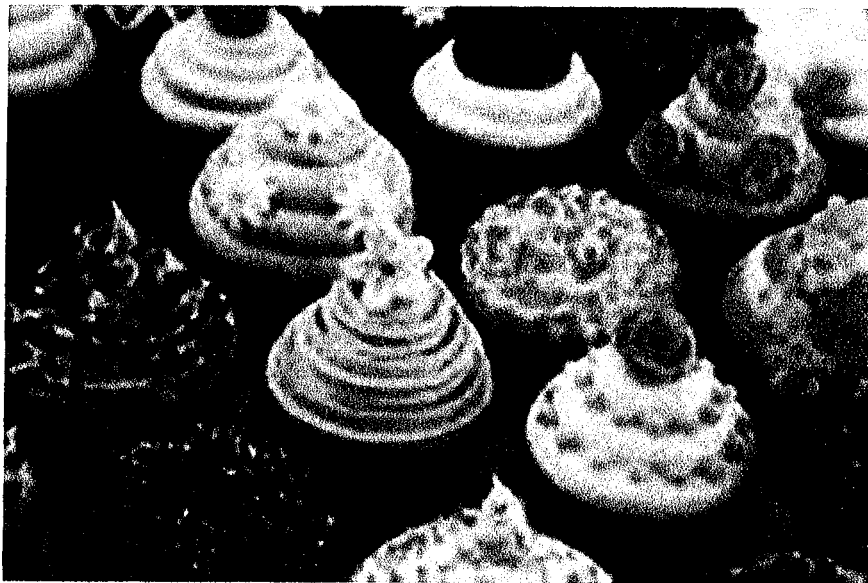
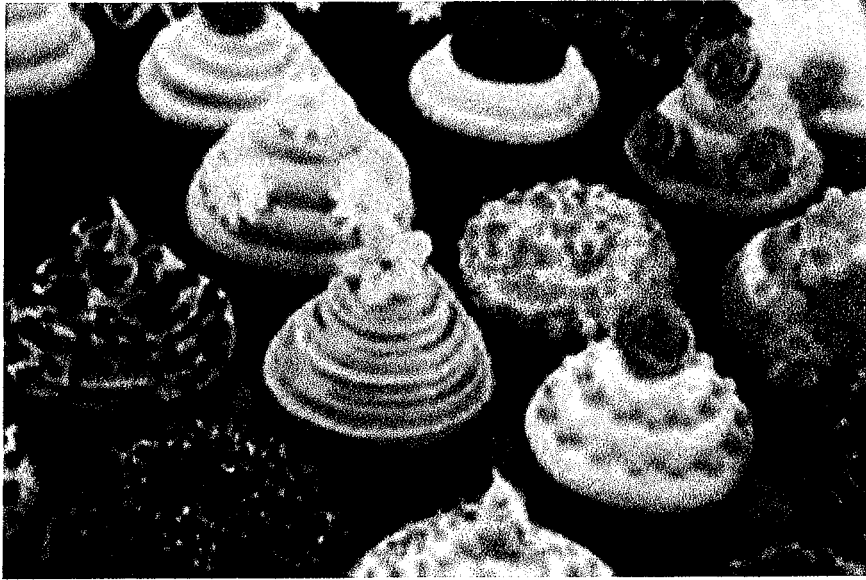


UC
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Cupcake Decorating

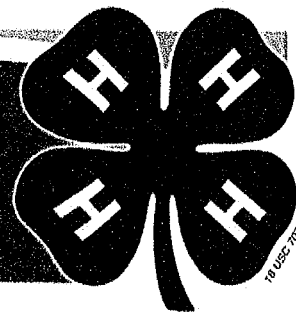


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This We Believe:

- The boy and girl are more important than the projects.
- The member should be their own best product.
- No award is worth sacrificing the reputation of a member or leader.
- Competition is a natural human trait and should be recognized as such. It should be given no more emphasis than other fundamentals.
- Learning how to do the project is more important than the project itself.
- Many things are caught rather than taught.
- A blue ribbon member with a red ribbon project is more desirable than a red ribbon member with a blue ribbon project.
- To learn by doing is fundamental in any sound educational program.
- Generally speaking, there is more than one good way of doing most things.
- Every member needs to be noticed, to feel important, to win, and to be praised.
- Our job is to teach members *how* to think, not what to think.



4-H BAKING PROJECT



In this project, youth learn about foods by partnering in the kitchen to plan and create baked goods. Explore the science, nutrition and history of baking while promoting healthy eating and resource management.

- Learn to bake a variety of snacks and treats, including cakes, pastries, pies, granola, breakfast bars, chips, cookies and more.
- Discover the health benefits associated with different foods.
- Explore the science behind baking, such as ratios, chemistry and ingredient interactions.

4-H THRIVE

Help youth:

A spark is something youth are passionate about; it really fires them up and gives them joy and energy. Help youth find what it is about baking that excites them.

The brain grows stronger when we try new things and master new skills. Encourage youth effort and persistence to help them reach higher levels of success.

Help youth use the GPS system to achieve their goals.

Goal Selection: Choose one meaningful, realistic and demanding goal.

Pursue Strategies: Create a step-by-step plan to make daily choices that support your goal.

Shift Gears: Change strategies if you're having difficulties reaching your goal. Seek help from others. What are youth going to do when things get in their way?

Ask project members how they can use their passion for baking to be more confident, competent and caring. Discuss ways they can use their skills to make a contribution in the community, improve their character or establish connections.

- Identify common pans used in baking.
- Learn to read a recipe.
- Review basic kitchen hygiene including washing hands and tying up hair.
- Measure wet and dry ingredients correctly.
- Learn how to safely use an oven and how to handle hot pans.
- Learn to separate eggs and discuss safe handling and eating practices.
- Explore other baked snacks besides sweets.
- Roast flavored nuts/seeds.

- Learn to scale recipes.
- Alter a recipe to make it more healthful (e.g., whole wheat, fat substitutes, shredded vegetables).
- Tour a bakery.
- Learn to correctly wrap and store baked goods.
- Explore the variables that affect baking outcomes (distance from heat, baking time and temp, etc.).
- Use a Dutch oven.
- Learn how to make fancy pie crust edges and tops.
- Learn how to clean an oven.

- Create a personal file of at least 25 baked recipes.
- Explore careers in the baking industry.
- Learn to bake gluten-free.
- Learn how different baking materials (cast iron, ceramic, glass, etc.) transfer heat.
- Build a solar oven.
- Understand how to bake at high altitudes.
- Explore advanced French baking techniques.
- Make essential ingredients from scratch (e.g., butter, flour, ground spices).

The activities above are ideas to inspire further project development. This is not a complete list.

Light Your Spark

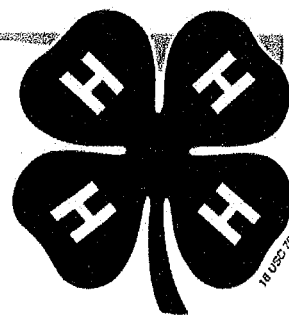
Flex Your Brain

Reach Your Goals

Light Your Spark

Flex Your Brain

Reach Your Goals



Expand Your Experiences!

Healthy Living

- Calculate and determine the caloric value and serving size of a homemade dessert.
- Create a portfolio of healthy, youth-friendly baked snacks such as granola bars, dehydrated fruit, roasted nuts, or vegetable chips.
- Take a first aid or safety class to learn how to treat burns.

Science, Engineering, and Technology

- Research the role of fat in baking and experiment using different types of fat or oil (e.g., margarine, olive oil, butter, vegetable oil) in a recipe.
- Be a food photographer. Find an example of food photography in a magazine and try to recreate it with your baking skills and camera.

Citizenship

- Tea for two: invite a special person like a grandparent or older friend over for a pot of tea and cookies. Bake cookies and set out tea and make someone very happy.
- Learn to bake traditional recipes from other countries to develop an understanding and appreciation for a variety of cultures. Share your recipes and baked goods with others.

Leadership

- Facilitate a baking class that teaches others how to make healthier desserts.
- Determine the different types of grains used in baked products (e.g., oats, wheat, rice flour, flaxseed) and give a presentation that follows one grain from farm to fork.
- Create and distribute a list of healthy baked snack ideas for 4-H club meetings.

- Book: *Kids' Ideas with Frozen Dough* by Rhodes International, Inc.
- Very Best Baking www.verybestbaking.com
- Joy of Baking joyofbaking.com
- King Arthur Flour www.kingarthurfLOUR.com
- Home Baking Association www.homebaking.org/foreducators
- Baking 911 baking911.com
- Baking Bites bakingbites.com
- Book: *How Baking Works: Exploring the Fundamentals of Baking Science* by Paula I. Feroni
- Smitten Kitchen smittenkitchen.com
- Betty Crocker www.bettycrocker.com/tips/bakewithkids

Connections & Events

Curriculum

4-H Record Book

Presentation Days – Share what you've learned with others through a baking-related presentation.

Field Days – During these events, 4-H members may participate in a variety of contests related to their project area.

Contact your county 4-H office to determine additional opportunities available, such as favorite foods day, a food fiesta, or nutrition and consumer science field day.

- Fantastic Foods - www.4-hmall.org/Category/4-hcurriculum-foods.aspx

4-H Record Books give members an opportunity to record events and reflect on their experiences. For each project, members document their personal experiences, learning and development.

4-H Record Books also teach members record management skills and encourage them to set goals and develop a plan to meet those goals.

To access the 4-H Record Book online, visit www.ca4h.org/4hbook

The UC 4-H Youth Development Program does not endorse, warrant, or otherwise take responsibility for the contents of unofficial sites.



University of California Agriculture and Natural Resources

Light Your Spark

Flex Your Brain

Reach Your Goals

Light Your Spark

Flex Your Brain

Reach Your Goals



bakeworks:

*preschool enrichment &
community service through baking*

Why Cook with Children?

"Children practice early math skills through counting, measuring, sequencing of events and understanding of time. They practice small motor skills, improve eye-hand coordination and learn to follow directions. Pre-reading skills are enhanced through numeral, symbol and word recognition."

Mollie Katzen, Pretend Soup. Author and educator.



Home Baking Association Educator
Award Recipient, Julie Ratchford
Lesson prepared with Sharon Davis,
Family & Consumer Sciences Education.
Download lesson at
www.homebaking.org

Background: *bakeworks, LLC* was researched and licensed by preschool educator Julie Ratchford as a multi-sensory enrichment experience for 3, 4 and 5-year-old children.

Over 8 weeks, baking lessons served as a fun motivator to:

- discuss the basic baking ingredient names
- reinforce multiple skills in math, language, literacy, arts, cooperative learning, social and emotional, science and kitchen safety
- encourage students to use newfound food skills to learn what human needs are and benefit those with needs such as the homeless.

Baking with Children Develops Language and Literacy

Purpose: Help children understand letters and word sounds by having them

- Speak clearly
- Ask and answer questions
- Pay attention to and listen to people and stories
- Follow directions
- Show an interest in books
- Learn about sounds in words
- Recognize letters and numbers
- Draw pictures and try to write and copy letters

Mathematical Thinking

Purpose: Help children understand measurement (*size, length, and weight*).

- Sort objects by different traits (*color, shape, sizes, taste, or texture*)
- Use words to describe baking tools and their uses
- Identify and copy simple patterns
- Use words to talk about position (*over, under, in, top, bottom, etc.*) and order (*first, next, last*)
- Count objects, in gredients, and how many the recipe serves
- Use words to communicate an understanding of numbers and relationships (*more, less, equal*)

Scientific Thinking

Purpose: Help children notice things in their world by thinking, asking questions and talking about things! Help children wonder about and investigate (*to learn*) things by making predictions (*guess*) and observe (*see what actually happens*).

- Wonder about things
- Ask questions
- Make predictions (tell what might happen).
- Look, listen, touch, smell, and taste to get information
- Organize information and talk about it
- Compare things by talking about how they are alike and different
- Use words to explain why something happened

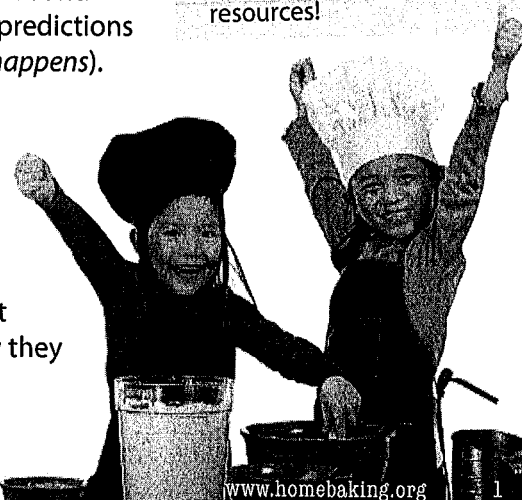
Children Learn What They Live,

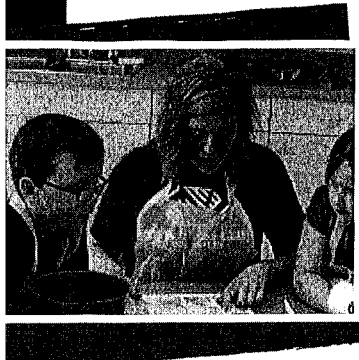
*...Get Active
in the Kitchen!*

The American Academy of Pediatrics recommends:

- no TV or video viewing under the age of 2.
- Read together... 3X a day!
- Play
- Sing
- Rhyme
- Talk about what you're doing
- Repeat words, sounds
- Make silly names, words for alphabet letters
- Build "do-it-yourself" food skills as part of an active lifestyle
- Eat meals together at least 5-7 times weekly

Visit www.homebaking.org for pre-K and up baking resources!





Getting Started!

Choose a simple baking project. Look at the picture. Connect the food to their body's nutrient needs—how much to eat of the food. Read the recipe together. Have children name and group ingredients. How did they group them? Texture, size, color, shape, smell. Look through a magnifying glass to observe...group items...liquid, solid, powder, soft, hard.

Name all the tools that will be used to prepare the recipe. Show how to do the simple tasks they will do and name what you will do with them. Give a task to every child.

After baking: Describe changes in state or appearance – liquids to solid or gas; expanded, browned, bumpy to smooth, round to flat. Guess, then state what factors made changes occur.

Social & Emotional Development

Purpose: Help your children get along with others in order to make and keep friends.

- Handle emotions
- Express oneself
- Want to learn new things
- Start and finish an activity
- Take responsibility for actions

Go over Thrill of Skill age-appropriate tasks at www.homebaking.org. Tell your children that you'd like to have a tea party. Say, "Let's make something good to eat and I've got a tea set here! I thought we could have a tea party together." Prepare a simple muffin, scone, bread, fruit tart. Show the items in the tea set and ask the children to help you set the table. Once the table is set, sit down with your children; take the teapot, and say, "Would you like some tea?" Share what the child help prepare or share pretend food.

Use this time to talk! Use open-ended questions to guide your conversation; in other words, ask things that will get them talking. Do not ask yes or no questions. Take time to enjoy sharing food, sitting down, with conversation. Eat slowly! Small bites! Ask each child something to make the conversation include all. You might say, "Tell me about something that made you laugh this week." or "What do you want to be when you grow up?" This will help teach children how to have a conversation (*how to talk and listen to others*).

The Arts

Purpose: Let your child try acting! Help your child understand and talk about books. Let your child use different art materials and talk about his work! Help your child practice pre-writing skills and recognize shapes and colors.

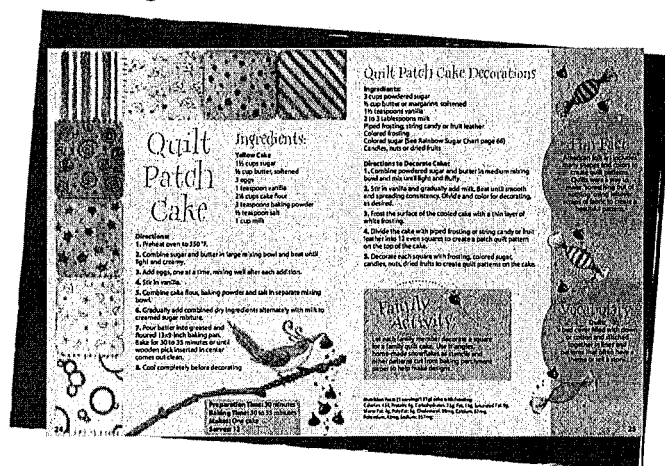
- Try different art activities, such as dancing, singing, acting, cooking, baking, painting and drawing.



Go to www.homebaking.org for **You Can Sculpt!** A dough art activity found in *Bake for Family Fun* section. Photo courtesy of Fleischmann's Yeast, www.breadworld.com.



- Ask questions about/looking for new ways to dance, make music, act or create.
- Use different art materials such as puppets, costumes, instruments, paint, glue, scissors, crayons, food ingredients.
- Show an interest in other children's art activities.
- Discover primary and designer colors.
- Create a rainbow of colors by coloring your own sugar. See the sugar color wheel at www.homebaking.org DIY Baking Channel, Quilt Cake.



Baking Develops all Five Senses

- Read *My 5 Senses* by Alik.
- Bake a savory food such as focaccia or Confetti Cornbread. (Download at DIY Baking Channel or Recipes, www.homebaking.org)
- What aromas do you smell, colors and shapes do you see, textures do you see and feel as you receive a portion; What do you hear as you share the food, temperatures and tastes (sweet, spicy, salty, bitter, sour, tsunami...)
- Fill a tray with baking tools or ingredients you will use for baking. Have the children study the tray as you name the tools or ingredients. Close your eyes – remove one item. Can they name what is removed? Repeat.

On-line, work together to do the Memory Game!
<http://www.homebaking.org/memory/memorygame.php>

Goals, Outcomes and Evaluation Methods

Age Level: 3 to 5-year old preschool children

Location: Preschool kitchen; access to hand-washing sinks

Time: Allow 2 hours class time, including time for lunch

Goal

Discuss basic human needs and how helping those with needs shows concern for others



Outcome: Children will identify basic needs, tell what it means to be without, and donate a portion of what they bake or ingredients to a shelter or feeding program

Evaluation Method: Children will name and circle pictures of basic needs, orally express what it means to be without

Discuss the main ingredients in most baked goods



Outcome: Children will identify flour/meal, sugar, butter, eggs, leavening

Evaluation Method: Children will name and circle pictures of the main ingredients

Follow directions and participate in the baking activity



Outcome: Children will follow teacher directions and recipe steps in order to create the baked product; children will communicate questions, answers and comments effectively to teacher and peers

Evaluation Method: Teacher assessment of participation and communication skills

Use numbers and counting skills in baking process



Outcome: Children will participate in math-related parts of the baking process such as: *How many eggs are we using? What ingredient did we put into the bowl first? Next? How long are we baking the muffins? Count how many cookies the recipe made. How many ounces or grams does one (cookie/muffin/pancake) weigh? Which (cookie/muffin/pancake) is bigger? Smaller? Does each (cookie/muffin/pancake) weigh the same amount?*

Evaluation Method: Teacher assessment of participation

To work effectively as a group and demonstrate effective communication skills



Outcome: Children will participate as part of a group and at age-appropriate level by listening, taking turns, helping, sharing with other group members

Evaluation Method: Teacher observation/assessment of cooperative learning skills

To model and practice food and kitchen safety skills



Outcome: Students will name two to four steps for kitchen and food safety independently or from pictures. Children will follow food and kitchen safety guidelines. Download Safe Kitchen Checklist at www.homebaking.org. Also resources at www.itsasnap.org

Evaluation Method: Oral/picture/on-site assessment of four kitchen safety tips; teacher observation of adherence to guidelines

To describe the baking experience and baked products as they relate to the five senses using words and/or pictures



Outcome: At the end of the lesson, as a group children will complete a graphic organizer that describes sensory experiences the children had throughout the baking process

Evaluation Method: Child's contribution to graphic organizer



Book and Bake!

Theme-related books to introduce the recipe activity or to read while products bake.

All in Just One Cookie.

Susan Goodman

Baker, Baker, Cookie Maker.

Linda Hayward

Beverly Billingsly Takes the

Cake. Alexander Stadler

Bread, Bread, Bread.

Ann Morris

Bunny Cakes. Rosemary Wells

Cook-a-Doodle-Do.

Janet Stevens & Susan Stevens
Crummel

Cookies: Bite-Size Life Lessons.

Amy Krouse Rosenthal

Eight Animals Bake a Cake.

Susan Middleton Elya

Froggy Bakes a Cake.

Jonathan London

Maisy Makes Gingerbread. Lucy
Cousins

May I Please Have a Cookie?

Jennifer E. Morris

Miss Spider's Tea Party. David Kirk

Ruth's Bake Shop. Kate Spohn

Sun Bread. Elisa Kleven

The Little Red Hen Makes a

Pizza. Philemon Sturges

The Runaway Pumpkin.

Kevin Lewis

The Very Hungry Caterpillar.

Eric Carle

Tractor. Craig Brown

Warthogs in the Kitchen.

Pamela Duncan Edwards

Welcome Books. (Beans to

Chocolate; Grapes to Raisins;

Grains to Bread) Inez Snyder

Up! Up! Up! It's Apple Picking

Time! Jody Fickes Shapiro

• Also visit *Book and Bake* at
www.homebaking.org

• Michigan Team Nutrition
Preschool Booklist.

www.michigan.gov/documents/mde/UpdatedMichiganTeamNutritionBooklist_290287_7.pdf

• University Cooperative
Extension Office...

www.learningandlivingwell.org

Foundation Learning Blocks For Early Learning



Oral Expression:

- Listen with increasing attention to spoken language, conversation, stories read aloud
- Use appropriate language to ask questions, express needs, get information
- Listen attentively in groups or whole class

Vocabulary:

- Use single words to label objects
- Listen with increasing understanding of directions
- Engage in turn-taking exchanges with adults and children
- Exposure to a wide variety of experiences to build vocabulary

Letter Knowledge/Early Word Recognition:

- Read simple/high frequency words, including his/her name

Print & Book Awareness:

- Identify the front of a book
- Identify the location of the title of the book
- Identify part of book that "tells the story"

Number/Number Sense:

- Count objects to 20 or more
- Count a group, set or collection of three to five objects as it is counted; say numbers using one-to-one correspondence
- Count collection of one-to five items; know last counting word tells "how many"

Measurement:

- Know correct names for the standard tools for telling time and temperature, length, capacity and weight (*clocks, calendars, thermometers, rulers, measuring cups, scales*)
- Use appropriate vocabulary comparing temperatures (*hot, cold*)

Geometry: Describe position of object in relation to other objects (*above, below, over, under, top, bottom*)

Scientific Investigation, Reasoning Logic:

Identify basic properties of objects by direct observation

- Describe objects using pictures and words
- Identify body parts with five senses

Matter:

- Identify colors (*red, yellow, orange, green, blue, purple*), white and black
- Identify shapes (*circle/triangle/square/rectangle*)
- Identify textures (*rough/smooth*); feel (*hard/soft*)
- Describe speed (*fast/slow*); change (*liquid, gas*)

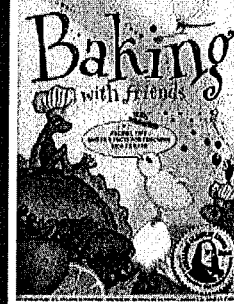
Civics/Citizenship: Cooperate together

- Share thoughts, opinions in group
- Demonstrate caring for classroom materials
- Identify the needs of people by helping them

Sample Baking Activity Timeline

Download, copy and send home: *Thrill of Skill, recipes, Food Skills Checklist and the Baking Certificate* at www.homebaking.org

- | | |
|----------------|--|
| 11:30 to 12:00 | Clean and set up workspace. with ingredients, tools, supplies for groups/teams |
| 12:00 to 12:20 | Children wash and eat lunch. While eating, read/share recipe, name and show ingredients, tools and interesting information/pictures about how or where an ingredient is grown. |
| 12:20 to 12:30 | Bathroom break and wash hands. |
| 12:30 to 1:15 | Measure, mix and bake. <ul style="list-style-type: none"> • Group children, 4 per leader. Read through recipe with children as needed • Have children help check to see if their group has tools, ingredients for recipe • Follow the recipe, explaining basic ingredients, how-to measure; let children help add ingredients, stir, whisk, grease pan...each one doing an age-appropriate task |
| 1:15 to 1:30 | Story time. While baked goods are in the oven, children listen to baking-related story with guided comments and questions; weekly note home about the activity can be filled out by helper |
| 1:30 to 1:45 | Additional skills practice and clean up. Examples: Cut out steps in recipe with key words, scramble them and have children help put them in the right order: do a memory game with tools/ingredients on a tray. (<i>Clean-up: Use spatula or bowl scraper to scrape flour, ingredients into waste basket, then wipe down tables. Children can help with both!</i>) |
| 1:45 to 2:00 | Tasting, describing, and conclusions. <ul style="list-style-type: none"> • Have children sit together and taste an appropriate serving of what they baked. Practice good manners! Have them describe the aroma, taste (<i>sweet, sour, salty, bitter, spicy, savory...</i>), and texture(s), sights, and sounds of the baked product and baking it. • Review daily activities and pack take-home containers to send with children to share their baked goods with their families. Refrigerate if needed. |



Gain more great baking activities with *Baking with Friends* at www.homebaking.org

Vocabulary and Skill Building

Assist children to hear, see and identify the tools, terms and activities they'll use while baking! Show ingredient examples and circle/point to the five basic ingredients: *flour, eggs, butter, sugar, leavening*

- **Measuring cups and spoons:** Containers that are marked with fractions and numbers for the amount of liquid or dry ingredient to *measure* for a recipe. Show *liquid measuring cup* and *dry measuring cups* and *measuring spoons*.
- **Mixing:** Stir, usually with a spoon, until the *ingredients* are well-combined (*no individual ingredients can be identified*).
- **Recipe:** The list of ingredients and directions you read and use to prepare a food. Read together the *recipe* you will prepare!
- **Stir:** Using a spoon to mix ingredients with a circular or figure-eight motion.



"This conversation is not just about weight or size or BMI. It's about overall health and the kind of lives that we want our kids to lead. We've got to set them up for success." Michelle Obama
Learn more: National AfterSchool Association Core Standards, 2012.
www.naaweb.org

Teacher Observation Checklist

Skill	Date	Date	Date	Date	Date	Date	Date
Child participated in math-related parts of baking process such as how many? How do we measure? How long does the food bake? etc.							
Child followed teacher directions and recipe steps in order (sequence) to create product							
Child communicated questions, answers, and comments effectively to teacher and other children							
Child participated in group at an age-appropriate level by listening, taking turns, helping, and sharing							
Child followed kitchen safety rules							
Child contributed to completion of graphic organizer by describing his/her sensory experiences using words or pictures							

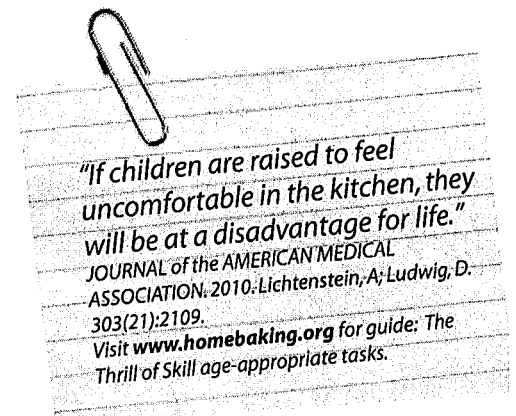
Final Assessment for (Name) _____ **Date** _____

Download a copy of the **Baking Skills Checklist** at www.homebaking.org for each child. Over the weeks, check off each skill the child's gained. Send home a copy of the checklist for each child to fill out, with the *Thrill of Skill* guide, and *Safe Kitchen Checklist* and the following final assessment so parents can see what their children can do and how they can continue building skills together at home!

Your child has

- ☐ Named and/or circled pictures of basic human needs (*food, water, air, clothing, shelter*).
- ☐ Orally expressed what it means to be homeless (*having no home*).
- ☐ Named or circled pictures of the five main ingredients used in making baked goods (*flour and/or meal; sugar; butter; eggs; leavening*).
- ☐ Participated in the math-related parts of the baking process such as how many? How do we measure the ingredient(s)?
- ☐ Followed teacher directions and recipe steps in order (*sequence*) to create final baked product.
- ☐ Communicated questions, answers, and comments effectively to the teacher and to other children.
- ☐ Participated as part of a group at an age-appropriate level by listening, taking turns, helping, and sharing with other group members.
- ☐ Followed kitchen safety rules. (*See Safe Kitchen Check List at www.homebaking.org*).
- ☐ Identified 2 to 4 kitchen safety tips (*independently or from pictures*).
- ☐ Contributed to the completion of the graphic organizer by describing his/her sensory experiences using words and/or pictures.
- ☐ Donated a portion of his/her baked goods to homeless or emergency shelter(s).

Teacher comments:



Recipes:

The following recipes are just a start!

Visit www.homebaking.org. Click on Recipes OR Members and links for child-friendly recipes.

Fruit Wholegrain Bars

Makes 9 X 13-inch pan (20 bars)

Children love creating their own whole grain fruit granola bars!

Ingredients

Crust and topping:

- 1 cup whole wheat flour
- ¾ cup packed brown sugar
- ¼ teaspoon salt
- 6 tablespoons unsalted butter
- 1/3 cup flax meal, or 2 tablespoons vegetable oil
- 2 ½ cups quick oatmeal
- 2 tablespoons orange or apple juice

Filling*:

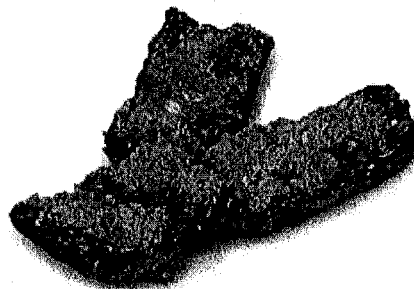
- ¼ cup dark brown sugar
- 2 tablespoons flour or 1 tablespoon corn-starch
- 1/8 teaspoon salt
- 3 ½ cups (18 oz.) fresh or frozen fruit (blueberries, blackberries, raspberries, cherries, cut-up firm peaches)
- 1 tablespoon fresh lemon juice

*Omit sugar and flour or cornstarch; combine fruit, lemon juice and one, 12-oz. can Solo® cake & pastry filling

Directions:

1. Preheat oven to 375°F. Grease a 9 X 13-inch pan.
2. In the bowl of a food processor, pulse the flour, sugar and salt. Cut the butter in cubes, and add with the flax meal; pulse five or six more times. Add the oats and pulse a couple more times.
3. Remove 2 cups of the oatmeal mixture. Then add the juice and pulse until moistened. Press this mixture into the greased pan.
4. For the fruit filling: Whisk together the sugar, flour or cornstarch and salt, *OR alternative Solo filling. Lightly stir in with the fruit and lemon juice to coat. Spoon the fruit mixture evenly over the bottom crust.
5. Sprinkle the remaining crumb mixture over the top and bake until golden on top, about 40 minutes.
6. Cool the bars on a wire cooling rack, about 1 ½ to 2 hours.
7. Cut into 20 (2 oz/61g) bars. Store bars in a tightly sealed container in the refrigerator or freezer.

Source: Sharon Davis, Family and Consumer Sciences education, www.homebaking.org



Excellent choice for grab-n-go breakfast, classroom snack, or sharing with a shelter.

Nutrition Facts

Serving Size (81g)
Servings Per Container

Amount Per Serving

Calories 150 Calories from Fat 35

% Daily Value*

Total Fat 4g 6%

Saturated Fat 2g 10%

Trans Fat 0g

Cholesterol 10mg 3%

Sodium 30mg 1%

Total Carbohydrate 27g 9%

Dietary Fiber 3g 12%

Sugars 12g

Protein 3g

Vitamin A 2% • Vitamin C 8%

Calcium 2% • Iron 6%

* Percent Daily Values (DV) are based on a 2,000

calorie diet. Your daily values may be higher or

lower depending on your calorie needs.

Calories 2,000 2,500

Total Fat Less than 65g 25g

Saturated Fat Less than 20g 25g

Cholesterol Less than 300mg 300mg

Sodium Less than 2,400mg 2,400mg

Potassium 3,500mg 3,500mg

Total Carbohydrate 300g 375g

Dietary Fiber 25g 30g

Calories per gram:

Fat 4 • Carbohydrate 9 • Protein 3

What can the children do?

- Grease pan (View demo at www.becomeabetterbaker.com)
- Add butter cubes and premeasured dry ingredients to food processor
- Whisk
- Press mixture into pan
- Spread filling over crust
- Sprinkle crumb mixture over top
- Count bars
- Deliver to homeless shelter
- Kids help save \$\$\$ at home with DIY Granola Bars!



Recipes:

No Oven? Bake with table top appliances.

See Portable Kitchens at www.homebaking.org. Here's a recipe to get started:

Fluffy Corn Cakes

Makes 24, (2oz/55g) corn cakes

Ingredients

- 1 cup whole wheat flour—*stir, spoon and level*
- ½ cup all-purpose flour—*stir, spoon and level*
- ½ cup white or yellow cornmeal, enriched or wholegrain
- 3 teaspoons baking powder
- 1/8 teaspoon (dash) salt
- 2 well beaten eggs
- 1, 15 oz. can cream-style corn **or**
fresh corn cut off cob (2 cups)
- 2 cups 1% milk
- ¼ cup melted butter or vegetable oil
- Optional: Syrup or honey*

Directions

1. In large mixing bowl combine flours, cornmeal, baking powder and salt. Whisk to blend.
2. In medium mixing bowl, use whisk to beat eggs well; add cream-style or fresh corn, milk and melted butter.
3. Brush a griddle with oil and preheat to medium high, 350-375 ° F.
4. Stir corn mixture into dry ingredients, mixing quickly.
5. Bake on lightly greased griddle or skillet until golden brown, turning once.
6. Keep warm on plate in the oven until all are cooked. Serve plain or with syrup or honey.

Source: *River Bend Council Camp Fire Council*, Elaine Veevaete & Kathy Horn, Staff, leader/volunteer.

Recipe tested and nutrition analysis by Sharon Davis, FACS Education, www.homebaking.org



Nutrition Facts

Serving Size (55g)
Servings Per Container

Amount Per Serving
Calories 80 Calories from Fat 25
% Daily Value*

Total Fat 3g 4%
Saturated Fat 1.5g 7%
Trans Fat 0g

Cholesterol 25mg 8%

Sodium 170mg 7%

Total Carbohydrate 4%

Dietary Fiber 1g 12g 4%

Sugars 3g

Protein 3g

Vitamin A 4% • Vitamin C 0%

Calcium 6% • Iron 2%

* Percent Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	25g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:

Fat 4 • Carbohydrate 4 • Protein 3



One-Dish Italian Meatball and Cheese Pizza Bake

Makes 6 servings

Ingredients

Batter

- 1 cup whole wheat flour*
- ¾ cup all-purpose flour
- 2, ¼ oz. envelopes (4 ½ teaspoons) fast-rising yeast
- 2 teaspoons sugar
- ½ teaspoon salt
- ¾ cup very warm water (120° F.) water
- 2 tablespoons olive OR vegetable oil

Directions

1. Mix batter ingredients in a pre-sprayed 9-½ inch deep dish pie plate OR batter may be mixed in a separate bowl, then spread in sprayed pie plate.
2. With lightly greased hands or back of spoon, press the batter to cover the bottom of the pan evenly.
3. Top dough with meatballs, firmly pushing meatballs into batter. Mix garlic, and seasonings with the pizza or tomato sauce and pour over meatballs. Sprinkle with cheese.
4. Bake by placing the pan in a cold oven; set temperature to 350° F. Bake for 30 minutes or until done (180° at center).

*OR 1 ¾ cup all-purpose flour, total, may be used **Reduce sodium by preparing meatballs from scratch with less salt; use reduced salt tomato sauce.

**Find great meatball recipes at: www.bettycrocker.com

Topping

- 18 to 20 small, cooked meatballs**
(about 8 oz) (thaw, if frozen)
- ¾ cup tomato or pizza sauce
- 1 teaspoon minced garlic
- 1 teaspoon Italian Herb Seasoning
- 2 cups (8 ounces) shredded mozzarella and provolone cheeses

What can the children do?

- Stir and spoon flour into cup; level off flour; pour flour into pan or bowl. Stir yeast, sugar and salt into flour and mix well. Add water and oil.
- Press meatballs into batter.
- Spoon sauce over meatballs.
- Sprinkle cheese over surface.
- Turn oven to 350 °F.



Nutrition Facts

Serving Size (181g)
Servings Per Container

Amount Per Serving
Calories 180 Calories from Fat 160
% Daily Value*

Total Fat 18g 28%

Saturated Fat 8g 40%

Trans Fat 0g

Cholesterol 50mg 17%

Sodium 540mg 23%

Total Carbohydrate 35g 12%

Dietary Fiber 4g 16%

Sugars 3g

Protein 19g

Vitamin A 10% • Vitamin C 4%

Calcium 30% • Iron 15%

* Percent Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

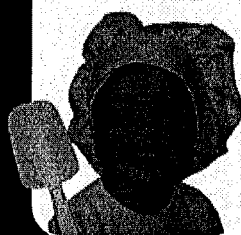
	Calories	2,000	2,500
Total Fat	Less than	65g	25g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

One-Dish Italian Meatball and Cheese Pizza Bake recipe provided courtesy of Fleischmann's Yeast. Visit www.becomeabetterbaker.com for more!

Recipes:



What can the children do?

Measure and add butter, brown sugar, flour to the mixing bowl. Press the dough into the pan. Add ingredients to food processor bowl and pulse; stir; spread. Older children can help cut into triangles with a pizza wheel.



Coconut-Caramel Triangles

Makes one 11 X 17-inch pan; 2 ½ dozen (2 oz/61g) triangles

Ingredients

- 1 cup (2 sticks) salted butter, room temperature
- 3 cups packed dark-brown sugar
- 2 ¼ cups all-purpose flour (may be half whole wheat flour)
- 2 cups sweetened shredded coconut
- 2 teaspoons baking powder
- 4 large eggs, lightly beaten
- 2 teaspoons pure vanilla extract
- 2 cups finely chopped toasted almonds*

*To toast almonds: Place slivered or sliced almonds on pan; bake or toast on stovetop over medium (350°F) heat, stirring often until golden (about 10-15 minutes).

Directions

1. Preheat oven to 350° F.
2. In a medium bowl, beat together butter, 1 cup brown sugar, 2 cups flour until mixture comes together to form a dough. Press evenly into a rimmed baking half-sheet pan (11 X 17-in).
3. Bake just until golden, about 15 minutes. Remove from oven; let cool on wire rack briefly.
4. While cooling, pulse coconut in a food processor several times, until coarsely chopped, then transfer into a large bowl. Stir in remaining 2 cups brown sugar and ¼ cup flour, baking powder, eggs, vanilla and nuts. Spread mixture over cooled crust.
5. Bake, rotating sheet halfway through until crust is golden brown and filling is set, about 20 minutes.
6. Remove from oven; transfer to wire rack to cool completely. Cut into triangles with serrated knife.
7. Store up to 2 days in an airtight container at room temperature or freeze as soon as cooled.



Nutrition Facts

Serving Size (61g)
Servings Per Container

Amount Per Serving

Calories 260 Calories from Fat 120

% Daily Value*

Total Fat 14g 22%

Saturated Fat 6g 30%

Trans Fat 0g

Cholesterol 45mg 15%

Sodium 120mg 5%

Total Carbohydrate 33g 11%

Dietary Fiber 2g 8%

Sugars 25g

Protein 4g

Vitamin A 6% • Vitamin C 0%

Calcium 6% • Iron 8%

*Percent Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Calories 2,000 2,500

Total Fat Less than 65g 25g

Saturated Fat Less than 20g 25g

Cholesterol Less than 300mg 300mg

Sodium Less than 2,400mg 2,400mg

Potassium 3,500mg 3,500mg

Total Carbohydrate 300g 375g

Dietary Fiber 25g 30g

Calories per gram:

Fat 14 • Carbohydrate 11 • Protein 4

Resources and References:

A Baker's Dozen DVD (130+ baking how-tos demonstrated) and lab manual (science, activities for all ages) for training, parent-child activities and service learning. www.homebaking.org

Healthy Beginnings: Supporting Development and Learning from Birth through Three Years of Age.

<http://www.marylandhealthybeginnings.org/>

Maryland State Dept. of Education and Johns Hopkins University School of Education. 2010.

Home Baking Association www.homebaking.org offers these resources

- **Bake for Family Fun** on-line, age-appropriate food activities
- **Baking with Friends**—Recipes, Tips and Fun Facts for Teaching Kids to Bake
- **Baking Glossary** with links and how-to video clips
- **Book and Bake** downloadable lessons
- **Do-It-Yourself (DIY) Baking Channel** videos and downloadable recipes
- **Portable Kitchen** blueprint, tips and resources
- **Test kitchen help, links, child-focused recipes and how-tos**—click on Members

Kids a Cookin' and Movin' Spanish and English resources. www.kidsacookin.org

Ready At Five, 5520 Research Park Drive, Suite 150, Baltimore, MD 21228 | 410-788-5725 | Email: info@readyatfive.org www.readyatfive.org

Learning and Living Well county and state University Extension locator and resources. www.learningandlivingwell.org Find food leaders, adult or teen, to assist or train with food activities.

Michigan Team Nutrition Preschool Booklist. Download an annotated list of over 250 books with positive food, nutrition, and activity messages for young children. www.michigan.gov/documents/mde/UpdatedMichiganTeamNutritionBooklist_290287_7.pdf

DIY Pizza is great for small hands! Use well-rested dough, divide and pat out personal pan crusts. Top... bake for breakfast, lunch or snack! View how-to and download recipe at DIY Baking Channel, www.homebaking.org No time to bake pizza? Par-bake crusts and send home for a family meal.

I'm a 4-H Project Leader: Now What Do I Do?

How do I know who is in my project?

- Your club organizational leader will provide you with the names, addresses and phone numbers of the members enrolled in the project for which you are the leader.
- If you are working on the county level, contact the UCCE for the list of project members.
- The organizational leader may indicate to you if any of the youth have special needs. At your first project meeting, note any other youth that may have special needs.
- You may wish to consult with the parent or your 4-H Youth Development Agent as to how to work with a special needs child.

How often should I hold project meetings?

It is recommended you hold 4-6 meetings that each last 1½ to 2 hours in length. Some projects require more meetings or a longer meeting time to accomplish your goals. Some projects, such as leather craft, may lend themselves to individual project work as members progress on their projects. In this case, you should hold several introductory meetings for all members and then set up a schedule of time for them to sign up for individual help.

When do I start?

Get started as soon as possible! Members' interest in a project is most keen when they are signing up for a project and when they get their project books.

How do I cover the cost of project meetings?

- There is a wide variety of means for covering the cost of project meetings. Some methods used include:
- Each member pays for their share of the expenses or provides a portion of the supplies.
- The club agrees to cover expenses using funds from their treasury. Approval in advance is needed for this.
- Members and leaders can solicit donations/supplies from area businesses.
- Sometimes funds from sources outside your club may be available to cover your project meeting costs.

How do I establish a project meeting schedule?

First, determine when you are available to work with project members. Then determine an initial project meeting date by consulting with your project members.

Publicize the date using one of the following means:

- County and/or club newsletter
- Club meeting or leader association meetings
- Postcards or phone calls to project members

You may not be able to schedule an initial meeting that everyone can attend. Establish a time to meet with those unable to attend before you hold your second project meeting.

Where do I hold project meetings?

Typically project meetings are held at project leader homes, schools, or community buildings. For more information on facility adaptability and liability concerns contact your 4-H Youth Development Agent.

What safety precautions do we need to consider?

Consider the type of safety issues your particular project involves. Request and secure necessary safety items such as ear protection, eye protection and head protection.

How do I let others in my club or other clubs know I am a project leader?

Prior to enrollment ask for time on your club's meeting agenda to let families in your club know you're a project leader and to share some things the kids could do in the project if they enrolled in it. When the project materials are handed out, take the opportunity to inform or remind members that you are their project leader and set an initial meeting date with the group. If no one in your club is in your project, you may wish to offer your services to a neighboring club. Talk to your club organizational leader or county 4-H Youth Development agent about this opportunity.

How do I prepare for the first meeting?

You may want to establish a 4-H resource box where you keep your project materials and any additional resources you will be using. Take time to become familiar with your project literature and talk to others who were project leaders for this project to find out what activities the members enjoyed.

What should I do at the initial project meeting?

- At the initial project meeting, here are some ideas of what you might want to cover:
- Find out what the members want to learn and accomplish in the project. The project literature is an excellent source of ideas.
- Review the safety practices that members will need to follow.

- Do an introductory activity related to the project so the members get to know one another
- Have a small project the members can complete and take home
- Talk about how the project meeting supplies will be paid for. Experienced leaders have found it easiest to charge a small fee to cover the cost of the expenses.
- Assess when members are available for additional meetings. You may wish to ask the parents or members to bring along their calendars of family activities.
- Encourage parents to participate in project meetings, especially the initial meeting.

What does a typical project meeting look like after the initial orientation?

Use the experiential learning model (found in the introductory pages of your Helper's Guide) to plan your project meeting. The project helper's guide will provide suggestions for designing a project meeting. Here are some suggestions for each section of the model:

Do

- Plan an activity to focus the project members on what they'll be doing today. Work on the project for that meeting.

Reflect

- Review the process completed
- Discuss what worked and didn't work.
- Talk about how any problems that arose were solved.
- Assist members in documenting their project work for inclusion in their record books/portfolios.

Apply

- Ask the project member the following questions:
- What else have you seen that is similar to this?
- How can you apply what you learned today to other situations?

What resources are available to help me?

- 4-H Project Literature – You will receive project literature through your 4-H club or the UW-Extension office. Typically there is a helper's guide and member literature for three to four levels.
- Other People in my Club & County – There are a number of people in your county who would be willing to share project ideas and tips with you.

These include:

- Project leaders in other clubs
 - County Staff
 - Older youth who have been involved in the project
-
- Media Collection & Public Libraries – Additional resources can be obtained from the Cooperative Extension Media Collection. They have videos, skillathons, displays and resource packages available to support a variety of projects. There is a user fee per item you or your club will be responsible for. You can view their catalog at their website <http://www.uwex.edu/ces/media/>. Check with your local public library to find out what resources they may have or that you can obtain through inter-library loan.
 - 4-H Website – Wisconsin 4-H is continually adding more information and activities to their website. Visit this site at www.uwex.edu/ces/4h/onlinepro/. You may wish to check out websites from other state 4-H programs also.
 - Volunteer Leaders Conferences – Review each issue of your county's newsletter to learn about training sessions for project leaders offered by your county, district or at statewide events. Sessions focusing on new project literature are typically offered at the State 4-H Volunteer Leader Conference held every other year. Periodically statewide conferences focusing on specific project areas are offered in addition to sessions at the volunteer conferences. You can also exchange ideas with other leaders at statewide Field Day.
 - Field Trips – Youth always enjoy the opportunity to see firsthand how things are done and how they work. Consider taking your project group on a field trip or tour of a local business or company to enhance their project experience. An example would be taking your dairy members to a cheese factory or your foods group to a local bakery.
 - Local Experts – Bring in a local "expert" to share their ideas and experiences with your group. One example would be asking a Master Gardener to share information on choosing perennial or trimming shrubs at one of your project meetings.
 - Magazines – Many leaders have found creative ideas to supplement those in the project literature in magazines they have or those at the public library.

How can I incorporate activities not included in the project guide?

We encourage you to use the ideas in the project literature as they have been successfully used with youth. If you have some additional activities you would like to incorporate, consider the following criteria:

- Of interest to kids
- Developmentally appropriate
- Incorporate the experiential learning model
- Youth and adults are involved in determining what will be done
- Enhances the development of member life and project skills
- Research based source of content utilized

What is the relationship between project work and the county fair?

The County Fair is an opportunity for an independent evaluation of life and project skills a member learned through completing a project. County fair entries typically match the activities included in the project literature and may include other activities that are being emphasized in your county. One of your roles is to help maintain the focus of members and parents on the goal of 4-H, which is to develop blue ribbon kids. Talk with members about what they learned about each of their fair entries from the judging process. Help members celebrate their accomplishments regardless of the color of ribbon each project member received at the fair. This may be done through individual encouragement or at a meeting following the fair. While entering and displaying a project at the County Fair is the traditional method of public affirmation, there may be other means of exhibition such as a club tour, open house, community celebrations or others.

Who can I go to if I need someone to help me during the project meetings?

If you are leading beginning level project meetings, ask older members in the project to help you. This is a great leadership experience for them! Parents are another excellent source of help. Don't hesitate to ask them to stay for the meeting and be actively involved in their child's project work.