

A 4-H AFTERSCHOOL RESOURCE GUIDE



18 U.S.C. 707



extraordinary learning opportunities

a Sampler of 4-H Afterschool Activities

CREDITS



4-H Afterschool

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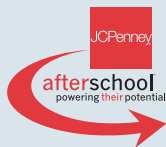
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4 - H A F T E R S C H O O L

E X T R A O R D I N A R Y L E A R N I N G O P P O R T U N I T I E S

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What is 4-H?

4-H is the Cooperative Extension System's dynamic, nonformal, educational program for youth. The program partners the cooperative efforts of youth, volunteer leaders, state land-grant universities, state and local governments, 4-H foundations, and the Cooperative State Research Educational and Extension Service of the U.S. Department of Agriculture. 4-H is one of the largest youth organizations in the United States, with more than 6.8 million youth and almost 611,000 youth and adult volunteers.



After-school hours represent either risk or opportunity.

Extraordinary Learning Opportunities: A Sampler of 4-H

Afterschool Activities can be used directly by after-school care providers, or as a training piece by Extension professionals. This resource guide represents some of the curricula, ideas, and information available throughout the Cooperative Extension System. It is not a full curriculum; rather, it is a sampling of activities. For more information, see *How to Use This Resource Guide* on page 6.

The Issue of After-School Care

Care for school-age children is a concern for millions of American families, particularly those in which the single parent or both parents are employed. With nearly 40 million children between the ages of five and 14, the United States is experiencing a burgeoning need for out-of-school programs.^{1,2} What's more, elementary and secondary school enrollment is at record levels in terms of numbers of students and is expected to increase every year through the early 2000s,³ so the need for programs will continue to increase.

Increased public attention has focused on the needs of youth during their out-of-school hours. There is a growing awareness that where youth spend their time, what they do, and with whom they do it are important to their overall development.^{4,5} Programs in the out-of-school hours can give youth safe supervised places to spend time, along with chances to learn new skills, develop their interests, and spend meaningful time with peers and adults.

Generally speaking, participation in high quality after-school programs is thought to increase positive behaviors, both academic and social, and decrease problem behaviors. Participation is linked with a lower incidence of problem behaviors, such as decreased academic failure, substance use, and delinquency.^{6, 7, 8, 9, 10, 11}

* Introduction based on work by Theresa Ferrari, Ohio State University.

The 4-H Afterschool Program

The 4-H Afterschool program helps increase the quality of after-school care. To accomplish this, the Cooperative Extension System has chosen to focus on improving the ability of after-school program staff to offer high quality care, education, and developmental experiences for youth. The program offers support and training materials, including this resource guide, to help after-school providers teach quality program activities. 4-H Afterschool also helps after-school providers establish 4-H clubs at their sites and can train providers to use positive youth development principles in their programming.



How To Use This Resource Guide

There are two other resource guides in this series. *Starting 4-H Clubs in After-School Programs* is used to help after-school program staff start 4-H clubs at their sites. *Guiding Growth: Training Staff for Working with Youth in After-School Programs* is used to help after-school program staff increase their capacities to provide educational experiences, opportunities for development, and caring environments for children. These guides are intended to be used independently. As such, they contain some repetition.

The *Extraordinary Learning Opportunities: A Sampler of 4-H Afterschool Activities* resource guide is designed to help sites expand their range of curriculum offerings. It represents the curricula, ideas, and information available throughout the Cooperative Extension System. It is not a full curriculum; rather, it is a sampling of activities.

This guide is a place to start for after-school staff if they're looking for "something to do" with the children who attend their programs. After-school staff can use this guide directly with the children who attend their sites. They also may request trainings from local 4-H professionals.

After-school staff also may decide to start 4-H clubs at their sites. Again, local 4-H professionals can help with this effort, using the *Starting 4-H Clubs in After-School Programs* resource guide to help sites get their 4-H club up and running.

Sites also may wish to schedule staff training to increase their capacity to provide quality care. In this case, local 4-H professionals will use *Guiding Growth: Training Staff for Working with Youth in After-School Programs* to structure a training for after-school staff.

Resource Guide Matrix

The matrix provides an overview of the activities found in this resource guide.

ACTIVITY	AGES	PURPOSE	CURRICULUM
CHAPTER ONE			
Children as Learners			
CHAPTER TWO			
Physical Development, Health, and Fitness			
FOOD GUIDE PYRAMID RELAY	Eight to 12 (contains adaptation information for younger children)	To become familiar with the food guide pyramid. To use the food guide pyramid to begin to incorporate more fruits, vegetables, and grains into diets.	<i>Youth Curriculum Sourcebook (EFNEP)</i> , North Central Region, University of Wisconsin Cooperative Extension Service
VEGETABLE JEOPARDY	Five to 14	To understand how important vegetables are in our diets.	<i>Youth Curriculum Sourcebook (EFNEP)</i> , North Central Region, University of Wisconsin Cooperative Extension Service
STRESS IN MY LIFE	Eight to 12	To understand some reasons why children experience stress.	<i>Health Rocks!</i> National 4-H Council
WASHY, WASHY, WASHY	Four to eight	To understand hands can carry dirt and germs. To demonstrate how to remove dirt and bacteria from hands.	<i>Rising to the Occasion: A 4-H Leader's Guide</i> , National 4-H Council
CHAPTER THREE			
Cognitive Development and Academic Success			
GOOD VIBRATIONS: THE SCIENCE OF SOUND	Five to 12	To understand how sounds travel and are heard. To gain an appreciation for how sounds enrich our lives.	<i>4-H Cloverbud Series II Curriculum</i> , Ohio State
IT'S IN THE BAG!	Seven to 14	To demonstrate techniques of measuring; to produce an end product (bread) by following directions.	<i>Rising to the Occasion: A 4-H Leader's Guide</i> , National 4-H Council

Resource Guide Matrix

ACTIVITY	AGES	PURPOSE	CURRICULUM
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CHAPTER FOUR

Social, Emotional, and Character Development

BLINDFOLD TRAIL	Five to 18	To learn to trust another person and follow their directions to achieve a positive outcome. Alternately, to learn to give good direction to work in cooperation to achieve a positive outcome.	<i>The Walk: Taking Your Youth Outdoors for Environmental Stewardship and Learning</i> , Michigan State University Extension
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CHAPTER FIVE

Artistic and Creative Expression

DESIGN ELEMENTS: SHAPE	Five to 18	To create combinations of shapes that communicate an idea or thing.	<i>Communications Toolkit: Fun, Skill-Building Activities to Do With Kids</i> , Michigan State University Extension
BLUE BOAT TAKES A RIDE	Seven to 12	To design boats that use different fuel sources.	<i>Energizing your future with energy, economics, and the environment!</i> National 4-H Council

CHAPTER SIX

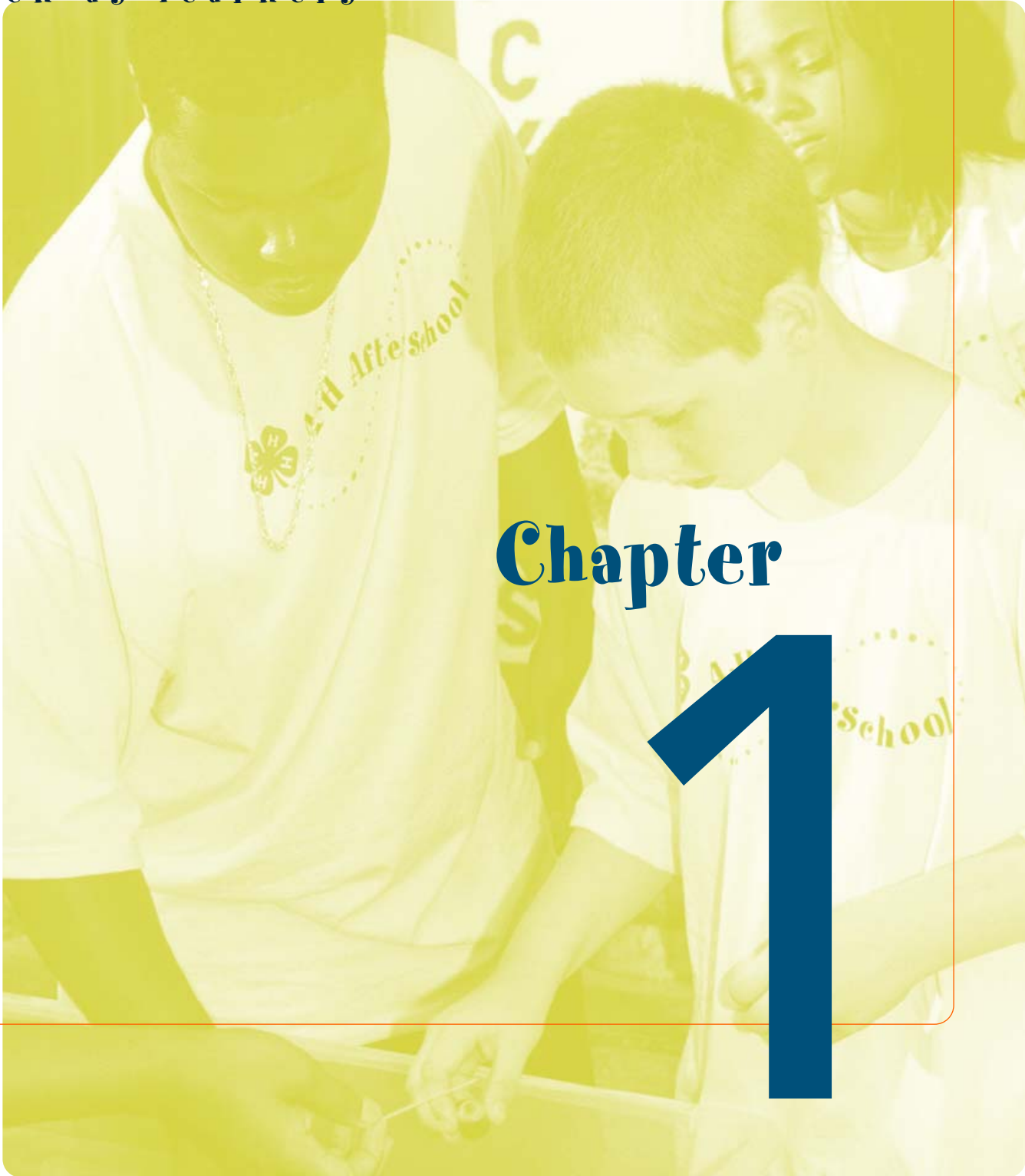
Family Living Skills

HUG ME TEDDY BEAR	Eight to 12	To learn the basics of sewing. To make an item for donation.	Home Sewing Association
BACTERIAL BLUNDERS	Five to 14	To identify potential food contaminants. To explore how to keep food safe.	<i>Getting into a Food Mood: Communicating Food Issues</i> , National 4-H Council
SAFETY SING-ALONG	Five to eight	To learn some basic safety skills around lawn mowers.	<i>Lawn Ranger Leader's Guide</i> , National 4-H Council

Resource Guide Matrix

ACTIVITY	AGES	PURPOSE	CURRICULUM
CHAPTER SEVEN			
Environment and Global Awareness			
ANT ANTICS	Five to eight	To develop an awareness of ants as part of the world.	<i>4-H Cloverbud Series II Curriculum</i> , Ohio State University
SCAVENGER HUNTS	Five to 14	To discover different pieces and parts of nature.	<i>The Walk: Taking Your Youth Outdoors for Environmental Stewardship and Learning</i> , Michigan State University Extension
LEAF LITTER SEARCH	Five to 12	To analyze small animals in leaf litter.	<i>Cycling Back to Nature: Food Production and Pesticides</i> , National 4-H Council
CHAPTER EIGHT			
Careers, Leadership, and Community Involvement			
MAKING KETCHUP	Five to 10	To explore how food gets from the farm field to the table.	<i>Getting into a Food Mood: Communicating Food Issues</i> , National 4-H Council

children as learners



Chapter

1

Child Development

A child's domains mature at different rates. The ten-year-old child who can expound on the history of the Civil War, for example, may be unable to concede losing a race. Intellectually, this child is 18; emotionally, he is seven.

As an after-school program staff member, you face many challenges in providing care for children. One of the largest is understanding youth development — why children behave as they do, how to communicate with them, and how to structure learning so that it is based on how children develop. You need to know how to help children develop healthy self-concepts, achieve success, be independent, express affection, try new adventures, be accepted by others, and be secure in who they are. This is a tall order!

CHARACTERISTICS OF YOUTH

Your program probably encompasses children who range in age from five to 14. You also may work with older teens as assistants. Providing curricula and activities that include all these age groups in an appropriate way can be difficult.

However, there are common traits shared within different age groups. For example, eight year olds can control their large muscles better than small muscles. If you place this age group with 12 year olds and ask them all to make jewelry, the older children will have stunning creations while the eight year olds may be reduced to tears. Their small motor skills don't allow for flawless beading.

Recognizing the different ages and stages youth experience as they mature, and reflecting on how these affect programming, will help you be more effective. The following chart summarizes some different traits and behaviors of different age groups. Use it as a reference when planning activities and programming.

Involving Older Youth in After-School Programs*

Children ages 10 to 14 begin to focus on peer relationships and have a strong need to belong. Providers can include them by:

- 1 Seeking their opinions and feedback about the activities they participate in, the rules they abide by, and the site itself.
- 2 Giving them responsibility.
- 3 Helping them connect to the larger community.
- 4 Exposing them to a wide range of interesting and challenging learning experiences.
- 5 Providing a support environment.

* Adapted from Tips on Out-of-School Youth Development Programs, at www.niost.org/tips-activities.html. Accessed 6/2002.



Child Development

Characteristics of Youth

GRADES K–3

CHARACTERISTICS

IMPLICATIONS FOR PROGRAMMING

Physical

Growing slowly, just learning to master physical skills. Can control large muscles better than small muscles.

Projects and meal times are messy. Activities that encourage use of large muscles, such as running, playing games, etc. are good.

Social

Learning how to be friends; may have many friends. Fighting occurs but doesn't last long. Towards the end of this phase, boys and girls separate.

Small group activities let this group practice their social skills, but still allow for individual attention. Role-playing helps children gain empathy. Encourage children to participate in mixed-gender activities.

Emotional

Are self centered. Seek approval from adults, and go out of their way to avoid punishment. Are sensitive to criticism; don't like to fail.

Be positive! Plan activities where everyone can experience some success. Foster cooperation, not competition.

Intellectual

Are concrete thinkers — base thinking in reality. Can't multi-task well. Are more interested in doing things than getting a good result at the end.

Plan lots of activities that take a short time to finish. Focus on the process rather than the final product. Allow for exploration and inquiry.

Child Development

Characteristics of Youth

GRADES 4 – 8

CHARACTERISTICS

IMPLICATIONS FOR PROGRAMMING

Physical

Moving all the time; can't sit still. Beginning of adolescence is marked by a growth spurt, with females maturing before males.

Provide active learning experiences.
Avoid competitions between boys and girls.

Social

Joining clubs becomes popular. Don't always understand other viewpoints, but like to try to make others happy. Strive to please adults with successful project completion, rather than gaining satisfaction from completing the project itself.

Use group learning as much as possible, with same-sex members. Encourage older mentors to work with your group.

Emotional

Have a weak sense of their individual identity. May become moody. Justice and equality become important issues. Need to feel as if they are part of something very important.

Don't compare youth to each other. Help them identify their own strengths. Emphasize progress made from previous performances.

Intellectual

Until about age 11, think concretely (black/white), but begin to understand new ideas if related to previous experiences. Begin to think abstractly. Become immersed in subjects that interest them. Often reject solutions offered by adults in favor of finding their own solutions.

Use simple, short directions and brief learning experiences. Offer a wide range of activities to ensure many experience success.

Child Development

Characteristics of Youth

HIGH SCHOOL

CHARACTERISTICS

IMPLICATIONS FOR PROGRAMMING

Physical

Physical changes are usually accepted, but boys may still be growing quickly. Most females reach maximum height by age 14 and most males by age 16.

Be willing to answer questions about physical changes. Avoid comments that criticize or compare body shapes/sizes.

Social

Self centered, but capable of feeling empathy. Are able to maintain relationships with many diverse people. Acceptance by members of the opposite sex is important. Want to belong to clubs yet be recognized as unique within those organizations. Spend more time working and going to school; less time in club and group activities.

Let teens plan their own programs. Establish a climate that is conducive to peer support. Emphasize personal development whenever possible.

Emotional

Searching for their identity, and usually find it around age 16. Want to be autonomous from parents. May have trouble with compromise; and may have unsettled emotions. Strive to earn responsibility and the respect of others.

Let teens assume responsibility; expect them to follow through. Help them explore their identity, values, and beliefs. Help them develop individual skills. Encourage them to work with older teens and adults.

Intellectual

Gain cognitive and study skills. Are mastering abstract thinking. Emphasis is on exploring and preparing for future careers and roles. Like to set their own goals based on their own needs, and may reject goals imposed by others.

Give them real-life problems to figure out. Let them make decisions and evaluate the outcomes. Encourage service learning. Plan field trips to businesses or colleges.

Curricula-Based Concepts

EXPERIENTIAL LEARNING

You may be inundated with curricula from various sources that focus on different topics or content. There are activities to study frog eggs, analyze rainbows, role play the Wright brothers' first flight, paint abstractly, etc. All of these concepts, while intriguing, are best learned through a process called experiential learning.

Experiential learning, or learning by doing, is the most effective way of helping children gain knowledge, since it engages learners actively, encourages them to think and puzzle things out for themselves, makes them work harder, and ultimately, helps them learn more.

Curricula not based in this process are not as effective at building knowledge and awareness. Such materials also don't increase investigation, critical thinking, problem solving, and other important life skills in children. You can enhance any materials by learning and following the experiential cycle. All 4-H curricula are based upon this process.

The activities found in this resource guide can be used independently, or you may plan a theme week around them. They also can be incorporated into 4-H club meetings at your site.

EXPERIENTIAL LEARNING MODEL

Direct, hands-on involvement (learning by doing) is the most effective way to help children learn. 4-H puts full emphasis on this principal. The experiential learning process engages learners actively, encouraging them to think for themselves, work harder, and ultimately learn more.

DO

As the leader, you'll describe the activity you'll have participants do. Encourage them to think about what they might see or what might happen. Then, let participants experience the activity; perform or do it.

SHARE

As the leader, you'll ask questions about the activity and the experience after they've completed it. Participants describe the results and their reactions.

PROCESS

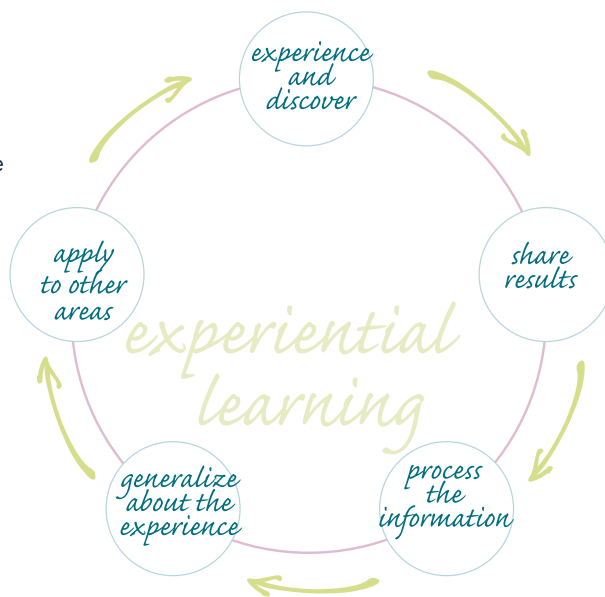
Ask questions about something that was important about the experience. Participants analyze the experience and reflect upon the results.

GENERALIZE

Now apply the results back to real world examples. Ask questions to help participants connect the subject matter to life skills and the bigger world.

APPLY

Help participants apply what they learned to their own lives, to give them opportunities to practice these new skills or use the new information.



Curricula-Based Concepts

LIFE SKILLS

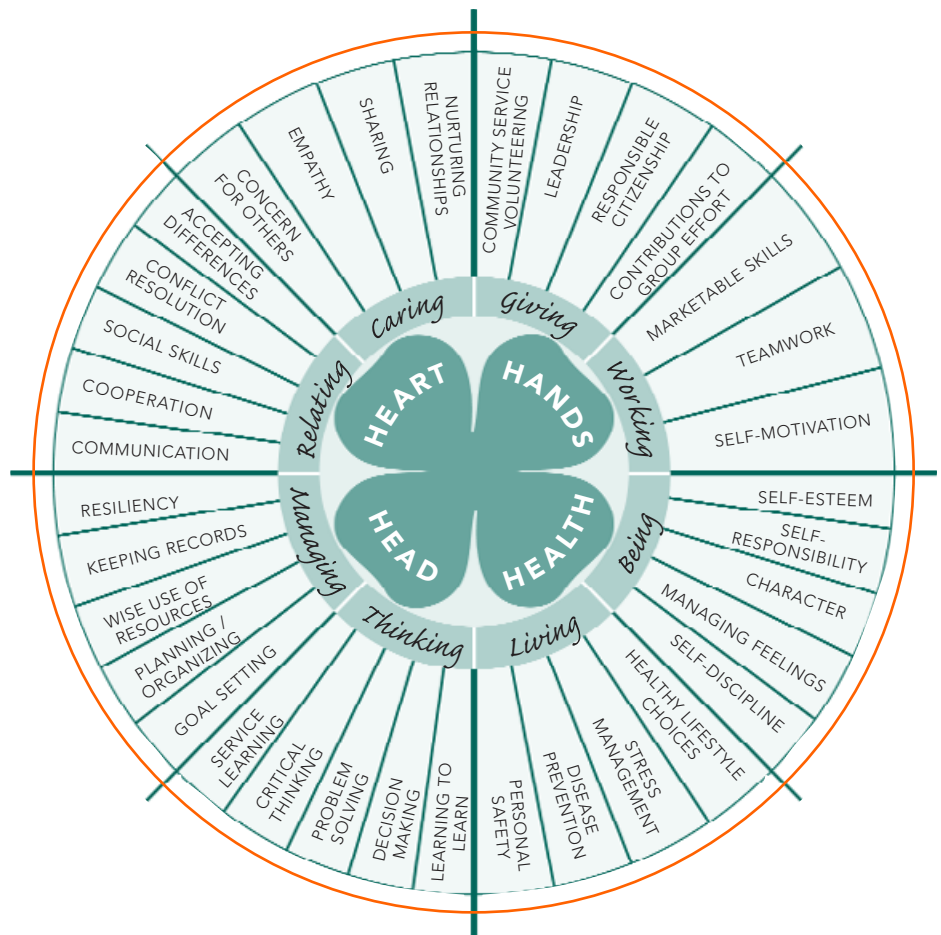
Curricula available through 4-H also is conceived and written to enhance the life skills that a child needs to transition successfully to adulthood. These skills include cooperating with others and feeling empathy, thinking critically, solving problems, and managing stress, as well as others. These skills are actually an extension of the regular 4-H clover model — Head, Heart, Hands, and Health.

The activities found in this resource guide identify which life skills they emphasize. Other Cooperative Extension System curricula also contain information about increasing the life skills of learners.

INVOLVING FAMILIES

Whenever possible, extend the activities in this resource guide into the child's home. Ask children to take home worksheets or products and share them with family members. Some of the activities contain hints for extending the learning into the home environment!

LIFE SKILLS MODEL



SOURCE: Hendricks, Patricia A. *Targeting Life Skills Model: Incorporating developmentally appropriate learning opportunities to assess impact of life skill development* (Rev. ed.). Iowa State University. 4H-137A.



physical development, health, and fitness

Chapter

2

Overview

The activities found in this chapter are categorized under the learning area of physical development, health, and fitness. These activities are a sampling of those found throughout the 4-H curriculum system.

The following 4-H materials focus on small and large motor skill development, strength, endurance, speed, safety, coordination, puberty, nutrition, and fitness:



1
Kids on the Grow! 4-H Cooperative Curriculum System.

2
Health — It's Your Choice. 4-H Cooperative Curriculum System.

3
Health Rocks! National 4-H Council.

4
Choices in a Pack. New Mexico State University.

5
Raising Responsible Teens, Resource Packet. University of Wisconsin.

6
Food, Fun, and Reading. University of Vermont.

7
Foods Leader's Guide. Penn State.

8
Food Science. University of Illinois.

9
Gifts of Gold. 4-H Cooperative Curriculum System.

10
Getting Into A Food Mood. National 4-H Council.

11
Our Heritage in Foods. University of Illinois.

12
The Youth Curriculum Sourcebook. University of Wisconsin.

13
Sports Nutrition. University of Illinois.

More information about these materials can be obtained from the 4-H Cooperative Extension System web site at http://www.4h-usa.org/curricul/4h_projects.htm. Many curricula also can be ordered from the National 4-H Supply Service (<http://www.4-hmall.org>). 4-H Cooperative Curriculum System materials can be ordered at www.n4hccs.org. Contact your local 4-H professional if you need help ordering these or other 4-H materials.

Food Guide Pyramid Relay*

LIFE SKILLS

Teamwork, Healthy Lifestyle Choices.

LEARNING OBJECTIVES

To become familiar with the food guide pyramid.
To use the food guide pyramid to begin to incorporate more fruits, vegetables, and grains into diets.

AGE

Eight to 12. (See also *Adapt this activity for younger children!*, page 20)

TIME

30 minutes.

SETTING

Indoors or outdoors.

MATERIALS

Photocopies of the *Food Guide Pyramid Handout*, page 21. Three sets of the same groceries to include rice, candy, pudding, bagels, cream cheese, eggs, orange juice, onions, grapes, butter, and other items as you have them handy. About 18 paper bags with drawings/ pictures of each of the food groups on front (dairy, meat, vegetables/ fruit, fat, sugar, bread). NOTE: You will make three sets of the same six bags.

OVERVIEW

Healthy eating in childhood is an important skill.**

- 1 It helps children grow, develop, and do well in school.
- 2 It prevents childhood and adolescent health problems such as obesity, dental caries, and iron deficiency anemia.
- 3 It lowers the risk of future chronic disease such as heart disease, stroke, diabetes, and cancer and reduces potential health care costs.

Yet, according to the USDA, many children don't eat well — only 2 percent meet all the recommendations of the pyramid, while 16 percent don't meet any!

Food Guide Pyramid Relay helps youth better understand the food groups found on the food guide pyramid. In this activity, children review the food guide pyramid and run a relay race where they separate groceries into one of the six food groups.

Before you begin, find a safe place for a relay race (non-slippery surface, no traffic, etc.). Make three sets of six paper bags, with each bag containing a picture, drawing, or name of the food group (e.g., the fat bag can either say "FATS," or have a picture or drawing of butter or margarine). Next, assemble three sets of groceries — each should contain the same items.

START HERE

Give everyone the *Food Guide Pyramid Handout* (page 21). Explain that the food guide pyramid shows us the kinds of food we need to eat every day to grow strong and healthy. Foods are found in groups, like families. Hold up an apple and orange. Explain that these two items are in the same family, but may look and even taste pretty different! They are both fruit.

Now ask participants to name their favorite foods. Where do they fall into the pyramid? (NOTE: Some, like pizza, cover many categories — dairy, bread, vegetable, etc.)

* Adapted from Pyramid Relay, Expanded Food and Nutrition Program (EFNEP). 1994. *Youth Curriculum Sourcebook*. North Central Region, University of Wisconsin Cooperative Extension Service.

** From USDA. September 2000. *Helping Students Learn to Eat Healthy*. At www.fns.usda.gov/tn. (Accessed 7/2002.)

Food Guide Pyramid Relay

Explain that eating foods in all of the food groups is like a race each day — a race to grow up healthy. Divide the room into three equal teams and ask each team to form a line, wherever the relay will be run (room, gymnasium, or outside). Put six prepared grocery bags across from the formed lines. Point out the food guide pyramid group on each bag.

Now place common groceries at the front (slightly to the side) of each team's line. Explain to the teams that they will run a relay race. The first child will grab a grocery item, run to the bags, and place the item in its correct food group. That child will then quickly run back and “tag” the next team member. That person will repeat the step. Each child may have to run the relay more than once, in order to “deposit” all the groceries in the bags.

WHAT'S NEXT?

Talk about the results. How many items went into the correct groups? (This is called *sharing* in the experiential learning cycle).

Ask participants the *processing* questions:

- 1 What was it like to race with your team?
- 2 Were there any problems?
- 3 Did you know which groceries went into which food group?

Ask participants the *generalizing* questions:

- 4 We saw which groceries went into different food groups. What did foods that went into the same bag, for example, into the milk group bag, have in common? Were they different at all?

FINAL ACT

Finally, ask participants the *applying* questions:

- 1 Do you think you learned enough about different food groups so that you might try new foods?
- 2 Will you try to eat foods from all the different groups every day? How could you do this? (Give examples. For instance, a child might choose pretzels from a vending machine instead of a candy bar, or might reach for an apple instead of gummy bears at home.)

Eating

foods in

all of the

food groups

is like a race

each day —

a race to

grow up

healthy.

Adapt this activity for younger children!

Use three food groups — fruit, milk, and bread.

You also don't need to distribute the *Food Guide Pyramid Handout*, unless you ask children to take it home and share with parents.

Food Guide Pyramid Relay

FOOD GUIDE PYRAMID A GUIDE TO DAILY FOOD CHOICES

Fats, Oils, & Sweets
USE SPARINGLY

KEY

- ◻ Fat (naturally occurring and added)
- ◼ Sugars (added)

These symbols show fat and added sugars in foods.

Milk, Yogurt, & Cheese Group
2-3 SERVINGS

Meat, Poultry, Fish, Dry Beans, Eggs, & Nuts Group
2-3 SERVINGS

Vegetable Group
3-5 SERVINGS

Fruit Group
2-4 SERVINGS

Bread, Cereal, Rice, & Pasta Group
6-11 SERVINGS

SOURCE: U.S. Department of Agriculture/U.S. Department of Health and Human Services. Available at www.nal.usda.gov/fnic/Fpyr/pyramid.gif.

NOTE: The food guide pyramid, developed by USDA, may be modified by 2005. Changes could center on separating types of fats; ungrouping red meat and chicken, fish, and dried beans; and distinguishing between whole-grain products and refined ones.

HANDOUT A

Vegetable Jeopardy*

LIFE SKILLS

Healthy Lifestyle Choices, Disease Prevention, Teamwork.

LEARNING OBJECTIVE

To understand how important vegetables are to our diets.

AGE

Five to 14. (Mix younger children with older ones on teams. Young children also may need prompts from adults or older youth.)

TIME

45 minutes.

SETTING

Indoors or outdoors.

MATERIALS

Photocopy *Game Cards*, pages 23 and 24, and cut them apart. Write their values on the back in large numbers. Chalkboard and chalk or posterboard and markers. Use the chalkboard/posterboard to make a Jeopardy Game Board.

OVERVIEW

Vegetable Jeopardy helps kids become acquainted with vegetables, an important food group for disease prevention. Most children (and adults!) don't eat enough vegetables. Less than 20 percent eat the recommended servings of vegetables.

Before you begin, make a gameboard from posterboard or chalkboard. Write the categories at top. Tape the *Game Cards* on the gameboard, face down.

START HERE

Introduce the topic of vegetables to participants. Explain that there are lots of good vegetables to eat, and we need to eat them every day! Ask questions to stimulate discussion:

- 1 What's your favorite vegetable?
- 2 Do you ever grow vegetables?
- 3 What kind of vegetables do you like best — fresh, frozen, or canned?

Next, explain that everyone will play a game about these amazing foods!

WHAT'S NEXT?

Divide participants into two teams by counting off carrot, broccoli, carrot, broccoli, etc. Ask teams to choose a captain, who will give answers for the team. Explain that team members must work together to choose the category and answer the question. The first captain who puts his or her hand up gets to answer. (Or, let teams take turns answering — this helps keep smaller

children engaged when the correct answer is a true team effort.) If one team gives a wrong answer, the other team gets a chance to answer.

Act as a moderator to read questions and keep score, or appoint someone to do these things. (Optional: Don't keep score with younger children. Everyone who participates and works together on a team is a winner.) Play the game!

FINAL ACT

After the game is done, ask participants the following processing questions:

- 1 What was it like to play the game?
- 2 What did you like the best?
- 3 What did you learn about vegetables?
- 4 Did you like being on a team?

Help process and apply. Here are some guiding questions:

- 1 Vegetables are important parts of our diet. Can anyone think of ways to eat more?
- 2 Do you think you'll eat more vegetables? Why or why not?
- 3 Can you think of a vegetable snack you could make yourself? Tell us about it.

* Adapted from Expanded Food and Nutrition Education Program (EFNEP). 1994. *Youth Curriculum Sourcebook*. North Central Region, University of Wisconsin Cooperative Extension Service.

Vegetable Jeopardy



Green Vegetables

Q. Name a vegetable used to make pickles.

A. What is a cucumber?

10

Orange/Yellow Vegetables

Q. Maize is another name for this vegetable.

A. What is corn?

10

Green Vegetables

Q. This green vegetable is the base of most salads.

A. What is lettuce?

20

Orange/Yellow Vegetables

Q. You may eat this vegetable at Thanksgiving, smothered in marshmallows.

A. What is a yam (or sweet potato)?

20

Green Vegetables

Q. This vegetable can be green or red, hot or mild.

A. What is a pepper?

30

Orange/Yellow Vegetables

Q. This vegetable grows on vines and its name is often used to describe something you might do to a bug.

A. What is squash?

30

Green Vegetables

Q. When you eat this green vegetable, you're actually eating the flower.

A. What is broccoli?

40

Orange/Yellow Vegetables

Q. This orange vegetable gives you good eyesight and can be used to make cake.

A. What is a carrot?

40

G A M E C A R D S A

Vegetable Jeopardy



Vegetable Puzzles

Q. Name a vegetable that's red inside and out.

10

A. (Either okay): What are red beets or red cabbage?

Vegetables in Cartoons and Movies

Q. Bugs Bunny's favorite food.

10

A. What is a carrot?

Vegetable Puzzles

Q. Name a vegetable you eat that's a root (or part of one).

20

A. (Any okay): What is carrot, turnip, beet, radish, or potato?

Vegetables in Cartoons and Movies

Q. Popeye got his strength from this vegetable.

20

A. What is spinach?

Vegetable Puzzles

Q. Only one in five people eat enough of these every day.

30

A. What are vegetables?

Vegetables in Cartoons and Movies

Q. When an actor peels this vegetable in the movies, he or she starts crying.

30

A. What is an onion?

Vegetable Puzzles

Q. This vegetable is also a letter of the alphabet.

40

A. What is a pea? (P)

Vegetables in Cartoons and Movies

Q. This small vegetable, placed under a stack of mattresses, kept a princess awake all night.

40

A. What is a pea?

Stress in My Life*

LIFE SKILL

Stress Management.

LEARNING OBJECTIVE

To understand some reasons why children experience stress.

AGE

Eight to 12.

TIME

30 minutes.

SETTING

Indoors.

MATERIALS

Flipchart and markers or chalkboard and chalk; masking tape and markers or chalk.

OVERVIEW

Studies have shown that children can experience stress. This activity helps them examine the source of this stress.

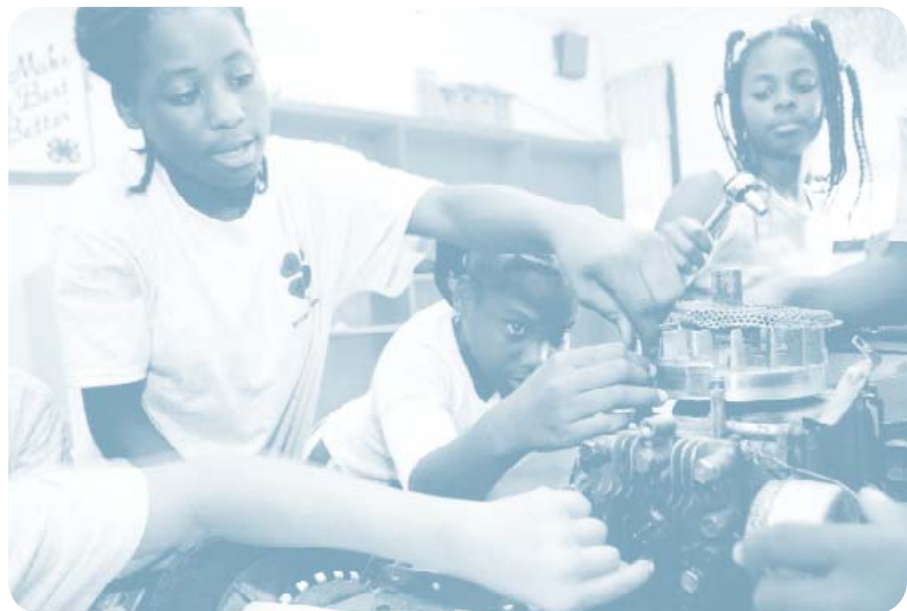
START HERE

Introduce and discuss the topic of stress** by asking people to brainstorm a list of words related to stress. Where do they feel stress in their bodies? (Head, neck, stomach?) What emotions do they experience when under stress? (Anger, fear?)

Use a burst diagram to record their answers. Write the word STRESS in a cloud, or burst, in the middle of a chalkboard or flip chart. As people call out words or feelings, write them floating around the burst word. At the end, connect the words to the burst as you discuss them. (Remind the group that in a brainstorm, anyone can call out an answer, but no one has the right to say an idea is bad or wrong.)

WHAT'S NEXT?

Next, survey children about whether they have experienced different stressors in their lives. They respond by moving to one end of a line (a continuum) or somewhere in between.



* Adapted from *Health Rocks!* National 4-H Council.

** The Merriam Webster definition of stress is "a physical, chemical, or emotional factor that causes bodily or mental tension."

Stress in My Life

Identify one spot in the room as “10, All the Time!” Drawing a straight line out about 15 feet from that spot, identify the end point as “1, Not at All!” Use chalk or masking tape and markers to identify the spots with numbers and descriptions.

Ask everyone to stand. Explain that individuals should move to the spot on the line that matches their feelings. (“1” is equal to “Not at All!” “10” is equal to “All the Time!”)

Ask the following questions, one at a time. Participants should place themselves at the spot that matches their feelings.

I feel bored in school.

I feel sick.

People ask me to do too much stuff.

I'm afraid I'm messing up.

I have too much homework.

I fight with my family.

My friends leave me out.

I wish I could sleep more.

I get mad over little things.

FINAL ACT

After children are again seated, ask these guiding questions:

- 1 Were most people at 10, one, or somewhere in between on our stress scale?
- 2 Do you think those who stood at 10 or near it are stressed? At 1 or near it?
- 3 What does stress feel like? Can it be a pain in your body? Where does it hurt?
- 4 What kinds of things cause stress?
- 5 Can stress be good? (Stress does spur us into taking action.)

If you have time, plan some stress relieving activities to follow up this activity. Provide children with clay and have them model their emotions. Or, let them paint, draw, or listen to music.

6 Do you think you're experiencing more or less stress than you were one year ago? Two years ago?

7 What do you do when you're under stress? What is your reaction?

Explain that just understanding that you're under stress helps you — you've put a name to the feeling. Children should know they aren't alone — many people feel overwhelmed sometimes.

Explain that there also are things we can do to cope with stress. Doing something creative, such as molding clay or painting while listening to soothing music, for example, can help work frustrations out. Exercise also is a good stress reliever.

Washy, Washy, Washy*

LIFE SKILL

Disease Prevention.

LEARNING OBJECTIVES

To understand hands can carry dirt and germs. To demonstrate how to remove dirt and bacteria from hands.

AGE

Four to eight.

TIME

10 minutes.

SETTING

Indoors in an area with a sink.

MATERIALS

Flipchart and markers or chalkboard and chalk; sink; soap; and water.

OVERVIEW

Hands can be habitats for millions of tiny creatures such as bacteria, molds, and other microscopic tidbits. These things float in the air or can be transferred to hands when we touch doorknobs, railings, food, or other items.

Before you begin, write the *Washy, Washy, Washy* song on the flipchart or chalkboard (see below). Skip this step if you don't have readers in your group. You'll just have to help them memorize the song.

START HERE

Explain that keeping hands clean helps keep everyone from getting sick! Colds, flu, and other diseases can be spread from person to person. Ask children to name ways this can happen. (Sneezing, coughing, etc.) Point out that just touching something full of germs, and then putting your hand to your mouth or nose, can make you sick. But there's a way to fight germs!

WHAT'S NEXT?

Lead the group through the Washy, Washy, Washy song a few times.

(To the tune of "Row, Row, Row Your Boat")

*Wash, wash, wash my hands
Till they're spark-i-ly,
Germs get splashed quick down
the drain
Right where they should be.*

*Wash, wash, wash my hands
Dirt just can't be seen.
Now I can cook and bake and eat
'Cause I am squeaky clean.*

Explain that if the children sing the song slowly while they wash their hands, they will be clean by the time the song is done! Let everyone wash their hands with warm water and soap while they sing the song.

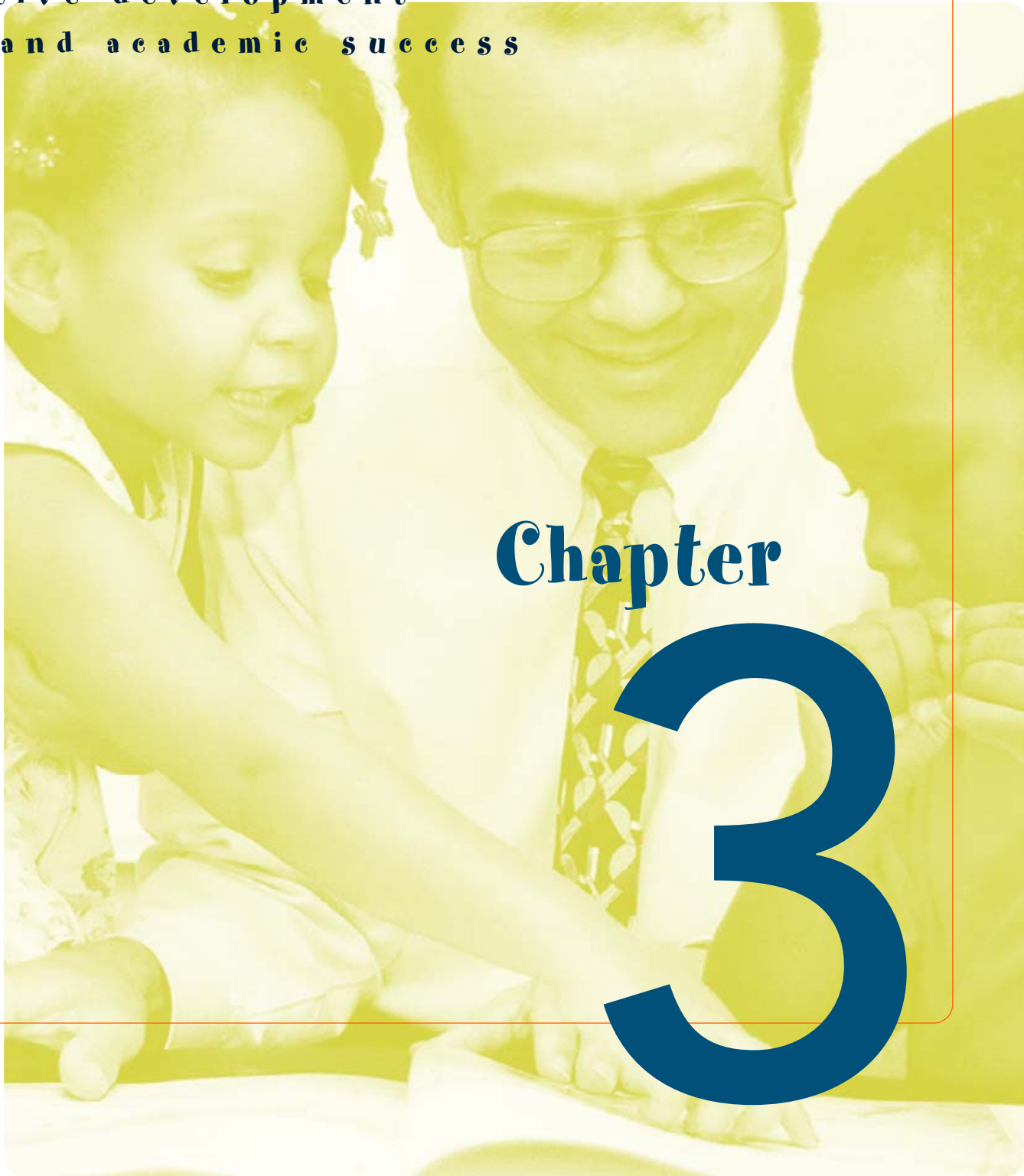
FINAL ACT

Ask children whether they can teach others in their homes to wash their hands. Why is it important to keep hands clean? Will they wash their hands more often at home and school now that they have a song to sing?

If the children
sing the song
slowly while
they wash
their hands,
they will be
clean by the
time the song
is done!

* Adapted from *Rising to the Occasion: A 4-H Leader's Guide*. National 4-H Council.

**cognitive development
and academic success**



Chapter

3

Overview

The activities found in this chapter are categorized under the learning area of cognitive development and academic success. These activities are a sampling of those found throughout the 4-H curriculum system.

The following 4-H materials focus on attention, memory, problem solving, decision making, school readiness, literacy/reading/language, arts, mathematics, science, social studies, history, tutoring, and homework:

- 1 *4-H Youth Experiences in Science (YES)*. University of California.
- 2 *Fields of Genes*. National 4-H Council.
- 3 *Fishy Science*. Ohio State University.
- 4 *Insectaganza of Excitement*. 4-H Cooperative Curriculum System.
- 5 *Funtivities: Hands-on Science and Math*. Iowa State University.

More information about these materials can be obtained from the 4-H Cooperative Extension System web site at http://www.4h-usa.org/curricul/4h_projects.htm. Many curricula also can be ordered from the National 4-H Supply Service (<http://www.4-hmall.org>). 4-H Cooperative Curriculum System materials can be ordered at www.n4hccs.org. Contact your local 4-H professional if you need help ordering these or other 4-H materials.



Good Vibrations: The Science of Sound*

LIFE SKILLS

Critical Thinking, Learning to Learn.

LEARNING OBJECTIVES

To understand how sounds travel and are heard. To gain an appreciation for how sounds enrich our lives.

AGE

Five to 12. (NOTE: Young children will enjoy this activity, but it may be a little abstract for them.)

TIME

20 minutes.

SETTING

Indoors or outdoors.

MATERIALS

Drum and drumsticks; plastic containers and lids that aren't clear; beans, pennies, paper clips, o-shaped cereal, popcorn kernels, and other small items to put inside the containers.

OVERVIEW

After-school programs can encourage learning through activities that straddle the line between play and academics. Learning is something that is structured outside of the child; play comes from within. By combining these ideas, you have... well, fun science!

Before you begin, prepare “shaking containers” by placing beans, pennies, paper clips, cereal, popcorn kernels, or other small items into containers. Prepare two of each — two containers with paper clips, two containers with beans, etc.

START HERE

Explain that sound is vibration moving through a substance such as air, water, or other material. Our ears collect the vibrations and pass them down the ear canal to the eardrum. The eardrum vibrates like the head of a drum. (Use a drum to simulate this vibration — ask for volunteers to help make the noise.)

Continue your explanation by pointing out that other small bones in the ear continue the vibrations until they reach the inner ear, where they are changed to signals that are sent to the brain.

WHAT'S NEXT?

Help participants explore the wonderful world of sound. Give each person a container. Tell them to shake it up but not open it. Listen carefully to the sound it makes. Now, instruct participants to go around the room and find the person with the match — the same

More to Do!

Why not an eardrum band? Assemble everyone and ask them to shake their canisters in beat to a simple tune, such as This Old Man or Row, Row, Row Your Boat. Accompany them on a piano (or other instrument) or play a tape/CD of music.

items in the container that they have. They may only use their sense of hearing to find the match.

After everyone has found a match, ask them to open canisters and see if they are correct. Those who aren't correct should find their match, and carefully compare the sounds made.

FINAL ACT

Ask participants these processing questions:

- 1 What kind of sounds did you hear?
- 2 How did you know who had the same items in their container?
- 3 Why did the different items in the containers make different sounds?
- 4 What other things could be put into the containers to make sound?
- 5 What things could you put in the containers that would not make sound?

Help children apply what they've learned. Explain that we get important information by hearing. Ask: When are some times when listening carefully is important? Are there ever times when listening isn't important?

* Adapted from *4-H Cloverbud Series II Curriculum*. Ohio State University.

It's In The Bag!*

LIFE SKILLS

Critical Thinking, Learning to Learn.

LEARNING OBJECTIVES

To demonstrate techniques of measuring. To produce an end product (bread) by following directions.

AGE

Seven to 14. (Pair younger children with older ones.)

TIME

Two to three hours.

SETTING

Indoors with access to a kitchen.

MATERIALS

Photocopies of *It's In The Bag Handout*, page 32; pencils; whole wheat and all-purpose flour; rapid rise yeast; sugar; salt; nonfat dry milk; warm water; vegetable oil; no-stick cooking spray; heavy-duty one-gallon freezer bags; twist ties; measuring spoons and cups; clean towels; bread loaf pans; rolling pins; wire racks; timer; pot holders; butter; jam; serrated and butter knives; access to oven(s).

OVERVIEW

In this activity, you'll help children develop their measuring and direction-following skills. Older youth can work without much teacher/leader intervention in teams. If you have various ages of children, pair younger ones with older ones.

Before you begin, set up work stations (one station for every two to three children). Each station should have:

- 1 a small bag of whole wheat flour
- 2 a small bag of all-purpose white flour
- 3 one package of rapid rise yeast
- 4 at least three tablespoons of sugar in a bowl
- 5 at least two teaspoons of salt in a bowl
- 6 at least three tablespoons of nonfat dry milk in a bowl
- 7 warm water in a bowl
- 8 vegetable oil
- 9 no-stick cooking spray
- 10 one large heavy-duty freezer bag, with twist tie or zip lock
- 11 loaf pan
- 12 measuring cups and spoons
- 13 clean towels
- 14 pot holders
- 15 wire rack
- 16 timer

START HERE

Organize children into teams of two or three each. Assign each team to a work station. Before children begin, have them wash their hands. Distribute copies of the *It's In The Bag Handout* to teams. Review the ingredients and steps involved in making the bread, and let teams follow them until products are complete. Help with placing the loaves into ovens. NOTE: There will be some lag time while the loaves are rising and cooking. Plan another activity during this time.

FINAL ACT

Serve slices of warm bread with jam and butter. As you do so, ask the following questions:

- 1 Did you have enough ingredients to make the bread?
- 2 Did you measure carefully?
- 3 Did your bread turn out?
- 4 Was the bread the same size when it went into the oven as when it came out? (No.) Why did it change? (The yeast caused it to rise. Yeast cells are living. When warm water and sugar or starch are added to yeast cells, they start to multiply, or bud. The yeast cells use the sugar or starch for energy, and give off alcohol and carbon dioxide gas. The gas causes the bread to rise.)
- 5 Do you think you could make this bread at home?

If you have
various ages
of children,
pair younger
ones with
older ones.

* Adapted from *Rising to the Occasion: A 4-H Leader's Guide*. National 4-H Council, 1997. Publication WFP031.

It's In The Bag!

Here's all you need to bag some bread.

GET MOVING!

1

To mix the ingredients, one team member should hold open the freezer bag. Other members take turns measuring and adding ingredients to the bag:

- 1 cup all-purpose flour
- 1 package rapid rise yeast
- 3 tablespoons sugar
- 3 tablespoons nonfat dry milk
- 1 teaspoon salt

2

Seal the bag, then shake it and work it with your fingers to blend. Take turns!

3

Add more stuff to the bag:

- 1 cup hot water
- 3 tablespoons vegetable oil

4

Reseal the bag and re-mix. Next, open the bag and add:

- 1 cup whole wheat flour
- A little less than 1 cup of all-purpose flour

5

Squeeze the air out of the bag and seal it. Squeeze and push the bag, taking turns.

6

Next, put a little flour on your hands. Put a little flour on the tabletop. Take the dough from the bag. Give a piece to each team member. Place it on the floured table top and:

- use your fingers to fold the dough
- use the heel of your hand to push and press the dough
- use your fingers to turn the dough

This is called kneading. Do this for about five minutes.

7

Cover the dough with a clean cloth and let it rest for 10 minutes.

8

You're ready to roll! Use a rolling pin dusted with flour to make it into a long square (rectangle). Then, roll up the dough with your hands to form a loaf.

9

Place the dough into a loaf pan that was sprayed with no-stick cooking spray. Cover and let it rise for one hour, or until it doubles in size. Bake the bread for 30 to 35 minutes at 400° F. Cool on a wire rack for 15 minutes before cutting.

H
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**s o c i a l , e m o t i o n a l ,
a n d c h a r a c t e r d e v e l o p m e n t**

Chapter

4

Overview

The activities found in this chapter are categorized under the learning area of social, emotional, and character development. These activities are a sampling of those found throughout the 4-H curriculum system.

The following 4-H materials focus on sharing, cooperation, developing friendships, peer pressure, identifying, regulating emotions, self concept, self esteem, anger control, negotiating, conflict management, problem solving, character development, and spiritual development:

- 1** *RISE — Respect and Integrity through Skills and Education.* University of Connecticut.
- 2** *Character at Work.* Colorado State University Cooperative Extension.
- 3** *Youth Leadership Institute.* University of Arizona.
- 4** *Boomerang! Character Education Program.* Iowa State University.
- 5** *4-H Focus on Character.* University of Illinois.



More information about these materials can be obtained from the 4-H Cooperative Extension System web site at http://www.4h-usa.org/curricul/4h_projects.htm. Many curricula also can be ordered from the National 4-H Supply Service (<http://www.4-hmall.org>). Contact your local 4-H professional if you need help ordering these or other 4-H materials.

Blindfold Trail*

LIFE SKILLS

Concern for Others, Cooperation, Communication.

LEARNING OBJECTIVES

To learn to trust another person and follow their directions to achieve a positive outcome. Alternately, to learn to give good direction and work in cooperation to achieve a positive outcome.

AGE

Five to 18. (Pair children of similar ages, but adjust course difficulty for age. See below under *Overview*.)

TIME

One hour.

SETTING

Indoors or outdoors.

MATERIALS

Blindfolds, rope.

OVERVIEW

In this activity, children pair up and take a blindfold walk through an area. The purpose is to get one member of the team to communicate obstacles clearly and calmly, while the other learns to trust the partner's judgement. It's also a good activity to get children to use senses other than sight to interpret clues. By relying on different abilities, children approach problem solving with more creativity.

Before you begin this activity, take into account the age of the group when selecting a site. Older children may be fine outdoors in a wooded area; small children should do this activity indoors with some "soft" obstacles in the way, or outdoors on a playground. To make the course for smaller children, string a rope or use a path already on the site.

START HERE

Explain that an important part of cooperation is trust and communication. Everyone will get a chance to explore cooperation in a real way by taking a blindfold walk. Pair children or let them pick partners (keep children of the same age together).

Next, lead them to the pre-selected walk site. Blindfold one person in each pair. Explain these rules:

- 1 The leader must tell the blindfolded walker about anything in his or her way in a soft, calm voice.
- 2 The blindfolded walker must trust the leader and follow his or her directions.

Encourage teams to take time to stop and listen to sounds and smell aromas as they walk. What clues are they getting about their surroundings? How will these clues influence where they move? Explain that as teams get to the end of the rope or path, they've won!

Let teams go one at a time, or have them begin a staggered start. Patrol to make sure all teams are safe.

WHAT'S NEXT?

When the group is finished, ask:

- 1 How many teams finished the course?
- 2 What types of things did you run into along the way? What did you discover?
- 3 Did the blindfolded teammates do a good job of following directions? Why or why not?
- 4 How did the leaders do with giving directions?
- 5 Can you think of other examples where you have to trust someone else, even when you don't know what is going to happen?
- 6 How do you feel about having to trust someone else completely? And how do the leaders feel about being in charge of someone?

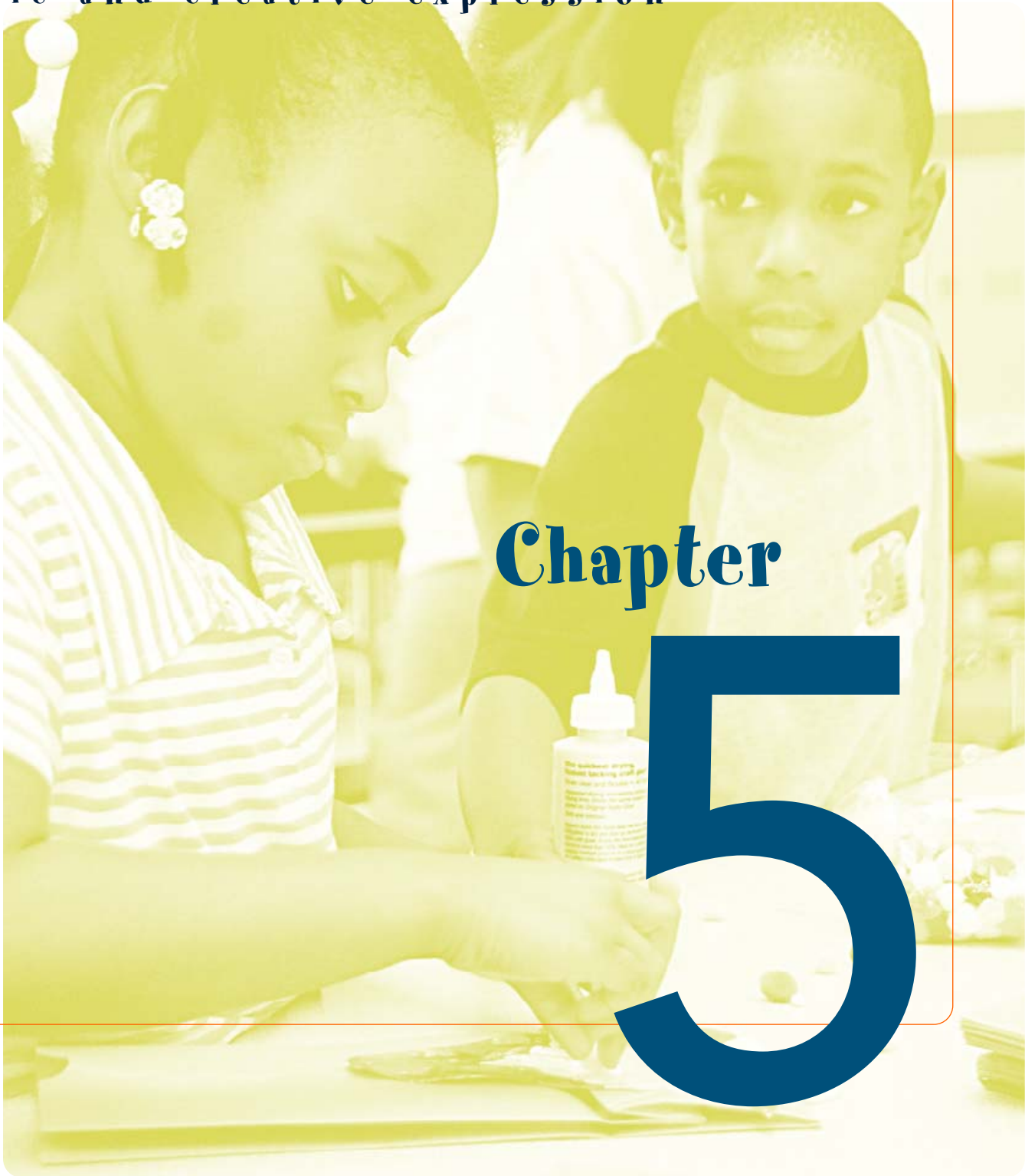
FINAL ACT

You may wish to repeat the activity with the leaders becoming blindfolded teammates, and vice versa. Ask participants to compare the experiences and decide which role they liked better.

By relying
on different
abilities,
children
approach
problem
solving
with more
creativity.

* Adapted from *The Walk: Taking Your Youth Outdoors for Environmental Stewardship and Learning*. 2000. 4-H Youth Development, Michigan State University Extension, East Lansing, Michigan.

artistic and creative expression



Chapter

5

Overview

The activities found in this chapter are categorized under the learning area of artistic and creative expression. These activities are a sampling of those found throughout the 4-H curriculum system.

The following 4-H materials focus on art, music, drama, creative expression, and interior design:

1
Communications Toolkit: Fun Skill-Building Activities To Do With Kids. Michigan State University Extension.

2
Theatre Arts Adventures. 4-H Cooperative Curriculum System.

3
Art in a Box. University of Wisconsin.

4
A Palette of Fun with Arts and Crafts. 4-H Cooperative Curriculum System.

5
National 4-H Photography Curriculum. National 4-H Council.

More information about these materials can be obtained from the 4-H Cooperative Extension System web site at http://www.4h-usa.org/curricul/4h_projects.htm. Many curricula also can be ordered from the National 4-H Supply Service (<http://www.4-hmall.org>). 4-H Cooperative Curriculum System materials can be ordered at www.n4hccs.org. Contact your local 4-H professional if you need help ordering these or other 4-H materials.



Design Elements: Shape*

LIFE SKILLS

Communication, Managing Feelings.

LEARNING OBJECTIVE

To create combinations of shapes that communicate an idea or thing.

AGE

Five to 18. (Younger children may spend much of the time just playing with shapes. You'll also need to read the information from the *Tangram Challenge Handout* to smaller children.)

TIME

30 to 45 minutes.

SETTING

Indoors or outdoors.

MATERIALS

Scissors; glue sticks or tape; photocopies on different colored paper of *Tangram Challenge Handout*, page 40.

OVERVIEW

During their out-of-school time, children need a chance to play and create. In fact, many experts argue that creativity is in short supply in American businesses and organizations. Perhaps we just need a little more time to think outside of the box — or tangram!

In this activity, participants explore the use of shape in design. They will use a tangram — an ancient Chinese puzzle — to make different objects that express objects and feelings.

START HERE

Begin by introducing shapes and design to the group. Explain that designers use shapes to represent ideas (for example, hearts often represent love; open books represent education). Designers use shapes in logos to represent what businesses or organizations do. They often use interesting shapes to attract readers to a page of information.

Explain that everyone will get a chance to express themselves using an ancient Chinese shape puzzles called a tangram. Handout copies of the *Tangram Challenge Handout* to participants, along with scissors. Ask participants to cut their tangrams apart. Then, instruct them to spend a few moments making:

- 1 Something that flies through the air.
- 2 An animal.
- 3 A house that you would like to live in.

Give everyone a chance to share their tangrams by walking around and viewing them. Ask:

- How easy or difficult is it to use the shapes to make a thing?

In this activity, participants explore the use of shape in design.

* Adapted from *Communications Toolkit: Fun, Skill-Building Activities to Do With Kids*. 2000. 4-H Youth Development, Michigan State University Extension, East Lansing, Michigan.

Design Elements: Shape

WHAT'S NEXT?

Explain that you'll now explore feelings using tangrams. Give everyone a few moments to express the following things with the tangram:

- Anger.
- Happiness.
- Sleepiness.
- Running fast.

Again, give everyone opportunities to share their tangrams as they make them. Ask:

1 Was it easier to communicate an object or emotion/state with the tangram? Why?

2 Where else do we use symbols in our life to communicate things? (Logos on our clothing to communicate coolness or affluence, for example.)

3 If you were trying to design a logo for friendship, what would it look like? For your family life?

FINAL ACT

You may wish to let participants work together as a team to design a logo using a tangram for your after-school site.



For Families

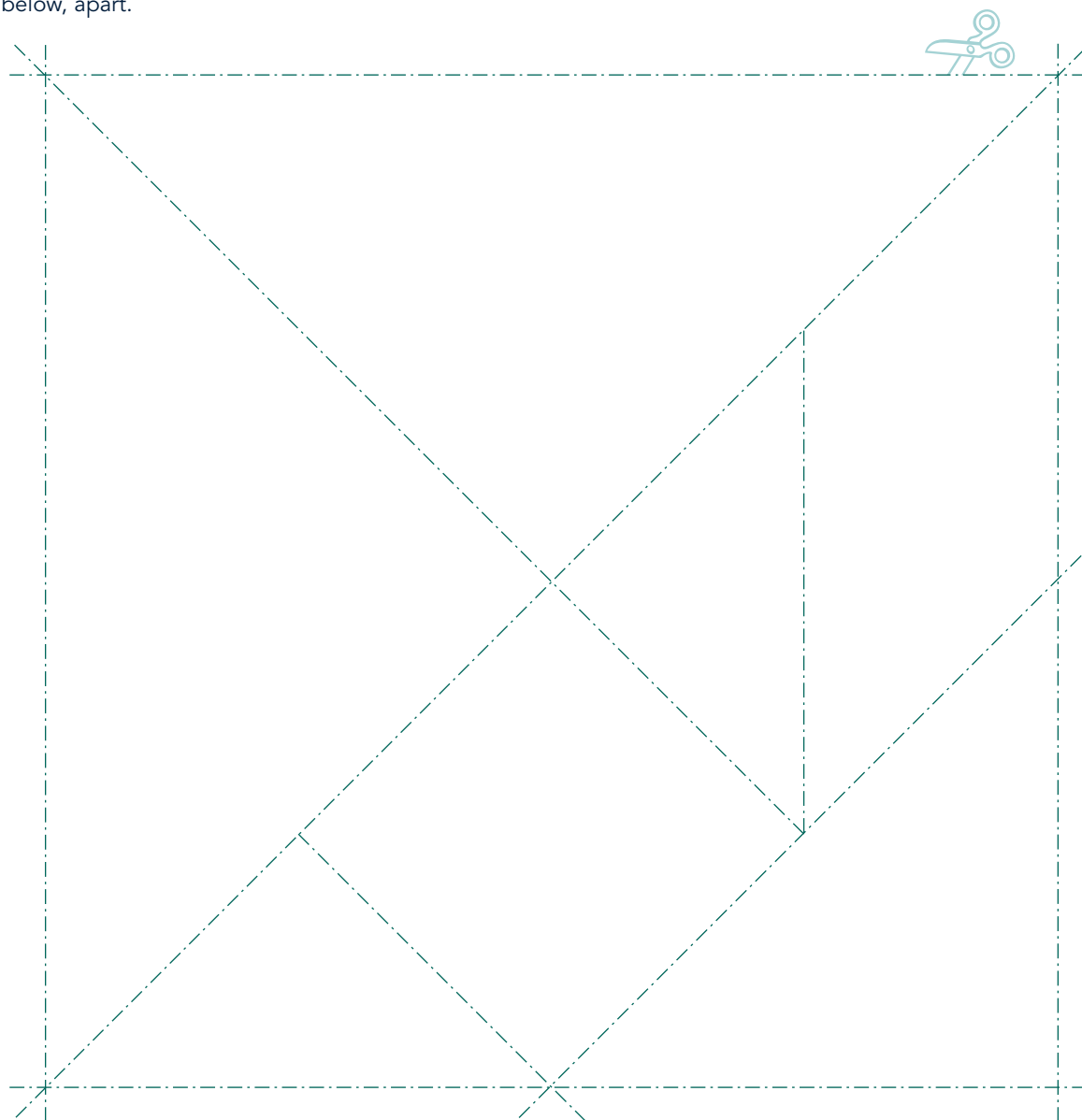
Give participants glue and cardboard backing so they can create and mount a tangram picture. Ask them to take them home and share them with their families.

Design Elements: Shape

TANGRAM CHALLENGE

Tangrams are ancient Chinese puzzles in which players use seven pieces cut from a square to create designs and figures. The traditional game requires that all seven pieces be used in each design and that no pieces overlap. For this activity, you may use as many of the pieces as you wish, but don't overlap them.

Cut the square, below, apart.



Blue Boat Takes a Ride*

LIFE SKILLS

Expressing Creativity,
Problem Solving.

LEARNING OBJECTIVE

To explore different fuels sources and create boats that will run with different fuels.

AGE

Seven to 12.

TIME

30 minutes.

SETTING

Indoors or outdoors.

MATERIALS

Art paper; markers; crayons; other art supplies; flipchart and markers or chalkboard and chalk.

OVERVIEW

In this activity, children examine different fuel sources that can power boats. They use their creativity to design the boats and their means of power.

START HERE

Begin by asking participants to name some things that provide energy. Young children may erroneously name things that use energy (e.g., computers, televisions, lights). You may have to prompt them to get a list of energy sources. For example, you may ask them, “Well, what do you use for energy?” or “Have you ever built a fire? What did you use for fuel?” Write their lists of energy on a chalkboard or flipchart. The list might look like this:

- wood
- food
- sunlight
- wind
- gasoline
- batteries

Review this list with participants. With young children, you may want to use a rhyme to help them remember the responses. For example:

The *wind* blows my hair
Through the air.

Wood in the fire
Makes the flames go higher.

A *corn dog* on a stick
Makes me run and jump and kick.

WHAT'S NEXT?

Now ask the children to close their eyes and imagine the following (read to children):

You are walking on a long dock with your best friend. At the end of the dock is a boat. It's just big enough for you and your friend. The boat is painted white with pretty blue trim. It's tied to the dock, but the waves are rocking the little boat. You want to get on the boat with your friend and go to an island you can see from the dock. The island has tall palm trees with coconuts and lots of shells on the beach. But you're not sure how to get the boat over to the island.

* Adapted from *Energizing your future with energy, economics, and the environment!* National 4-H Council.

Blue Boat Takes a Ride

Now ask the children to open their eyes. Give everyone some art paper and markers and other art supplies. Explain that they will be designing a fuel source for the boat so that they can take the trip over to the island. Encourage them to consider some of the fuels from your list, but tell them they can use any fuel they want, as long as they design the boat to run with it!

Give children some time to design their boats. After they have finished, let them show and explain their inventions to the rest of the group. Ask each child:

- 1 What is the fuel for your boat?
- 2 Do you think you could really build a boat like this?
- 3 Would the fuel be hard to get? Is there lots of it around?

FINAL ACT

Ask the group:

- 1 What kinds of energy do you use every day? (Food, fossil fuels for things such as heat and car fuel, etc.)
- 2 Is there lots of energy in the world? (Yes. Some people use wood to heat; some use coal or propane. Everyone uses food for fuel.) Are there any kinds of energy that we may use up someday? (We can't make new fossil fuels in our lifetimes, so it's possible these may be used up some day. Fossil fuels include coal, propane, and oil.)
- 3 Can some fuel sources take the place of others? (Yes. For example, sunlight can be used for heat and to power engines; water can be used to generate electricity. There are many other examples.)

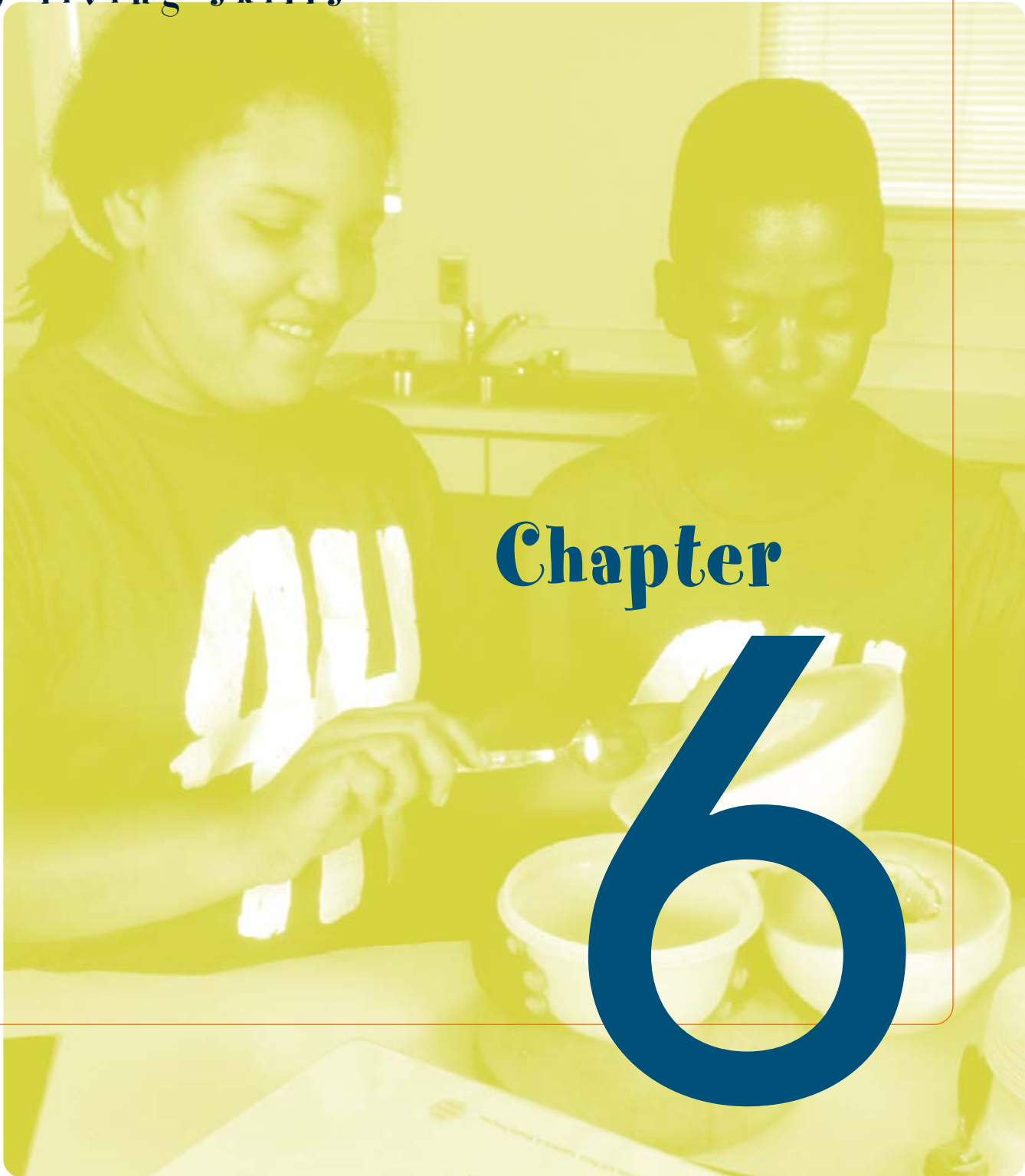
Congratulate all designers on their creations. Display the pictures around the room.

Adaptations for Older Youth

Older children may actually want to try to build their boats using balsa wood, scraps of material, glue, and other materials. They can test their inventions in a pond or large basin of water.



family living skills



Chapter

6

Overview

The activities found in this chapter are categorized under the learning area of family living skills. These activities are a sampling of those found throughout the 4-H curriculum system.

The following 4-H materials focus on understanding your family, family relationships, promoting family strengths, financial management and budgeting, and consumer education:

1

Generation Celebration. Penn State University.

2

Walk in My Shoes — Aging. University of Illinois.

3

Attention Shoppers! University of Nebraska.

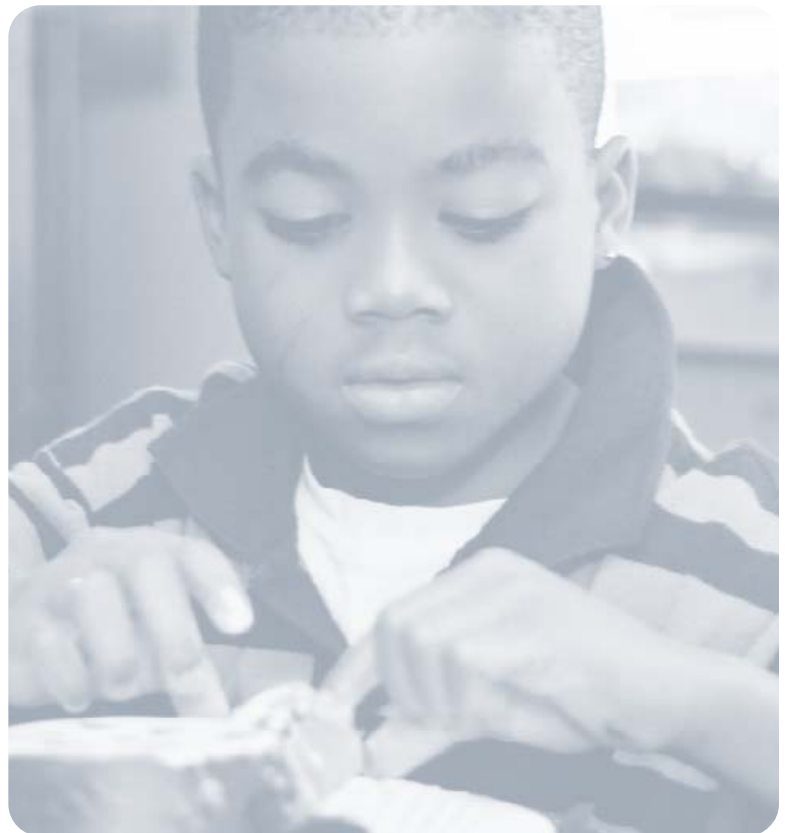
4

It All Adds Up. Cornell University.

5

Rent Event. Penn State University.

More information about these materials can be obtained from the 4-H Cooperative Extension System web site at http://www.4h-usa.org/curricul/4h_projects.htm. Many curricula also can be ordered from the National 4-H Supply Service (<http://www.4-hmall.org>). Contact your local 4-H professional if you need help ordering these or other 4-H materials.



Hug Me Teddy Bear*

LIFE SKILLS

Expressing Creativity,
Concern for Others.

LEARNING OBJECTIVES

To learn the basics of sewing. To make an item for donation.

AGE

Eight to 12.

TIME

One hour.

SETTING

Indoors.

MATERIALS

Photocopies, *Teddy Bear Pattern Handout*, page 46; fabric, preferably a light colored cotton (enough for all participants to have two pieces about 8" by 10"); batting; fabric paints or markers; pins; sewing machine or needles and thread; scissors.

OVERVIEW

Sewing, cooking, money management, and other domestic skills are core competencies for adults in a home setting. Children can begin to learn these skills, as well as use their critical thinking and problem solving abilities.

Set up sewing tables. Place dozens of pieces of fabric, precut to 8" by 10", at each table, along with batting, scissors, fabric paints or markers, pins, and needles and thread.

Children will donate the teddy bears they sew. Investigate where you can donate bears. Some ideas include local hospitals, shelters, churches, child care centers, etc. NOTE: Don't add buttons or other decorative items to the bears that could be pulled off and present a choking hazard.

START HERE

Explain that participants will learn how to sew a simple teddy bear and that they'll get to donate it to charity (see *Overview*).

Ask children if they have ever sewn an item before. Let them describe any projects they may have been involved with. Most likely, you'll need to walk participants through the basic steps of threading a needle, making a knot at the end, and joining two pieces of fabric. You optionally may choose to teach older children how to use a sewing machine, and let them take turns sewing their bears.

WHAT'S NEXT

Pass out copies of the *Teddy Bear Pattern Handout* to everyone. Following the instructions, either demonstrate, step by step, how to assemble the bear, or do this as children at the tables assemble their own bears.

Give children plenty of time to sew their bears.

FINAL ACT

Let each child show the group their teddy bear. Ask children why they choose the fabrics, colors, etc. that they did. Ask: How do you think a child will feel when he or she holds your teddy bear? Why do teddy bears make us feel good? How will donating these bears help other children?

* Adapted from the activity Hug Me Teddy Bear from the Home Sewing Association. New York, New York, 2003.

Hug Me Teddy Bear

TEDDY BEAR PATTERN

How to assemble the bear:

- 1** Trace this pattern onto one piece of fabric.
- 2** Add a one-half inch seam allowance around each edge.
- 3** Place both pieces of fabric together (using pins) and cut out the teddy bear.
- 4** Place the cut out pieces together, with right sides together.
- 5** Using a sewing machine or needle and thread, sew a one-half inch seam around the teddy bear, remembering to leave an opening for stuffing.
- 6** Use scissors to clip small notches into the seams around the corners.
- 7** Turn the teddy bear inside out.
- 8** Stuff the bear with batting, using the eraser end of a pencil to help push it inside.
- 9** Stitch the remaining opening closed with needle and thread.
- 10** Use fabric paints and markers to draw a nice face on your teddy bear!

LEAVE OPEN

HANDOUT D

Bacterial Blunders*

LIFE SKILLS

Critical Thinking, Learning to Learn, Problem Solving, Disease Prevention.

LEARNING OBJECTIVES

To identify potential food contaminants. To explore how to keep food safe.

AGE

Six to 14. Let children older than eight serve as team leaders.

TIME

30 minutes.

SETTING

Indoors in a kitchen setting.

MATERIALS

Cups; spoons, table knives; napkins; celery; raisins; spoons; cottage cheese; crackers; peanut butter; sunflower seeds; or other snack items (fruit, cheese, etc.).

OVERVIEW

According to Centers for Disease Control estimates, about five million illnesses each year and 4,000 deaths are attributable to meat and poultry products. In all, experts estimate that about 9,000 people die and at least six million get sick each year from all food-borne infections. In this activity, you'll help children learn how to keep their snacks safe.

Before you begin, set up kitchen countertops with the snack items and utensils.

START HERE

Explain any or all of the following:

Food poisoning is the general term for getting sick from eating contaminated food. There are many ways a food can become unsafe. It may not be cooked long enough (high temperatures kill bacteria); it may be a cold food that becomes warm, which allows bacteria to grow; or bacteria from humans may spoil it. Salmonella are rod-shaped bacteria that live in the intestines of animals and humans. Some types of salmonella can cause food poisoning, which can lead to death. E. coli (short for Escherichia coli) are bacteria that live in intestines and are found in feces.

Mold is sometimes added to food to improve flavor. However, there are different types of mold. Some are fit for humans to eat, some aren't. Some, when eaten, cause allergic reactions or illness.

Pesticides control weeds, insects, and other things that hurt crops. Like any poison, pesticides in large enough quantities can kill people. Generally, very little pesticide is left on fruit or vegetables by the time they get to the store.

Insects, such as flies and larvae, don't belong in foods! They indicate the food has been contaminated. They also can be harmful if eaten. Soil should be washed from all produce. It contains bacteria and just doesn't taste good.

* Adapted from Bacterial Blunders, *Getting Into a Food Mood: Communicating Food Issues*. National 4-H Council.

Bacterial Blunders

Ask the group to discuss and share any other examples they can recall of unsafe or unwholesome foods. You can begin the discussion by asking questions such as:

- 1 Did you ever eat green cheese? Did you think it might not be safe to eat?
- 2 Tell me about a food that you saw that you thought wasn't safe to eat.

Ask children what made the foods unhealthy (didn't use good sanitation when preparing, didn't keep hot foods hot or cold foods cold; didn't thoroughly cook, etc.).

Explain that there are many things that contaminate food, or make it unhealthy. They include bacteria, mold, chemicals, and other things.

Ask participants: Who is responsible for keeping food safe? Point out that, generally, everyone is responsible for keeping food safe, including farmers, truckers, food processing plants, retail stores, and the government. But all these people can only get it to your home safely. Parents, caregivers, and children are finally responsible for keeping food edible and safe.

WHAT'S NEXT

Break children into two teams, making sure each team has older children. Assign one team to be the Snack Makers, while the other is the Safe Snack Team. The Snack Makers should prepare a simple snack (peanut butter, celery, and raisins; or cottage cheese mixed with seeds and served with crackers).

The Safe Snack Team will be making sure that the Snack Makers are following good rules for keeping foods safe. Ask the Safe Snack Team to make sure the Snack Makers:

- 1 Wash hands before they start.
- 2 Keep hair out of food.
- 3 Keep cold foods cold.
- 4 Wash hands again if they cough or sneeze into them.
- 5 Use clean utensils.
- 6 Refrain from tasting the food with their fingers.

7 Wash any produce before they begin.

8 Make sure surfaces are clean before they start.

Explain that following these steps help prevent the spread of germs — the things that cause people to get sick.

Let everyone enjoy the snack!

FINAL ACT

Ask participants if they think all foods are safe to eat. Ask them how foods become contaminated. (They are prepared in unsanitary conditions, not cooked thoroughly, not kept hot or cold, etc.) Share the slogan, "When in doubt, toss it out!"

**Parents,
caregivers,
and children
are finally
responsible
for keeping
food edible
and safe.**

Safety Sing-Along*

LIFE SKILLS

Critical Thinking, Learning to Learn, Personal Safety.

LEARNING OBJECTIVES

To learn some basic safety skills around lawn mowers.

AGE

Five to eight.

TIME

20 minutes.

SETTING

Indoors or outdoors.

MATERIALS

Copies of the *Safety Sing-Along Handout*, page 50.

OVERVIEW

More than 230,000 people are treated in hospital emergency rooms for injuries from yard tools each year. Many of those injured are children. Two common injuries involving lawn mowers, according to the Consumer Product Safety Commission, are amputations and injuries from thrown objects. In fact, the revolving blade of a lawnmower can throw objects at more than 200 miles per hour. Small children (and adults!) can't react fast enough to get out of the way.

START HERE

Ask the group if they've ever used a *sense* to avoid danger. Ask them to give examples (hearing a car honk and moving out of the street, smelling smoke, etc.).

Ask children to close their eyes. Lead them through a visualization process. Begin by describing a bright, sunny day. Ask:

- 1 What do you hear?
- 2 What do you smell?

Now explain that a friend has come over with her dog to play ball. Ask:

- 1 What do you hear?
- 2 What do you smell?
- 3 What do you see?

Suddenly, there is a signal that tells you that danger is coming. An adult is getting ready to mow the lawn with a power mower. Ask:

- 1 What do you hear?
- 2 What do you see?
- 3 What do you smell?

Explain that the things they hear, see, and smell (such as the engine roaring, the mower moving, and gasoline fumes) are CLUES that tell you since it's time to mow, it's time to go. It's safest inside the house when a mower starts. And bring the pet inside, too.

WHAT'S NEXT

Give children copies of the songs to sing from *Safety Sing-Along Handout*. Pair readers with non-readers, if necessary. Choose one or more of the songs to sing.

FINAL ACT

Try these different scenarios with the group to see if they've understood the safety message.

You're outside on a perfect, sunny day. Your big brother opens the garage door and starts fueling the riding mower. What do you do?

GO INSIDE!

Your neighbor pushes her power mower into your yard and yells that she'll mow your lawn as a quick favor. But you're outside on the lawn blowing dandelion seeds around. What do you do?

GO INSIDE!

You're at a friend's home. You're playing with him in the playground out back. An adult comes out of the building and starts mowing with a lawnmower. What do you do?

GO INSIDE!

* Adapted from *Safety Sing-Along, Lawn Ranger Leader's Guide*. National 4-H Council.

Safety Sing-Along

Go, Go, Go Inside

TO THE TUNE OF "ROW, ROW, ROW YOUR BOAT."

Go, go, go inside
When the mower roars
Merrily yet warily leave
the yard
Get behind closed doors.

Go, go, go inside
When you see someone
Puffing and huffing and
pushing a mower
Stay put until they're done.

Go, go, go inside
Safe as you can be.
Then you'll giggle and
wiggle and squiggle
Another day happily.

Lawn Ranger Chant

1,2,3,4

Parents can mow in the
light of day.

5,6,7,8

But never at night, tell
them "No way!"

1,2,3,4

Grass can be mowed when
everything's dry.

5,6,7,8

But not when it's wet,
shouldn't even try.

1,2,3,4

Tell your brother to use
his sight.

5,6,7,8

Mow going forward,
backward isn't right.

1,2,3,4

Lawnmower safety is
the key.

5,6,7,8

To living a life that's
healthy!

environment and global awareness

A photograph of two young women, likely members of a 4-H AfterSchool program, working together on a project. They are wearing white t-shirts with the 4-H logo and the text "4-H AfterSchool". The woman on the left is leaning over a table, and the woman on the right is looking down at something on the table. The background is slightly blurred, showing a sign with the words "operat" and "ensio".

Chapter

7

Overview

The activities found in this chapter are categorized under the learning area of environment and global awareness. These activities are a sampling of those found throughout the 4-H curriculum system.

The following 4-H materials focus on energy awareness, recycling, organic gardening, air/water quality, understanding customs/cultures of other countries, and international living experiences:

1
Going Places, Making Choices: Transportation and the Environment. National 4-H Council.

2
In Touch Science: Chemistry and Environment. Cornell University Media Services.

3
New Jersey 4-H Science Discovery Series. Rutgers University.

4

Cycling Back to Nature: Food Production and Pesticides. National 4-H Council.

5
Cycling Back to Nature: Soils Alive! National 4-H Council.

6
Mud, Muck, and Other Wonderful Things. National 4-H Council.

7
Soil, Water, and Land Use. University of Florida.

8
4-H Wetland Wonders. Oregon State University.

9
Leafing Out. University of Nebraska.

10
Energy Links. North Carolina Cooperative Extension Service.

11
SERIES. University of California.

12
YES. University of California.

More information about these materials can be obtained from the 4-H Cooperative Extension System web site at http://www.4h-usa.org/curricul/4h_projects.htm. Many curricula also can be ordered from the National 4-H Supply Service (<http://www.4-hmall.org>). Contact your local 4-H professional if you need help ordering these or other 4-H materials.



Ant Antics*

LIFE SKILL

Learning to Learn.

LEARNING OBJECTIVE

To develop an awareness of ants as part of the world.

AGE

Five to nine. Young children will need help filling out the *Ant Antics Handout*.

TIME

One hour.

SETTING

Outdoors near an ant colony.

MATERIALS

Photocopies of the *Ant Antics Handout*, page 55.

OVERVIEW

Ants are insects, and as insects are the more numerous type of creature on the planet. This activity helps children develop an appreciation for living things other than people and pets by studying an ant colony. Be sure to locate an anthill/colony before you go outside.

START HERE

Explain that ants rule the earth! They are part of the insect world, which makes them the masters of the planet, since there are more insects than any other type of creature. But ants also are really small. There are many, many different kinds of ants — red, black, yellow, brown, and almost every color and type.

Ask children where ants live. Point out that they are a little like humans in that they like to live together in big groups called colonies.

Be sure to choose a benign variety of ant for observation.

In some parts of the south, fire ants swarm viciously on people and things near their homes.

WHAT'S NEXT?

Lead children outside to watch a nearby ant colony. Here are some basic ant watching rules:

- 1 Don't get too close. Remember, ants bite because they think you are a big giant sneaking up on them.
- 2 You can gently touch an ant with a stick, to see what it will do. Or, you can put something in its way, to see what it will do.
- 3 Be careful around ant hills, because these are the ants' homes.
- 4 Watch with opened eyes and closed mouths! You can learn more if you just watch quietly!

Watch for about five or ten minutes. Rotate to make sure children don't get too close and don't get bit.

* Adapted from *4-H Cloverbud Series II Curriculum*. Ohio State University.

Ant Antics

FINAL ACT

Ask children these questions:

- 1 Where are the ants coming from or going to? (Let children speculate. Ants may be going to collect food or defend against intruders.)
- 2 How many ants are there in the ant colony? (Lots! Colonies have a queen or queens, female workers and occasionally male ants. Colonies have to be big enough to support everyone. They can range from a few dozen to thousands upon thousands.)
- 3 What are the ants doing? Describe it. (Answers will vary.)
- 4 Are the ants different sizes? (Most ants that you can see are workers. They are approximately the same size.)
- 5 Do they look like they are doing work? (Probably. The work that ants do include building hills, moving dirt and debris, and bringing home food such as other insects, among other things.)
- 6 How do they act like humans? (They collect food, guard against intruders, move fast, eat seeds and bread, and build homes. They also like to live in hot climates! But ants aren't humans, and probably don't feel emotions like humans do. They also don't like to play video games or try on clothes.)

- 7 Do you think ants are important? Why or why not? What role do they play in nature? (More than 10,000 species of ants exist in the world. They fill particular niches in their habitats, acting as food for other living things, moving soil, and occupying an important place in the food web.)

Hand out copies of the *Ant Antics Handout* for children to take home and do with family members. The answer key to this sheet is as follows:

- 1 Antennae
- 2 Nests
- 3 Tunnels
- 4 Acid
- 5 Need
- 6 Temperatures
- 7 Insects
- 8 Colonies
- 9 Six



Ant Antics

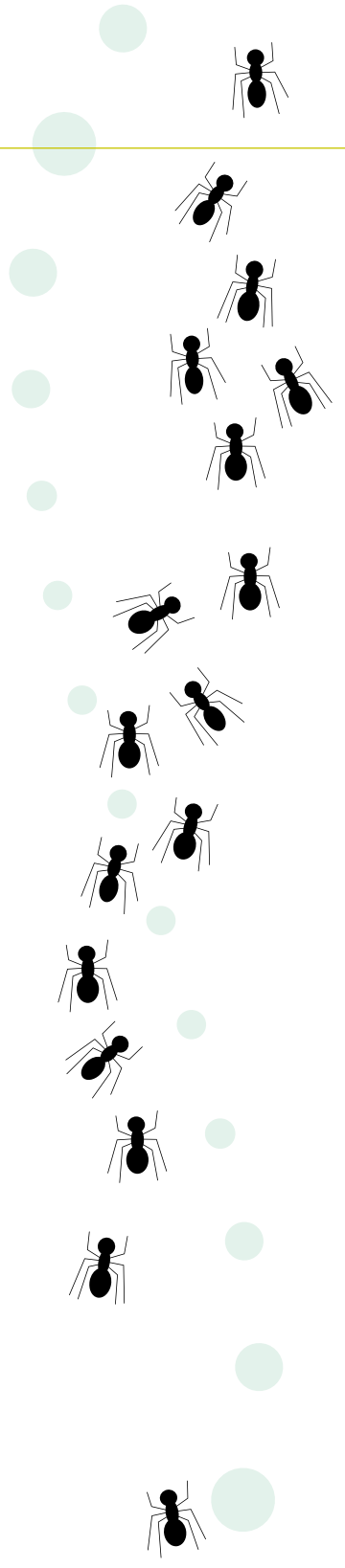
How much do you know about ants?

Test your knowledge and complete the words, below.
The first one is done for you.

- 1 ANTENNAE
- 2 N _____
- 3 T _____
- 4 A _____
- 5 N _____
- 6 T _____
- 7 I _____
- 8 C _____
- 9 S _____

Clues

- 1 Ants use _____ to communicate.
- 2 Some ants make _____ from leaves to live in.
- 3 Ants use _____ to get around through soil.
- 4 Ants secrete a kind of poison called formic _____.
- 5 Ants _____ food, water, and space to survive.
- 6 More ants live in areas with warm _____.
- 7 Ants belong to this group.
- 8 Ants live together in _____.
- 9 Ants have _____ legs.



Scavenger Hunt*

LIFE SKILL

Learning to Learn.

LEARNING OBJECTIVE

To discover different pieces and parts of nature.

AGE

Five to 14. (Pair readers with nonreaders, and make sure all children are supervised.)

TIME

One hour.

SETTING

Outdoors.

MATERIALS

Photocopies of *Scavenger Hunt Handout*, page 57; baskets or other containers; markers; and paper.

OVERVIEW

In this activity, you'll lead children outdoors on a scavenger hunt to find different pieces and parts of nature. This activity works well in the city or rural areas, since every item found is not named but rather described, giving way to broad interpretation! For example, children are asked to find something that was once in the air. Acorns, feathers, or other items would fit the bill!

Before you begin, find an area outdoors that is safe. Make sure it contains as much natural material as possible. A small woodland, garden, or city boulevard with trees would work well.

START HERE

Explain that everyone will be taking a nature hike to collect items — like a scavenger hunt. Pair children into teams of two or three (place older children with younger ones).

Discuss rules:

- 1 Collect things that aren't alive. Bugs and beetles stay behind. You can take a leaf or flower if you can leave the plant alive when you're done. If not, don't pick it.
- 2 You can pick up things from the ground, except for glass and other sharp objects.
- 3 Stay in the area.
- 4 If you want to collect something but can't, draw a picture of it.

Give each team a basket or other container, some paper, and a few markers (to draw their items if they need to). When you are outside, give teams a copy of the *Scavenger Hunt Handout*. Give them about 20 minutes to complete their scavenger hunt.

WHAT'S NEXT?

Let teams show their finds to the larger group, explaining which items fit which categories. As they do so, ask these questions as appropriate:

- 1 What is the item?
- 2 Where did it come from?
- 3 Did you expect to find it here?
- 4 What role does the (bird, animal, plant, dirt) have here at this area?
- 5 What else can you tell me about it?

FINAL ACT

Return items outside to nature that will degrade, i.e., any organic material such as feathers and leaves. Rocks and dirt can be returned, too. Throw trash away.

* Adapted from *The Walk: Taking Your Youth Outdoors for Environmental Stewardship and Learning*. 2000. 4-H Youth Development, Michigan State University Extension, East Lansing, Michigan.

Scavenger Hunt

THE RULES

1

Collect things that aren't alive. Bugs and beetles stay behind. You can take a leaf or flower if you can leave the plant alive when you're done. If not, don't pick it.

2

You can pick up things from the ground, except for glass and other sharp objects.

3

Stay in the area.

4

If you want to collect something but can't, draw a picture of it.

Find these items outdoors.

- Find something that is blue.
- Find something that was once in the air.
- Find something that squawks or rustles in the wind.
- Find something that is soft if you rub it against your face.
- Find something that sticks to your clothing.
- Find something that looks like your hands or feet.
- Find the most colorful thing you can.
- Find something that is smooth and round.
- Find something that lives on the ground.
- Find something that likes water.
- Find something that is brown.

Leaf Litter Search*

LIFE SKILL

Critical Thinking, Learning to Learn.

LEARNING OBJECTIVE

To analyze small animals in leaf litter.

AGE

Five to 12. (Pair older children with younger ones.)

TIME

One hour.

SETTING

Outdoors or indoors. Fall is the best time of the year for this activity.

MATERIALS

Lens boxes or magnifying glasses; collected leaf litter (or go outside); colored pencils; paper; insect/beetle field guides; plastic glasses; newspaper (if activity is done indoors).

OVERVIEW

Many organisms live in leaf litter — the leaves, twigs, and other debris that falls onto the forest floor. Most of these animals are decomposers. Decomposers are extremely important — they break down dead material into nutrients, which can be used again by living things (such as trees or flowers).

In this activity, children look at leaf litter to find small arthropods and other organisms. They can use a lens box to look at their creatures more closely. Before you start this activity, find a safe outdoors area where there is leaf litter on the ground, or collect some and bring it in to the group. (It shouldn't be more than a few hours old, or the creatures may migrate to the bottom of the garbage bag or other collecting device.)

START HERE

Explain that everyone has a home. Even decomposers. Decomposers are bugs and insects that munch on dead material and release nutrients. Ask children where they think decomposers live. Explain that it's easiest to find decomposers among the land of the dead — dead leaves, that is! Invite children to look for these very important creatures.

Indoor directions: Divide children into teams of two or three. Give each team a magnifying glass or lens box, some newspaper, colored pencils, paper, plastic glasses, and a bag of leaf litter. Instruct teams to spread out the newspaper and then dump some of the leaf litter on top.

Outdoor directions: Divide children into teams of two or three. Give each team a magnifying glass or lens box, colored pencils, paper, and plastic glasses. Take teams outdoors to a safe area with trees and forest debris. Ask teams to collect a pile of leaf litter.

Decomposers

are extremely important — they break down dead material into nutrients, which can be used again by living things.

* Adapted from *Cycling Back to Nature, Food Production and Pesticides*. National 4-H Council.

Leaf Litter Search

WHAT'S NEXT?

Ask teams to gently search their leaves for living things. Explain that it may take several minutes before teams locate a decomposer. Encourage them to keep looking. When they find an insect, arthropod, or other creature, they can use their pencil and gently put it into the plastic cup for further study. One or all of the team members can sketch the animal.

Teams also can look through field guides to try and identify the creatures they've drawn. Ask teams:

- 1 What kind of creature did you find?
- 2 Was it eating something?
- 3 Where did it come from?
- 4 Did you find other bugs or insects?
- 5 What else do you think the animals used the leaves for?
- 6 What role does the animal play in the forest?
- 7 What else can you tell me about it?

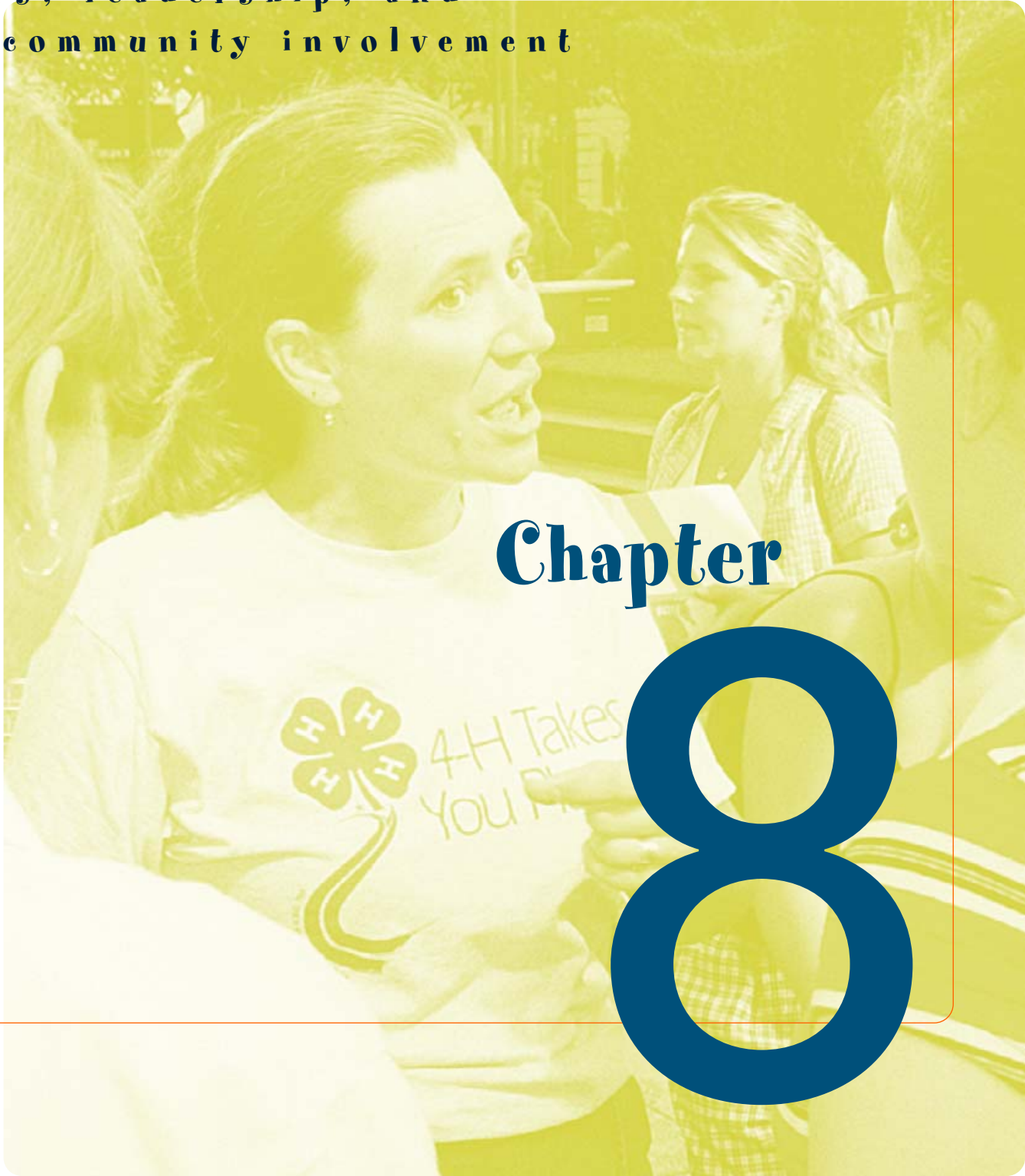
Also ask teams to share their pictures. You may wish to hang them around the room.

FINAL ACT

Be sure teams return their bugs to the leaf litter. If teams are indoors, put the leaf litter back outside when you're through. Explain why it's important to put the materials back outside (creatures can go back to their lives; nutrients can be released into the soil).



**careers, leadership, and
community involvement**



Chapter

8

Overview



The activities found in this chapter are categorized under the learning area of career identification and preparation, leadership, and community awareness and involvement. These activities are a sampling of those found throughout the 4-H curriculum system.

The following 4-H materials focus on learning about careers, leadership learning, learning about the community, field trips, community volunteerism, community involvement, and service learning:

1
Getting into a Food Mood. National 4-H Council.

2
Getting Down to Business — A Curriculum for Introducing Youth to Entrepreneurship. OSU Extension Program.

3
Wild Over Work — WOW! 4-H Cooperative Curriculum System. E-mail order@Extension.umn.edu.

4
Learn and Earn for Fun and Profit, Member's Guide. Maryland 4-H Center.

5
Life Skills Training Program for Youth II, Student Workbook. New Mexico Cooperative Extension Service, 4-H Youth Development.

6
Rising to the Occasion. National 4-H Council.

7
The World of Work. Cooperative Extension Service, University of Kentucky.

8
Teens in Tourism — Understanding Tourism in Your Community. Montana State University, Extension Service.

9
Tackling the Tough Skills, A Curriculum Building Skills for Life and Work. University of Missouri.

10
Workplace Ethics — Lessons to Strengthen Character by Model. Louisiana 4-H.

11
Developing Backbone for Career Choices — Lower Elementary. The Ohio State University Extension.

More information about these materials can be obtained from the 4-H Cooperative Extension System web site at http://www.4h-usa.org/curricul/4h_projects.htm. Many curricula also can be ordered from the National 4-H Supply Service (<http://www.4-hmall.org>). 4-H Cooperative Curriculum System materials can be ordered at www.n4hccs.org. Contact your local 4-H professional if you need help ordering these or other 4-H materials.

Making Ketchup*

LIFE SKILL

Learning to Learn.

LEARNING OBJECTIVE

To explore how food gets from the farm field to the table.

AGE

Five to 10. (Pair younger children with older ones. You also may wish to end the activity after *Start Here* if you are working with a group of very young children.)

TIME

15 to 20 minutes.

SETTING

Outdoors or indoors.

MATERIALS

Markers and paper; flipchart and markers or chalkboard and chalk; tomato; full, unopened ketchup bottle.

OVERVIEW

In this activity, you'll help children explore how food gets to the table, and what type of work needs to be done to accomplish this. Many children today can't explain where their food comes from originally, and don't understand the career opportunities available in the food production field. While less than 1 percent of Americans actually produce food (which feeds the other 99 percent), about 25 percent of our gross national product is related to the food industry. Still, our food is cheap — the average American family spends only about 10 percent of its disposable income on food, less than any other nation.

START HERE

Explain that everyone will explore how food gets from the farm field to the grocery store shelf. Line up nine children and assign the following roles:

- farmer
- trucker #1
- ketchup factory worker
- trucker #2
- warehouse worker
- store buyer
- trucker #3
- stocking clerk
- customer

Give the farmer a tomato, and the ketchup factory worker a bottle of ketchup. Read the following scenario, and have the “workers” act out the steps.

The *farmer* grows tomatoes in the hot sun. After about three months, they are ripe. It's time to take them to the ketchup factory. *Trucker #1* drives a big load of tomatoes to the factory. The *ketchup factory worker* runs machines that mix vinegar, sugar, and spices into the tomatoes. This makes ketchup. *Trucker #2* takes the ketchup bottles to a warehouse. The *warehouse worker* sells the ketchup to a local store buyer. The *store buyer* purchases all the things found in a grocery store, like ice cream and maple syrup! *Trucker #3* takes the ketchup from the warehouse worker to the store. A *stocking clerk* puts the ketchup on the shelf. The *customer* buys it because his/her family is having french fries and hamburgers tonight!

Everyone
will explore
how food
gets from the
farm field to
the grocery
store shelf.

* Adapted from Grocery Store Scavenger Hunt, *Getting Into a Food Mood: Communicating Food Issues*. National 4-H Council.

Making Ketchup

WHAT'S NEXT?

Ask children:

- Where does microwave popcorn come from?

Draw a food diagram on the board, using pictures of the following actions:

Special corn plant → farm worker picks the corn → truck ships it to manufacturing plant → plant workers clean and treat the popcorn and add salt, butter, and other substances, then put it into bags → truckers bring boxes of microwave popcorn to grocery stores → we buy it!

Divide teams into two or three each and give them markers and paper. Ask them to pick a food for which to draw a food diagram. Some ideas are:

- hamburgers
- packaged chocolate chip cookies
- applesauce
- peanuts
- frozen broccoli
- juice drink boxes
- can of tomatoes
- oat bran cereal.

Let teams share their food diagrams.

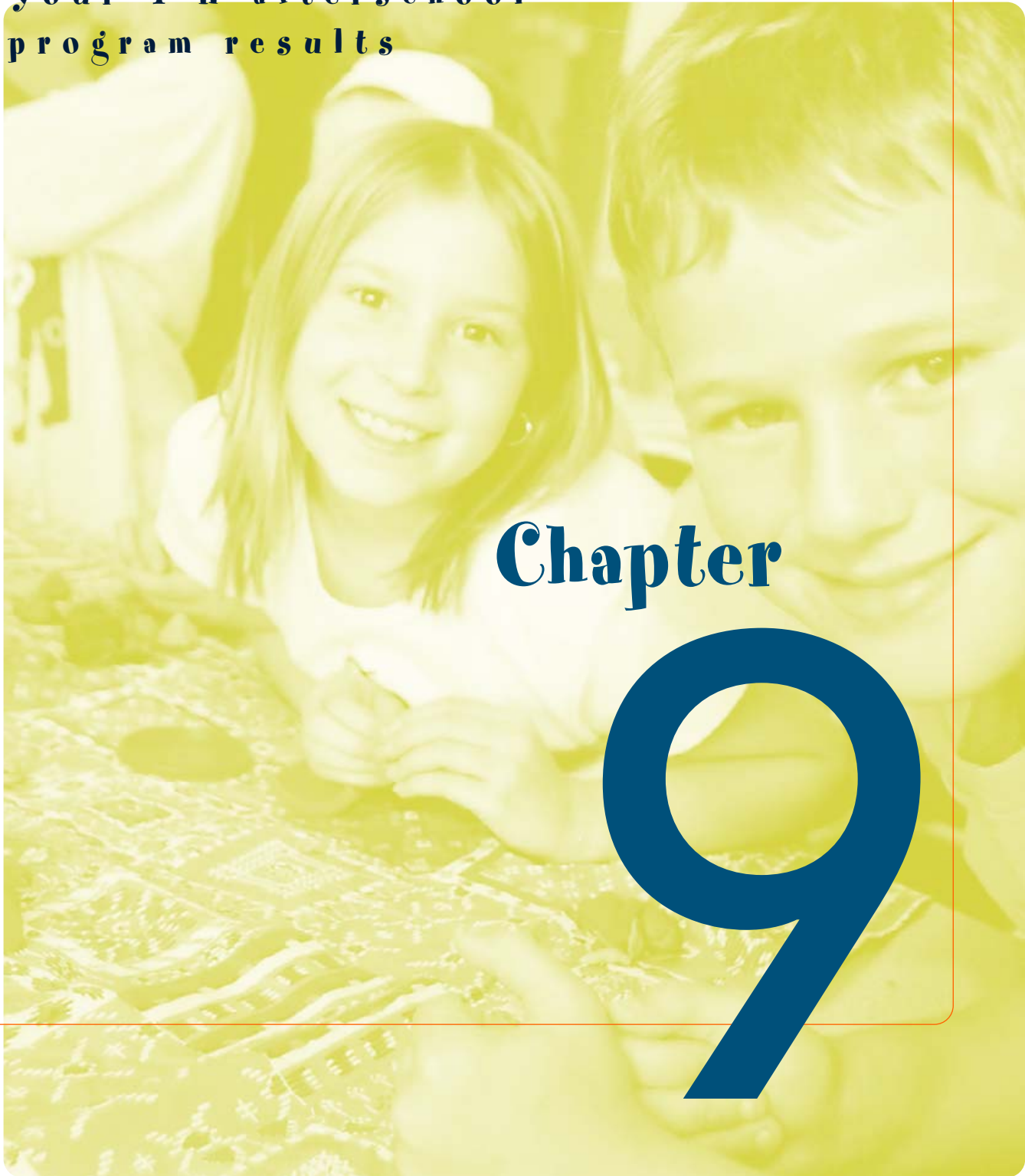
FINAL ACT

Ask:

- 1 What types of jobs could you have in the food business?
- 2 Do you think it's important to feed people?
- 3 Do you think it's important to have a job that helps people?



share your 4-H afterschool
program results



Chapter

9

Join Up...and Share Your Results*

- Do you have outstanding programs you want others to know about?
- Are you pressured to report results of your programs?
- Do you feel as if you have no time for reporting the outcomes of your programs?
- Have you been in a situation where you needed to report program results immediately?
- Would you like to contribute to a National effort?

Then 4-H Afterschool has a few solutions!!

4-H Afterschool programs will have several opportunities and systems available for reporting program results and being recognized for quality efforts. They include:

- 1 The Extension CARES Initiative (ECI) Evaluation and Reporting System
- 2 4-H Afterschool Program Profiles (a.k.a. Benchmark Information)
- 3 State Plan of Work reporting system
- 4 ES-237
- 5 4-H and Family and Consumer Science “Programs of Excellence” Collection

WHAT IS THE ECI?

The Extension Care Initiative (ECI) is a national initiative of the Cooperative Extension System that aims to increase the quality, availability, accessibility, affordability, and sustainability of child care, school-age and teen out-of-school programs. Program goals and objectives can be found at the reusda.gov/extension-cares web site.

WHAT IS THE ECI EVALUATION AND REPORTING SYSTEM?

The ECI evaluation and reporting system is a web-based system for reporting information from early care and education, school-age care and teen programs. This is the primary system 4-H Afterschool programs will use. It generates local reports and provides data that can be aggregated for state and national use.

Why should you use the ECI system?

- It's on the Internet, so no special software is required.
- Data entry is fast and easy, and the system performs all the analysis for you!
- Provides instant professional reports of your results!

There are three ways in which you can report results of your efforts with 4-H Afterschool projects into the ECI system.

PART 1: Simply tell us what trainings/programs you are doing. With the report you will get from this data, you can answer evaluation questions such as: Who am I reaching with my program?; What range of topics have I offered through training?; How many training hours have I offered my participants?

* This chapter was written by Toni DeWeese, ECI National Data Coordinator.

Join Up...and Share Your Results

PART 2: Use ECI Client

Satisfaction evaluations to evaluate the training/program you've done.

There are four versions of client satisfaction surveys: Provider/Staff, Extension, Families, and Community, each depending on the target audience of the program. Each evaluation contains basic questions on demographics of that population, plus four simple questions about the program. You can either send evaluations for scanning or enter evaluation data into the online system. With the report you will get from this data, you can determine multiple characteristics of your audience, as well as answer questions such as: How do participants rate the quality of the training?; Am I reaching my target audience?; How do my programs compare to the national average?

PART 3: Report specific activities or outcomes you've been working toward.

For a list of the questions asked in the semi-annual report, refer to the website at: www.eci.msstate.edu. While the semi-annual report can be conducted alone, we highly encourage it to be used in conjunction with reporting programs and using client satisfaction evaluations to maximize the power of this system and the reports you get back.

NOW, HOW DO YOU START?

1 Obtain an ECI User ID and password for logging into the system. Visit our website for a list of state ECI coordinators, then contact your coordinator for a User ID.

2 Once you have a User ID, you can login to the system to start reporting.

3 *You also need to download the reporting and evaluation system training manual. This manual gives you step-by-step instructions on how to report your data in the system.* It also tells you complete instructions on how to use client satisfaction evaluations. To download the manual, visit our website at: www.eci.ext.msstate.edu.

Our website has just about everything you need to know about the evaluation and reporting system so you can start reporting right away! If you have questions about the evaluation and reporting system, please go to the www.eci.ext.msstate.edu web site.

The ECI evaluation and reporting system is one of the few that allows the aggregation of data across the country. Summary data will help market our excellent work and position Cooperative Extension System for resources in the future. JOIN UP and become part of the national effort! You'll be glad you did!

Other than the ECI evaluation and reporting system, how can I participate in...

4-H AFTERSCHOOL PROGRAM PROFILES (AKA BENCHMARK INFORMATION)?

4-H Afterschool Programs will be asked to respond to an on-line survey during the fall of each year. This gives the 4-H Afterschool Leadership Team valuable information that profiles programs, lets us know who is involved in afterschool programs, and provides information which can be used to market the nation-wide efforts of the Cooperative Extension System. Some of the questions in this quick survey are similar to the ones asked in the "Semi-Annual Report" through the ECI system. The "profiles" offer quick snapshots of what is happening across the country, while the semi-annual report collects and analyzes the information in more detail. To preview the Profile questions, visit our website at: www.eci.ext.msstate.edu.

With the report you will get from this data, you can determine multiple characteristics of your audience.

Join Up...and Share Your Results

STATE PLAN OF WORK (POW) REPORTING SYSTEM?

A set of outcome indicators that measure impact in early care and education, school-age care, and teen out-of-school time programs, has been developed and will be integrated into the national Plan of Work system that states submit to the Cooperative State Research, Education, and Extension Service (CSREES) in order to receive federal funds. These outcomes and indicators were developed by a national committee of Family and Consumer Science faculty and the School-Age Care, Teen Out-of-School Time, and Evaluation Committees of ECI.

Watch for this opportunity in the next POW reporting cycle. Copies of the indicators can be found on the ECI website at: www.reeusda.gov/extensioncares.

ES-237 ANNUAL REPORTING FOR 4-H?

There are two categories in the ES-237 Annual 4-H Report, starting with the reports due November 1, 2004, that will capture 4-H Afterschool efforts. Under the "4-H Club" category, states will be able to report youth members in: community 4-H clubs, school 4-H clubs, afterschool 4-H clubs, and military 4-H clubs. It is a new option to be able to report 4-H clubs in these different categories. Previous reports only asked for 4-H clubs and many interpreted this to mean community clubs only. This category assumes there is a 4-H club structure present in the afterschool environment.

There is another category in which states can report "youth participating in School-Age Child Care programs." States can report youth reached through all afterschool efforts (needs assessments, curriculum enhancement, staff training, community development, etc.) here. A 4-H club structure does not have to be part of the afterschool experience.

4-H PROGRAMS OF EXCELLENCE?

For a number of years the National 4-H Headquarters staff collected "4-H Programs of Excellence" from the states and compiled them into a web-based resource of information. These were narrative reports that could document results.

Opportunities such as this may be available in the future. 4-H Afterschool programs are encouraged to provide program information for these types of requests.



ENDNOTES

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