
- Toothpicks
- Containers for honey or orange juice and wheat germ or nuts
- Paper plates (one for each child)

Have the children wash their hands before starting this activity. Have the children use the

toothpicks to dip the bananas into the honey or juice and then roll them in the wheat germ or nuts and put them on their plates. Enjoy!

## BOOKS AND STORIES

**Eat the Fruit, Plant the Seed**, by Millicent E. Selsam and Jerome Wexler. New York: William Morrow and Co., 1980.

*Directions for growing plants from the seeds found inside avocados, papayas, citrus fruits, mangoes, pomegranates and kiwis are included in this book.*

**The Apple and Other Fruits**, by Millicent Selsam. New York: Morrow, 1973.

*This book includes photographs and descriptions of each stage in the growth of apples and other common fruits.*

## TRIPS OR WALKS

- Visit a fruit farm and let the children pick the fruit. Have them wash the fruit and eat it.
- Visit a fruit market or roadside stand and let the children see the varieties of fruit. Let them purchase a piece of fruit. Have them wash the fruit and eat it.

## Talk Abouts

(approximate time: 5-10 minutes)

1. What part of a plant is a fruit?  
*It is the part that has the seeds.*
2. How are fruits different from one another?  
*They come in different sizes, shapes, colors and tastes.*
3. Where can you find fruit on a plant?  
*In different places: sometimes up high, sometimes on the ground, sometimes under the ground.*
4. Why should we eat fruits?  
*They are good for us and taste good.*

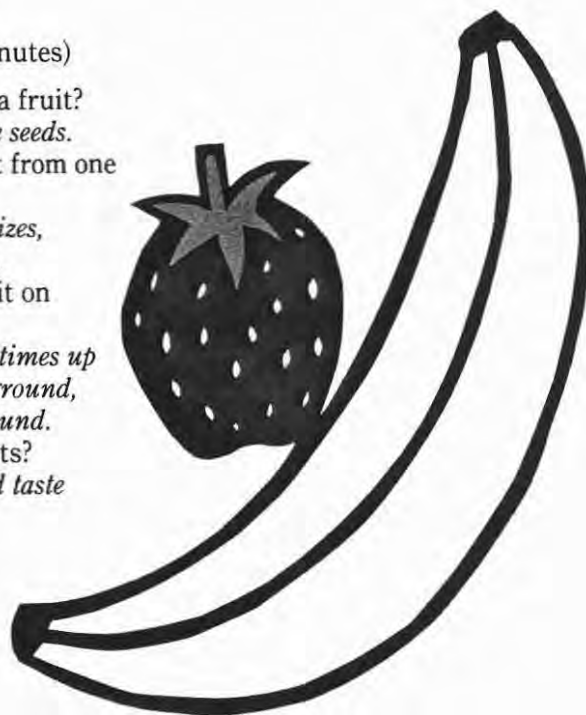
## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Fabulous Fruits" in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the "Fabulous Fruits Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# Surprising Seeds

## Purposes

- To have children learn what a seed is.
- To help children learn that seeds grow into plants.
- To show children that seeds come in many sizes, shapes and colors.
- To show children what is inside a seed and to have them learn the names of seed parts.
- To help children understand that some seeds are edible and nutritious.
- To provide children with the opportunity to see and handle different kinds of seeds.
- To show how seeds can be used for decoration.

## Suggested Meeting Plan

1. Talk with the children about the information in “What Children Need to Know.”
2. Do the “Inside a Seed” major activity.
3. Do any other activities that time allows from “Other Fun Things to Do.”
4. Do the “Talk Abouts.”
5. Plan for the next meeting by doing “Planning Ahead Together.”
6. Send home the “Surprising Seeds Mini-Poster.”

## What Children Need to Know

- Seeds are a part of plants and can be planted to grow more plants.
- Seeds come from the fruit of the plant.

- Seeds come in many sizes, shapes and colors.
- Pretty decorations can be made using seeds.
- Seeds have different parts—the seed coat, the scar and the baby plant.
- Some seeds can be eaten and they contain nutrients.

## Major Activity— Inside a Seed

(approximate time: 10-15 minutes)

You will need:

- An assortment of large dried beans (kidney, navy, lima, etc.)
- Containers for each kind of bean
- Paper towels
- Plastic knives (one for each child)
- Magnifying glasses, if possible

1. On the day before the meeting, place the beans in water and soak them overnight.
2. Give each child a paper towel and set out the containers of beans.
3. Tell the children to take a few of each kind of bean. Show them how to carefully pry open the beans and have them look at the parts of the beans. Explain that:
  - The **seed coat** is on the outside to protect the seed.
  - The **scar** on the seed coat is where the seed was attached to the plant. It is similar to a belly button.
  - The **baby plant** has a leafy tip and a young root. The leafy tip will become the top of the plant and will make green leaves as it grows into a full-sized plant.
4. Point out the different sizes, shapes and colors of the seeds being used. Ask the children if

they have ever eaten any of these seeds. Tell them many seeds are good to eat and are good for you. Ask the children what will happen if the seed is planted. (It will grow into a big plant.)

## Other Fun Things to Do

ABOUT ME—  
A DISCUSSION ACTIVITY  
(approximate time: 5-10 minutes)

Talk with the children about their experiences with seeds. Begin by asking general questions such as:

- Have you ever seen seeds before?
- Have you ever eaten seeds?
- Have you ever planted a seed?

As the children share their experiences with seeds, ask more specific questions about their experiences with seeds such as:

- What seeds have you eaten raw?
- What seeds have you eaten cooked?
- What seeds do you like best to eat?
- Do you think some seeds are pretty? Which ones?
- What kinds of seeds have you planted? What happened to the planted seeds? Can you act out a seed that is beginning to grow?
- What other kinds of things have you done with seeds?



## WHERE DO SEEDS COME FROM?—AN ACTIVITY

(approximate time: 10-15 minutes)

You will need:

- An assortment of thoroughly washed fruits, such as apples, oranges, lemons, cherries, peaches, beans or peas in the pod, summer squash and cucumbers (**Note:** As you do this activity, remember to call all the food items “fruits” because that is the correct name for the part of the plants that holds the seeds.)
- Paper towels
- Plastic serrated knives (one for each child)

**Have the children wash their hands before starting this activity.** Give each child a paper towel and a plastic knife. Place the fruits in front of them and ask them to guess what is inside them. Let them cut the fruits open and remove the seeds. Ask the children questions such as:

- What did you find inside the fruit?
- What color are the seeds?
- Are the seeds the same shapes?
- Are the seeds the same size?
- What will happen if you plant the seeds?
- What kind of plant will grow from each seed?
- Which fruit has the largest seed?

Have the children taste the fruits as they remove the seeds. Ask them if they ate any seeds as they tasted the fruits. Which ones were they and how did they taste?

## SAMPLING SEEDS—A TASTING ACTIVITY

(approximate time: 10-15 minutes)

You will need:

- A variety of edible seeds—pumpkin, sunflower, peanut, pecan, walnut, sesame, coconut, etc. (Include both raw and toasted seeds.) Information on roasting/toasting seeds follows this activity.

- Paper towels or paper plates (one for each child)
- Plastic spoons (one for each child)
- Containers for each kind of seed

**Have the children wash their hands before starting this activity.** Give each child a paper towel or paper plate and a spoon. Set out the containers of seeds. Ask the children questions such as, “What colors are these seeds? Are there any the same color? Are any of the seeds the same shape or size?” Tell the children to take a few of each of the seeds with their spoons and then group them on their plates/towels. When they are finished, ask why they grouped certain seeds together. Ask if there are other ways to group the seeds. Children could group their seeds according to color, size, shape, texture, hardness or type of seeds (for example, all the nuts together).

After the children have sorted the seeds, encourage them to taste them. Have them taste both raw and roasted seeds. Remind them some seeds are good for you because they contain nutrients.



## ROASTING/TOASTING SEEDS

(approximate time: 10-15 minutes)

You will need:

- Seeds (pumpkin, squash, melon or sunflower)
- Vegetable oil
- Salt
- Frying pan or shallow oven pan

Seeds that are hulled (that is, no longer in their shells) can be roasted in a frying pan over low heat or toasted in a shallow pan in an oven heated to 325°F. Mix about 1 cup of seeds with 2 teaspoons of vegetable oil and 1 teaspoon of salt. Heat and stir frequently to prevent scorching. The time required will be from 2 to 6 minutes, depending upon the dryness of the seeds.

## TOASTING WALNUTS

(approximate time: 15-20 minutes)

You will need:

- Walnuts
- Pan for boiling water
- Shallow baking pan

Drop walnut kernels into rapidly boiling water and boil for 3 minutes. Drain well. Spread the kernels evenly in the shallow pan and bake at 350°F, stirring often for 12 to 15 minutes, until golden. Cool thoroughly.



## SEED MEDALLIONS—AN ARTS AND CRAFTS ACTIVITY

(approximate time: 30-45 minutes)

You will need:

- Colorful seeds, such as pinto beans, kidney beans, corn, squash, split green peas, popcorn and sunflower seeds
- 3-inch cardboard circles (one for each child)
- Scissors
- Paper punch
- White glue or tacky glue
- Yarn or shoelaces
- A clear glaze spray (optional)

**Before the meeting, cut the cardboard circles and punch a hole close to one edge.** Have the children spread a thick layer of glue on one side of their cardboard circle. Have them carefully arrange a variety of seeds in a pattern on the glue. After the medallion is completely dry, spray with the glaze (optional). Give each child a 36-inch loop of yarn or a shoelace to thread through the hole and tie in a knot. It's now ready to wear!

These medallions also make lovely holiday ornaments. For ornaments, make the circles 1½ inches in diameter and use 4-inch loops of yarn.

## HUCKLE, BUCKLE, BEANSTALK—A GAME

(approximate time: 10-15 minutes)

You will need:

- A large seed of some type (For older children, a kidney bean may be large enough; for younger children, use a seed the size of a lima bean or larger [such as a nut].)

Select one child to be "It" and give him or her the seed to hide while the other players cover their eyes. When the seed has been hidden, the person who is "It" says "Ready!" and the other players start looking for the seed. When a player sees the seed, he or she goes to "It" and says "Huckle, buckle, beanstalk."

That player then sits down without saying where the bean is. After all the players have found the seed, a new game is started with the first player who found the seed being the new "It."

Younger children may need some help in locating the seed. Players who have already found the seed can coach from the sidelines by telling the other players when they are getting "warmer" or "colder."



## POPCORN SONG—A SONG

(Sung to the tune of *Sing a Song of Sixpence*. This song is adapted from the song in *Sing Through the Seasons*, Plough Publishing House, N.Y., 1986. Adapted with permission.)

Sing a song of popcorn  
When the snowstorms rage.  
Fifty little brown seeds  
Dropped into a cage.  
Shake them 'til they jump up  
Crowding to the top.  
Watch them burst their little coats.  
Pop! Pop! Pop!



## OATS, PEAS, BEANS AND BARLEY GROW—A SONG

(This song is reprinted by permission of Sterling Publishing Co., Inc., 387 Park Avenue South, New York, N.Y. 10016, from *The Best Singing Games for Children of All Ages* by Edgar S. Bley, © 1957 Sterling Publishing.)

Oats, peas, beans and barley grow,  
Oats, peas, beans and barley grow,  
Nor you nor I nor any can know,  
How oats, peas, beans and barley  
grow!

*(For the first verse, everyone should form a circle and skip to the left.)*

Thus the farmer sows his seed,  
Stands erect and takes his ease.  
He stamps his foot and claps his  
hands  
And turns around to view his land.

*(For the second verse, everyone should stand still and act out the motions of sowing the seed, stamping one's foot, clapping hands and looking over the land.)*

**Note:** You can sing the song again and change "his" to "her" in the second verse.



## PEANUT BUTTER SUNSHINE—A SNACK

(approximate time: 20 minutes)

You will need:

- Peanut butter
- Grated raw carrots
- Raisins
- Bread or crackers
- Paper plates
- Plastic knives, forks and spoons

**Have the children wash their hands before starting this activ-**

**ity.** Have the children spread peanut butter on their crackers or bread, then add a layer of grated carrot and sprinkle with raisins. The children can make regular or open-faced sandwiches. Talk about how peanut butter is made from an edible seed—the peanut.

## BOOKS AND STORIES

**Seeds and More Seeds**, by Millicent E. Selsam. New York: Harper and Row Publishers, 1959. *This read-aloud story tells what makes a seed special.*

**Science Fun With Peanuts and Popcorn**, by Rose Wyler. New York: Julian Messner, 1986. *Information about activities and experiments using peanuts and popcorn is presented.*

**The Riddle of Seeds**, by Winifred G. Hammond. New York: Coward-McCann, Inc., 1965. *This book tells all about seeds—their sizes, shapes, colors and parts. It also tells where seeds come from and how they grow.*

**Eat the Fruit, Plant the Seed**, by Millicent Selsam and Jerome Wexler. New York: Morrow, 1980. *Directions for growing plants from the seeds found inside avocados, papayas, citrus fruits, mangoes, pomegranates and kiwis are included in this book.*

## TRIPS OR WALKS

Go to a health food store, grocery store or bulk food store and see what kinds of seeds are available.

## Talk Abouts

(approximate time: 5 minutes)

1. What are seeds a part of?  
*A plant.*
2. Why do we plant seeds?  
*To grow more plants.*
3. What part of the plant are seeds found in?  
*The fruit.*

4. How are seeds different from one another?  
*They come in many different sizes, shapes and colors.*
5. What are the different parts of the seed?  
*The seed coat, the scar and the baby plant.*
6. Besides planting seeds to grow more plants, what else can we do with seeds?  
*We can eat some seeds and we can use seeds for decoration.*

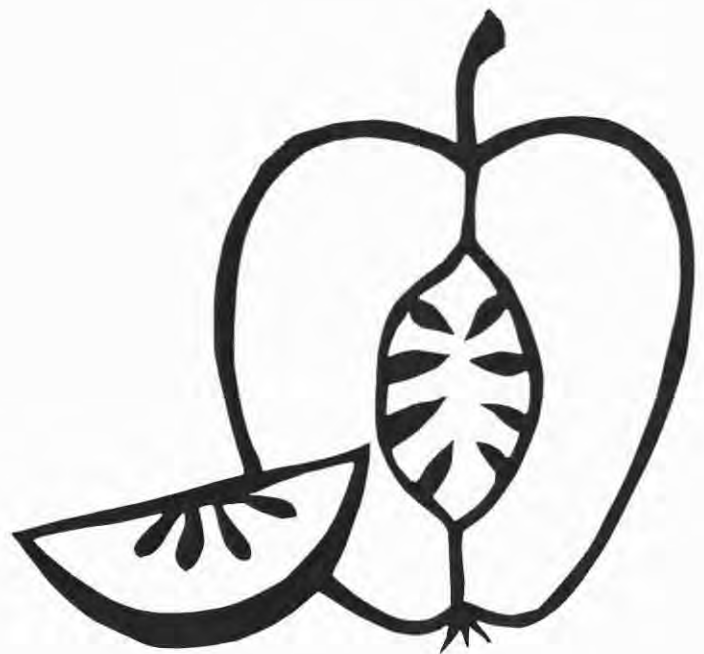
## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the “My Thoughts and Feelings” sheet for “Surprising Seeds” in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the “My Thoughts and Feelings” sheets, put each child’s in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the “Surprising Seeds Mini-Poster” home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# Oh, No! Stains!



## Purposes

- To provide children with the opportunity to identify common clothing stains and to practice methods of removal.
- To help children understand that wearing clean clothes can help people look nice.
- To help children realize that they can try to avoid getting stains on their clothing.

## Suggested Meeting Plan

1. Use the "About Me" discussion to introduce the topic of stains and the information in "What Children Need to Know."
2. Have the children do the "Make Your Own Stain" major activity.
3. Do any other activities that time allows from "Other Fun Things to Do."
4. Do the "Talk Abouts."
5. Plan for the next meeting by doing "Planning Ahead Together."
6. Send home the "Oh, No! Stains! Mini-Poster."

## What Children Need to Know

- A stain is a dirty or discolored spot.
- Different kinds of stains are removed in different ways.
- Treat stains right away, if possible.
- Some stains are hard to remove and some can never be removed.
- Wearing clean clothes can help people look nice and feel better.

- When using or eating messy things, people can try to keep stains from getting on their clothes by wearing aprons, paint smocks and bibs, and by using napkins.

## Major Activity— Make Your Own Stain

(approximate time: 30-45 minutes)

You will need:

- White kitchen-size garbage bags (one for every two children)
- Scissors
- Paper
- Pen or marker
- Paper bag
- Old clothes or scraps of fabric that are machine washable (an old sheet cut into 5-inch squares works well)
- Dish tubs or pails
- Water
- Items or products for making stains (grass, catsup, Popsicles, fruit such as blueberries, chocolate pudding, ink, soft drinks, etc.)
- Stain removal products (see the **Stain Removal Fact Sheet** on page 33 for the products suited to the stains you have chosen)

1. Prepare the following materials before the meeting:
  - Make aprons for the children. To make each apron, slit a bag up the sides and at the bottom to make two sections (each section will make one apron). Cut a strip off one side for a belt and cut a hole in the center

about 3 inches down from one end for the neck opening.

- Write the name of each stain on a slip of paper and put the slips in a paper bag.
2. Have the children put on the aprons. Tell them that they will need to protect their clothing from stains during this activity by wearing an apron and by rolling up their sleeves.
  3. Have each member draw a slip of paper from the paper bag. Tell them that this is the stain they will make. Explain that different kinds of stains can be removed in different ways and that you will be telling them the best ways. Also tell them that you will be treating the stains right after they are made because that is when the stains are the easiest to remove.
  4. Have the children make the stains on the fabric provided. (The same stain can be made on different types of fabric.)
  5. Demonstrate how to remove stains and then let each child remove his or her stain using the recommended products and methods as indicated on the **Stain Removal Fact Sheet**. You may want to let them experiment with different removal methods as well. If some of the children are having trouble, explain that some stains are harder to remove than others.
  6. After everyone has finished, let each child show his or her stain. (Most stains will have been removed.) Ask for their suggestions on ways to avoid getting stains on clothing. You may also



want to talk about how wearing clean clothes can help us look nice.

## Other Fun Things to Do

### ABOUT ME— A DISCUSSION ACTIVITY

(approximate time: 5-10 minutes)

Ask the children if they have ever gotten stains on their clothes. (You may need to define the word “stain” for some children.) For the children who answer “yes,” follow up with questions like, “Did the stain ever come out? How did you (or your mother or father) get it out?” You may want to continue with questions about how they felt about getting the stain and whether they have changed the things they did when wearing the clothing that was stained. For example, they may now wear a permanently stained shirt for playing rather than for going to church. Explain that they will have a chance to practice getting some stains out themselves.

### MYSTERY STAIN GAME

(approximate time: 10-15 minutes)

You will need:

- Fabric scraps that have stains made with the same products used in the “Make Your Own Stain” activity
- Items or products used to make stains

Hold up the “mystery” stains one at a time for the children to see. Let the children take turns matching each of the stains to its source.



### THIS IS THE WAY WE WASH OUR CLOTHES—A SONG

(Sung to the tune of *Here We Go Round the Mulberry Bush*.)

This is the way we wash our clothes,  
Wash our clothes, wash our clothes,  
This is the way we wash our clothes,  
So early in the morning.

(You may want to use hand motions and add verses for other washing chores such as scrubbing stains, drying clothes and hanging clothes.)

### STAIN PAINTINGS—AN ARTS AND CRAFTS ACTIVITY

(approximate time: 10-20 minutes)

You will need:

- White paper towels
- Newspaper
- Felt tip pen
- Eyedroppers
- Food coloring
- Water
- Small jars (baby food jars work well)

Give each child a piece of white paper towel and place it on several thicknesses of newspaper. Have each child write his or her name on one of the corners of the paper towel. In each jar, mix water and a different food coloring. Tell the children to use the eyedroppers to drop these mixtures onto the paper towel to create a stain painting. If the colors are too watery, add more food coloring.

### BOOKS AND STORIES

**Theodore**, by Edward Ormondroyd. Berkeley: Parnassus Press, 1968.

*This is the story of Theodore, the bear who comes out clean after he is accidentally put in the laundry. His owner fails to recognize him until he gets dirty again.*

**Soo Ling Finds a Way**, by June Behrens. San Carlos: Golden Gate Junior Books, 1965.

*Soo Ling's grandfather must close his hand laundry business because of competition from a new laundromat. But the story has a happy ending when the laundry and laundromat combine to give the best service to customers.*

**Clean as a Whistle**, by Aileen Fisher. New York: Crowell, 1969.

*This is the story of three children who get dirty and are shown that even animals keep themselves clean.*

**Mrs. Mopple's Washing Line**, by Anita Hewett. New York: McGraw-Hill, 1966.

*When the wind blows Mrs. Mopple's washing off the line, the washing ends up on the farm animals.*

### TRIPS OR WALKS

Arrange a guided tour of a dry-cleaning store or commercial laundry. Find out which methods they use to get out stains.

## Talk Abouts

(approximate time: 5 minutes)

1. What is a stain?  
*A soiled spot or discolored spot.*
2. Why is it important to avoid getting stains on your clothes?  
*Some stains are hard to remove and some can't be removed.*
3. What are some things you could do to keep from getting stains on your clothes?  
*Use a napkin or wear an apron, a smock or a bib.*
4. What can you do if you get something on your clothes?  
*Treat the stain as soon as you can.*
5. What are some things to remember about treating stains?  
*Different kinds of stains are removed in different ways. Try to remove a stain as soon as it happens.*

## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Oh, No! Stains!" in their packet. Follow the same directions given on page 6 to have them complete their

sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

### Mini-Poster

Send the "Oh, No! Stains! Mini-Poster" home with each child.

This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.

# Stain Removal Fact Sheet

## General Points to Remember

- Identify the stain.
- Identify that the garment is washable.
- Treat the stain immediately! Fresh stains are easier to remove than old ones.
- Blot or scrape off excess stain.
- Work on the wrong side of the fabric so you push the stain out, not in.
- Work carefully and patiently.
- Do not use hot water on an unknown stain.

## How to Identify Stains

One very important factor in successful stain removal is correctly identifying the stain. What is it? When did it happen? What does the garment label say about the fiber content? Does the label say the garment is washable?

If you can't remember what caused the stain, then try the following:

1. Look at the color and appearance of the stain.
2. Look at where the stain is located.
3. Smell the stain. Does it have an odor you recognize?
4. Feel the stain to check the texture.

## Procedure for Removing Identifiable Stains

- Place a soft cloth or paper towels under the stain to serve as a blotter.
- Work on the wrong side of the fabric.
- Place the stain side to the blotter.
- Sponge the stain lightly with a clean, soft cloth.
- Move frequently to a clean area on the blotter.

## Simple Stain Solutions

There are many different methods of stain removal, and this list focuses on methods and stain removal products which children can safely handle with adult supervision. You may have methods of your own to share with your group.

- **Catsup**—Scrape off the excess with a dull knife. Soak in cold water for 30 minutes. Rub detergent into the stain while it is still wet, then launder the garment.
- **Grass and Chocolate**—Treat the stain with cold water before it dries. Soak for 30 minutes. Use an enzyme presoak (like Axion or Biz) and presoak the garment for the recommended amount of time. Apply concentrated detergent to the stain and allow it to set, then launder the garment.
- **Fruit juices, mud, soft drinks**—Soak the stain for 15 minutes in a solution of 1 quart warm water, ½ teaspoon liquid hand dishwashing detergent and 1 tablespoon vinegar. Rinse. Sponge with rubbing alcohol.
- **Ink (ballpoint)**—Sponge the stain with rubbing alcohol or spray it with hair spray until it looks wet. Rub detergent into the stained area. Launder the garment. Repeat if necessary.
- **Ink (felt tip pen)**—Rub household cleaner such as Formula 409 or Mr. Clean into the stain. Rinse. Repeat as many times as necessary to remove the stain. Launder the garment. Some stains may be impossible to remove.
- **Ice cream**—Soak the stain in cold water. Rub detergent into the stain. Launder the garment.
- **Mustard**—Rub detergent into the dampened stain. Rinse. Soak in hot detergent water for several hours. Launder the garment.

# Wet and Wonderful

## Purposes

- To help children learn the basic characteristics of water.

## Suggested Meeting Plan

1. Talk about the information in “What Children Need to Know” and tell them they will be doing some activities using water.
2. Do the “Ice Turns Into Water” major activity.
3. Do any other activities that time allows from “Other Fun Things to Do.”
4. Do the “Talk Abouts.”
5. Plan for the next meeting by doing “Planning Ahead Together.”
6. Send home the “Wet and Wonderful Mini-Poster.”

## What Children Need to Know

- Water is a liquid.
- Water spreads out.
- Water flows when poured.
- Some things float in water.
- Ice is frozen water.
- Warmth changes ice into water.
- Some things dissolve in water.
- Water evaporates.
- Water is important to us.

## Major Activity for Younger Children—Ice Turns Into Water

(approximate time: 10-20 minutes)

You will need:

- Small paper cups (two for each child)

- Tinfoil pie pans or plastic bowls (two for each child)

1. **On the day before the meeting, freeze water in the cups** (one for each child). Fill each cup one-half to three-quarters full.
2. Give each child a cup of frozen water and a cup half-full of unfrozen water. Give them each two pie pans or bowls. Ask the children what is in their cups and how the contents are alike and different.
3. Have them put their ice in one pie pan or bowl and pour the water in the other. Tell the children to notice how the water **flows** when they are pouring it. Have the children compare the ice and the water in the pans. Talk about how the ice is colder than water, how the water spreads out in the pan and ice doesn't, how they can pick up the ice in one piece while they can't pick up all the water, and how the ice melts and the water doesn't.
4. Ask the children to describe what is happening to the ice as it sits in the pan. They will probably answer that it is melting. Remind the children that ice is really water that has frozen and now it is becoming water again.
5. Ask the children if they know how to make the ice melt faster. Let them use their imaginations to come up with ways of melting ice. Ways could include holding the ice, breathing on it or placing it in the sun. Let the children do the things they think of and then have them decide which way melts ice the fastest. Ask them what it is that makes the ice

melt. (Warmth.) Then ask the children how we can make the water turn into ice again.

6. Talk with the children about why ice is important to us. (One reason is that ice cools things—food, beverages and us on a hot day.)

## Major Activity for Older Children—Ice Turns Into Water

(approximate time: 10-20 minutes)

You will need:

- Small paper cups (two for each child)
- Pen or marker
- Tinfoil
- Small Styrofoam or paper plates
- Scraps of cloth, newspapers and other useful materials such as pieces of wood and plastic, sawdust and sand (be sure to have both light- and dark-colored materials)
- Containers large enough to hold water and an ice cube (one for each child)
- Bowls of ice cubes

1. Write each child's name on two paper cups.
2. Place the different materials around the area for the children to use. Ask the children what ice is and what happens when ice gets warm. Remind them that ice is frozen water. Tell the children that they are going to see how fast ice melts when it is put on different kinds of surfaces, when it is covered with different kinds of materials, and when it is put in different places.

3. Ask the children what happens when ice is put in water. After they have predicted what will happen, give each child a container of water and an ice cube in a paper cup. Have the children put their ice cube into the water. Talk about what happens to the ice. Does it melt quickly or slowly?
4. Have the children choose a material to put ice cubes on—tin foil, plastic, Styrofoam, wood, etc. Have the children tell you how fast they think the ice will melt on each surface. Give each child ice cubes in their paper cup and have them put them on the surfaces to see how fast the ice melts. Talk about the surfaces on which the ice melted the fastest.
5. Tell the children that covering ice with materials can change how quickly the ice will melt. Give the children more ice in their cups and have them cover each piece with a different material. Ask them how quickly they think the ice will melt when covered by each material. For example, one child may wrap one ice cube in tin foil and one in newspaper and cover one in sawdust. Again ask the children to talk about the results.
6. Give each child their second cup and give them one ice cube for each cup. Have each child choose two places to put their cups of ice. Have them tell you which cup of ice they think will melt the fastest.
7. While the ice is melting, talk with the children about why ice melts more quickly in some places. Let them suggest reasons for why this occurs. Explain that warmth will make ice melt, and that the warmer the temperature, the faster the ice will melt. You may want to do another activity and check the ice after that activity so that it will have enough time to melt.

## Other Fun Things to Do

### ABOUT ME— A DISCUSSION ACTIVITY (approximate time: 10 minutes)

Ask the children the following questions:

- Have you ever floated in water either by yourself or while on something like a boat?
- What have you seen floating in water around your house?
- Can you think of things you like that are dissolved in water? (Examples might include lemonade or orangeade.)
- Do you like to be in or around water? What things do you like to do with water? Do you like the feel of water on your body?
- How does your family use water in your home?
- Do any of you live close to water (for example, near rivers, creeks, ponds and lakes)?

### WATER DISSOLVES THINGS— AN ACTIVITY (approximate time: 15-20 minutes)

You will need as many of the following as possible:

- Salt, sugar cubes, powdered sugar, honey or syrup, flour, uncooked beans, cooking oil, butter or shortening, uncooked rice (at least one food item for each child)
- Straws for stirring
- Several clear plastic glasses
- Several small plastic containers of water
- Plastic spoons (one for each child)

Give each child a food item and ask him or her to tell you what it is. Then give each child a plastic cup, a spoon and a straw. Have the children pour some water in their glasses. Then tell them to use the plastic spoons to add some of their food to their glass of water and then stir with the straws. Ask what happens when they do this. What

happened when they added butter to the water? Can they still see it? Will they still see it if they stir harder? Can they stir until they can't see the food anymore? What happened when they added the sugar? Can they still see it? Did the sugar dissolve in the water? Did the butter dissolve? Tell the children that when something dissolves in water, it breaks apart and spreads out in the water. Let the children experiment with different materials until they have tried several items which dissolve and several items that do not dissolve.

### MAKING LEMONADE— A SNACK

(approximate time: 30 minutes)

You will need:

- Lemons, one per child
- Sugar (approximately 2 tablespoons per child)
- Paper cups (one per child)
- Plastic liquid measuring cups
- Measuring tablespoons (one per child)
- Plastic teaspoons
- Plastic serrated knives (one per child)
- Several small plastic pitchers or other containers filled with water
- Small plastic bowls (one per child)
- Paper towels or napkins
- Large plastic pitcher
- Ice cubes (at least one per child)

#### 1. Have the children wash their hands before doing this activity.

2. Give each child a plastic spoon, plastic knife and a bowl. Explain to the children they are going to make lemonade for their snack.

3. Give each child a lemon and tell them to roll it back and forth on the table until it is soft. Younger children may need some help with this.

4. Have them use the plastic knives to cut the lemons in half, then have them hold the lemons over their bowls and squeeze

out all the juice. They can use their spoons to take the seeds out of their bowls.

5. After this is done, have them lick their spoons. Ask them how the lemon juice tastes. (Do not let them put their spoons back in their bowls after licking them.) Let them describe their reactions to the taste.
6. Have each child pour his or her juice into the large pitcher. Then have each child use a measuring cup to pour 1 cup of water into the large pitcher (using the water from the small pitchers). Stir.
7. Pour a small amount of the water and juice mixture into each child's cup and have them taste it. Ask them what the lemon juice tastes like now. Does it taste the same as it did on the spoon? Ask what they can add to make this taste better. (Sugar.)
8. Have each child use the measuring tablespoon to add 2 tablespoons of sugar to the water and juice mixture. Have them take turns stirring the mixture until the sugar is dissolved.
9. Give the children a small amount in their cups and have them describe it.
10. Put ice in each child's cup and have them pour their lemonade. While they are enjoying their drink, talk with them about what happened with the lemonade. How did the mixture taste? What happened when they added sugar? Could they see the sugar in the water? How did it taste after the sugar was added? Did the sugar dissolve? How can they tell the sugar is still in the lemon/water mixture? What else could they mix with water to make a drink? You can also ask questions about what happens to the ice when it is put into the warm lemonade. (It floats, then melts.)

### **CORK SAILBOATS—AN ARTS AND CRAFTS ACTIVITY** (approximate time: 20 minutes)

You will need:

- White paper
- Scissors
- Crayons, and/or colored pencils
- Large corks (one for each child)
- Plastic multicolored toothpicks
- Large basin of water

**The day before the meeting, cut the white paper into 2-inch squares, then cut each of the squares in half diagonally to make the sails.**

Ask the children if they have noticed that some things float in water. Ask them to think of things they have seen floating at some time. Tell them that they are going to make something that will float on water—a sailboat.

Put out the crayons and colored pencils and give each child one of the triangular pieces of sail. Have them write their name on the sails and decorate it as they like. Give each child a cork and have them choose a colored toothpick for the mast. Have them insert the toothpick through the sail (see illustration). (You may need to help younger children with this.) Then have them stick the toothpick into the middle of their cork.

After the children finish their boats, have them put the boats in the large basin of water to see if they float.

### **ROW, ROW, ROW YOUR BOAT—A SONG**

Row, row, row your boat,  
Gently down the stream.  
Merrily, merrily, merrily, merrily!  
Life is but a dream.

### **WHERE DOES THE WATER GO?—AN ACTIVITY**

(approximate time: 10-20 minutes)

You will need:

- Inexpensive paint brushes in assorted sizes and/or sponges
- Pails or large cans to hold water

This activity should be done outside. Tell the children they will be "painting" with water today. Give each child a pail of water and let them choose a paint brush or sponge. Allow the children to paint various surfaces outside—walls, sidewalks, benches, driveways, fences, railings, tree trunks and so on. Encourage the children to use their imaginations in making their "water pictures." Ask if they have ever painted with water before. Does the surface look different after they have painted it? Does it stay the same after they have finished painting? Where did the water go? How do we know the water isn't there any more? Tell the children the water went into the air and that this is called "evaporation."

### **PLAYING IN THE GARDEN HOSE—AN ACTIVITY**

(approximate time: 30-45 minutes)

You will need:

- Swimsuits
- Towels
- One or two garden hoses
- A source of water
- A warm, sunny day

Have each child bring a swimsuit and towel to the meeting. When the children have changed into their swimsuits, turn on the water and show the children how the water flows out of the hose. Point out to the children that the water spreads out on the ground and doesn't stay in one shape. Encourage the children to run and play in the spray from the garden hoses for as long as they like. When they are done, have the children leave parts of their bodies wet. As they dry in the sun, ask them where the water went. Did they dry it off with a towel? Tell the children the water went into the air, and this is called "evaporation."

## WATER SLIDE—A GAME

(approximate time: 10 minutes)

You will need:

- A long sheet of plastic
- A garden hose and water source
- A warm, sunny day

Spread the sheet of plastic on level grassy ground. Spray it well with water. (You may need to stake the plastic down in some way so that it doesn't bunch up.) Have the children take turns running and sliding down the plastic sheet. Talk about how the water spreads out on the plastic after it flows out of the hose.

## BOOKS AND STORIES

**The Little Sailboat**, by Lois Lenski. New York: Henry Z. Walck, 1937.

*Captain Small and his dog Tinker spend a day sailing, fishing and swimming.*

**The Magic of Water**, by Warren G. Schloat, Jr. New York: Charles Scribner's Sons, 1955.

*The story of a boy named Andy who finds out all about water and the fun he can have with it.*

**Talk About Water**, by Angela Webb. London: Franklin Watts., 1986.

*This book is for younger children. It provides information, activities and experiments about water at an easily understood level.*

## Talk Abouts

(approximate time: 5 minutes)

1. What happens to water when it is poured?  
*It flows and spreads out.*
2. What happens to things, such as boats, when you put them in water?  
*They float.*
3. What is ice?  
*It is frozen water.*
4. What changes ice into water?  
*Warmth.*

5. What happens to things like sugar when they are put into water?  
*They dissolve.*
6. What is it called when water goes into the air?  
*Evaporation.*

## Planning Ahead Together

(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Wet and Wonderful" in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

## Mini-Poster

Send the "Wet and Wonderful Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.



# Birds of a Feather

## Purposes

- To help children learn what makes a bird a bird.
- To help children discover the many different kinds of birds.
- To help children learn about the many different kinds of bird behaviors.
- To show children how they can attract birds.

## Suggested Meeting Plan

1. Talk with the children about the information in "What Children Need to Know."
2. Do the "Making Bird Puppets" major activity.
3. Do any other activities that time allows from "Other Fun Things to Do."
4. Do the "Talk Abouts."
5. Plan for the next meeting by doing "Planning Ahead Together."
6. Send home the "Birds of a Feather Mini-Poster."

## What Children Need to Know

- Birds are the only animals with feathers.
- Birds come in many different sizes, shapes and colors.
- Different kinds of birds move in different ways.
- Different kinds of birds eat different foods.
- Bird feeders can attract birds to your yard or window.

## Major Activity— Making Bird Puppets

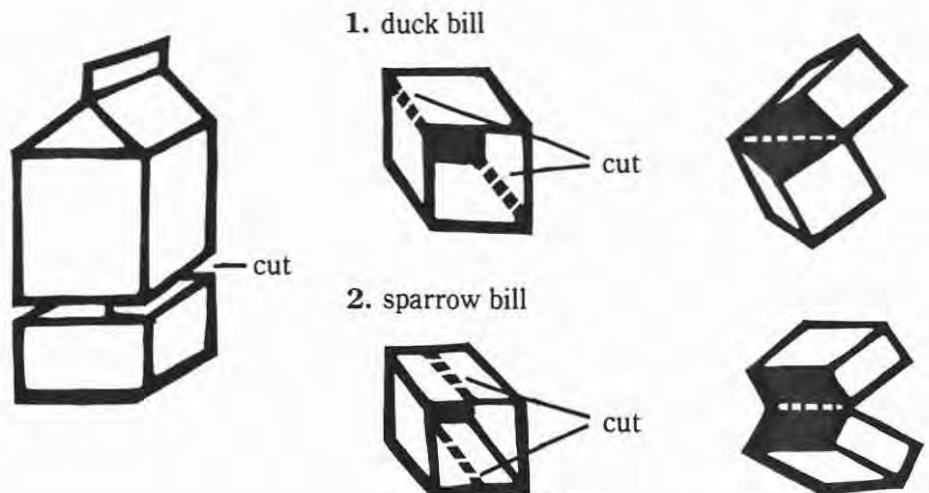
(approximate time: 20-30 minutes)

You will need:

- Pictures of different birds from magazines, books, Cooperative Extension Service publications
- Old light-colored socks (one for each child)
- Scissors
- Buttons
- Glue
- Feathers (available from craft stores)
- Construction paper in a variety of colors
- Markers
- Materials for bird bills—Plastic spoons (for mallard duck bill), plastic straws (for ruby-throated hummingbird bill), toothpicks (for hairy woodpecker bill), milk cartons (for house sparrow bills)
- Rubber bands

1. Follow the illustration below to prepare the milk carton bills before the meeting.

2. Show children the different pictures of birds. Point out that birds come in different sizes, shapes and colors, and that different birds have different shaped bills. Ask the children if they know what all of these birds have in common. If they are unable to guess, tell them that **all birds have feathers** and that this makes them different from any other type of animal.
3. Tell the children that they are going to make bird puppets and they will be able to "try on" different bills for their birds. They will also be able to decorate their puppets with feathers, because all birds have feathers.
4. Give each child a sock. Have them cut a very small hole in the end of the sock. Then have the children choose buttons for eyes for their puppets and glue them on above the hole. Let the children decorate their puppets as they like, using real feathers, feathers cut out of construction paper or feathers drawn on their socks with markers.



- After their birds have been decorated, have the children look at the bird pictures again. Point out how birds have different shaped bills, depending on what kinds of food they eat. Some birds, like hummingbirds, have bills that are like straws because they suck up fluids like nectar from plants. Others, like house sparrows, have thick beaks for crushing seeds. And still others, like ducks, have spoon-shaped bills for straining through water for food. And still others, such as woodpeckers, have sharp, thin bills for probing behind tree bark for insects. Show the children the straws, milk carton bills, spoons, and toothpicks and explain that these things are a lot like the bills of different birds. Have them choose one for their puppet, insert the “bill” through the end of the sock, and hold onto it from inside the sock puppet. Have them use rubber bands to keep the puppets on their hands.
- Have the children pretend to have their puppets eat. Let them try each kind of bill at least once.

## Other Fun Things to Do

### ABOUT ME— A DISCUSSION ACTIVITY (approximate time: 5-10 minutes)

Ask the children the following questions:

- Have you ever seen any of the birds in the pictures we saw today? Where did you see them?
- Which kind of bird would you like to be if you were pretending?
- How many different colored birds have you seen around your home and school?
- Have you ever found feathers on the ground? Where did you find them? What colors were they?
- What kind of bill would you like to have if you were a bird? What kinds of food would you eat with this kind of bill?

- What would be the best thing about being a bird?

### BIRDPLAY— A MOVEMENT ACTIVITY (approximate time: 20-25 minutes)

You will need:

- The **More Than Flying—What Birds Do** booklet pages (from the member's packet)
- Stapler

Tell children that different birds behave in different ways. Tell the children to fold the **More Than Flying—What Birds Do** pages in half and then staple them together to make a book to use for this activity. (The children will take this book home to color after the meeting.) While looking at the books, talk about the different ways that birds move. Tell the children that birds move in different ways for many reasons. They feed on different kinds of food (seeds, insects, small animals), and they move in the ways that best help them to find their food. Also, birds sometimes fly or walk in a “funny” way to attract a mate. Have the children pretend to be each of the different kinds of birds and have them fly, perch and move on the ground the way the different birds do.

### FEATHER FUN—AN ARTS AND CRAFTS ACTIVITY (approximate time: 30 minutes)

You will need:

- Feathers (large wing feathers are preferred)
- Crayons with paper removed
- Light-colored lightweight paper
- Scissors

Talk about what makes a bird a bird. Remind children that birds are the only animals that have feathers. Have each child choose a feather and do a rubbing of their feather by using the sides of crayons on paper placed on top of the feather. The rubbing will look most like a feather if the coloring strokes are perpendicular to the shaft (center) of the

feather. The outer edge of the feather will be very faint. You may want to have the children outline this edge with a different color crayon. Have the children cut out their feather rubbing.

Talk about how real feathers are very light, yet very strong. Have them hold their real feather and their paper feather to see which is lighter. The paper feather is almost as light as a real feather, but which is stronger? Have each child move their real and paper feathers through the air. Which one is sturdier? Which one moves and twists through the air?

### FEEDING BIRDS— A CONSTRUCTION ACTIVITY FOR YOUNGER CHILDREN (approximate time: 30 minutes)

You will need:

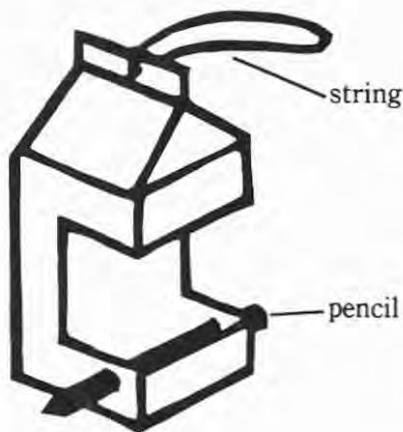
- Pine cones
- Yarn or string
- Peanut butter
- Plastic knives
- Bird seed

Ask the children how they think they can attract birds. One way is to make food available for the birds. Tell them they are going to make a bird feeder to put in their yards or windows.

Give each child a pine cone and some yarn or string. Have them tie the string or yarn securely around the pine cone, wrapping it around the cone several times. Then have them use the knives to spread peanut butter generously all over the pine cones. Have them roll each pine cone in the bird seed. Tell them that when they take these feeders home, they can be hung outside a window to attract birds. Talk about places to hang their feeder. It should be high enough so other animals can't get it and close to protective cover for the birds.







### FEEDING BIRDS— A CONSTRUCTION ACTIVITY FOR OLDER CHILDREN

(approximate time: 30 minutes)

You will need:

- ½ gallon cardboard milk cartons (one for each child)
- Felt tip marker or pen
- Illustration for birdfeeder
- Scissors
- Paper punch (optional)
- Pencils (one for each child)
- String
- Bird seed

Ask children how they think they can attract birds. One way is to make food available for the birds. Tell them they are going to make a bird feeder to put in their yards or windows.

Give each child a milk carton. Draw lines on the carton to cut along as shown in the illustration. Have children cut the cartons along these lines. Use a paper punch or scissors to make the holes to insert the pencil for a perch, and to make holes in the top to attach string to hang the bird feeder. Sprinkle bird seeds on the bottom of the feeder.

Have the children talk about where they can put their feeders at home. Tell them it should be placed within view of a window, high enough so other animals can't get it, and close to protective cover for the birds.

### SIX LITTLE DUCKS—A SONG

(This song is from **Sally Go Round the Sun**, by Edith Fowke. Used

by permission of the Canadian Publishers, McClelland and Stewart, Toronto.)

**Verse 1:**  
Six little ducks that I once knew,  
Fat ones, skinny ones, fair ones, too.

**Chorus:**  
But the one little duck with a  
feather in his back,  
He led the others with a "QUACK,  
QUACK, QUACK!  
QUACK, QUACK, QUACK! QUACK,  
QUACK, QUACK!"  
He led the others with a "QUACK,  
QUACK, QUACK!"

**Verse 2:**  
Down to the river they would go,  
Wibble, wobble, wibble, wobble,  
to and fro.  
Chorus

**Verse 3:**  
Home from the river they would  
come,  
Wibble, wobble, wibble, wobble,  
ho hum hum.  
Chorus

### BOOKS AND STORIES

**A Bird's Body**, by Joanna Cole.  
New York: William Morrow and Co.,  
Inc., 1982.

*This book discusses the anatomy, characteristics and behavior of birds. It focuses on their ability to fly and includes great pictures and diagrams.*

**The Beginning Knowledge Book of Backyard Birds**, by Hanniford Rush. New York: Macmillan, 1964.  
*The anatomy, eggs and nests of 18 most commonly found birds are discussed.*

**What Is a Bird?** by Gene Darby. Chicago: Benefic Press, 1960.  
*This book describes different birds' anatomy, nesting habits, birth and flight patterns.*

**Golden Guide to Birds**, by H. S. Zim and I. N. Gabrielson. New York: Golden Press, 1956.  
*This is a guide to the most familiar American birds.*

### Talk Abouts

(approximate time: 5 minutes)

1. What is it that only birds have?  
*Feathers.*
2. How are birds different?  
*They come in different sizes, shapes and colors. They move in different ways, and they eat different kinds of food.*
3. How can you attract birds to your house?  
*You can provide food for the birds with a bird feeder.*

### Planning Ahead Together

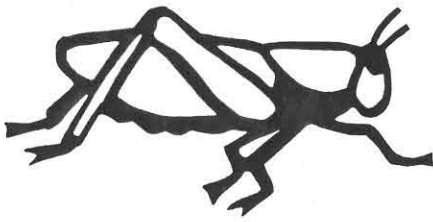
(approximate time: 10 minutes)

Have the children find the "My Thoughts and Feelings" sheet for "Birds of a Feather" in their packet. Follow the same directions given on page 6 to have them complete their sheets and prepare for the next meeting. After you have looked at the "My Thoughts and Feelings" sheets, put each child's in his or her folder as a record of the activities completed in 4-H.

### Mini-Poster

Send the "Birds of a Feather Mini-Poster" home with each child. This will tell parents about the activities the children did this week. Remember to write down any special messages for parents that you feel are important: things each child should bring to the next meeting, your positive comments about a child, and so on.





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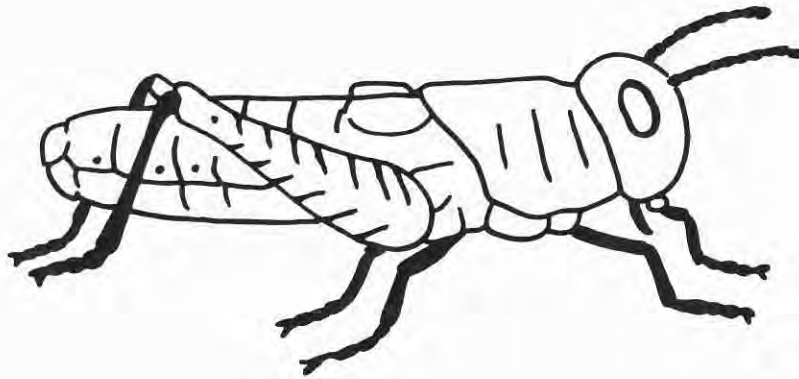
## **Grasshopper Life Stages**

### 1. Egg



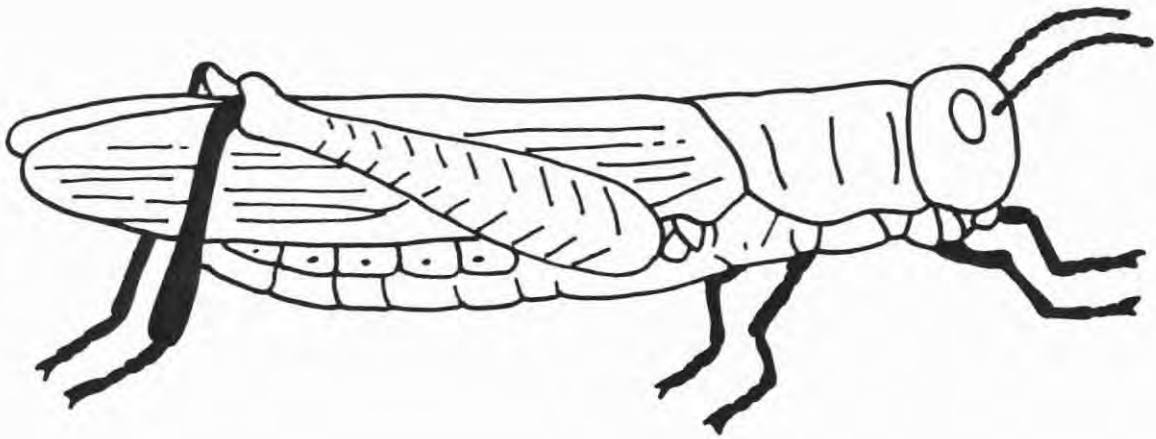
## **Grasshopper Life Stages**

### 2. Baby Grasshopper (Nymph)



## **Grasshopper Life Stages**

### 3. Adult Grasshopper





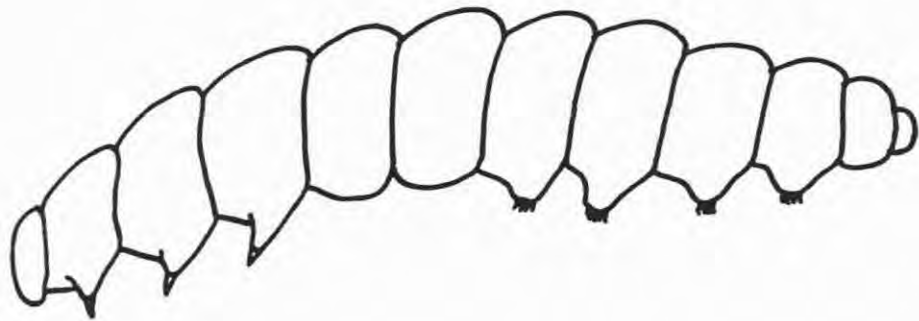
## **Butterfly Life Stages**

### 1. Egg



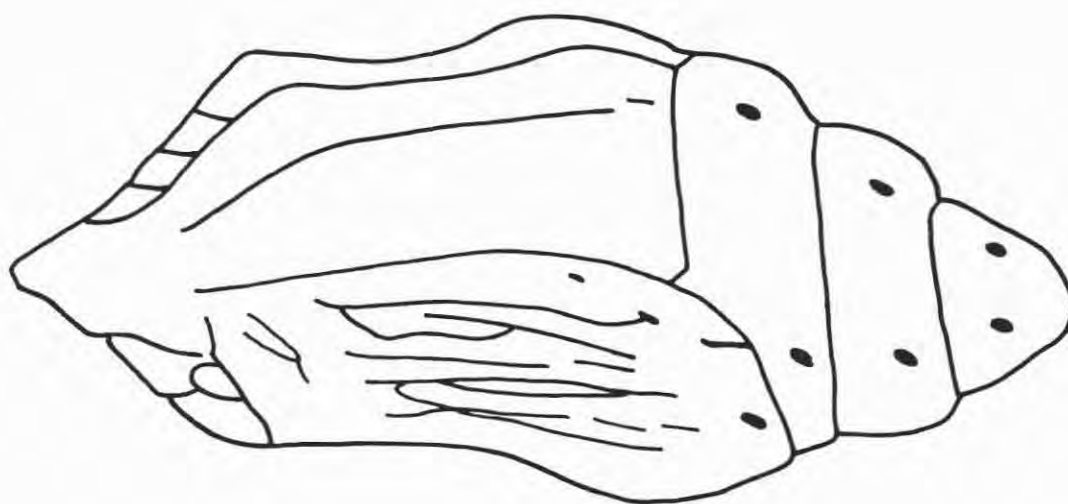
# **Butterfly Life Stages**

## 2. Caterpillar



## **Butterfly Life Stages**

### 3. Cocoon (Pupa)



## **Butterfly Life Stages**

### 4. Butterfly

