



# **4-H Microwave Magic Lesson Planning Tool**

## Lesson #2 Micro Magicians

**Intended Learners:** Ages 8-12 / Grades 3-6 **Total Time Needed:** 1 hour

## **Goals & Outcomes**

### Long Term Impact:

- Youth gain knowledge and skills in kitchen safety, using the microwave, and making healthy food choices.
- Youth have the skill and knowledge to safely prepare food or drink in the microwave oven
- Youth experience a sense of belonging
- Youth gain confidence, and feel pride in their skills

### Learning Outcomes - youth understand...

- kitchen & food safety practices
- food safety practices food storage
- how a microwave oven operates watts, cooking wattage
- micro-cooking terms/ techniques --hot spots, arranging food

## Action Outcomes – youth practice...

- making food in the microwave oven
- working in a group, teamwork
- making substitutions; trying new things
- cleaning up after self and others
- finding foods on choosemyplate.gov

### Life Skills – youth practice...

- following directions
- observing, recording
- thinking critically
- reflecting and applying new knowledge or skill
- trying new things

# Lesson Plan Overview (60 minutes)

### Get It Together (5 minutes)

• Use & Care Guide Scavenger Hunt

### Welcome to 4-H (5 minutes)

- 4-H youth check-in
- 4-H Pledge
- 4-H Wheel of Life

## Culinary Concepts (10 minutes)

- Hot Spots
- Power in Watts

## Culinary Skills (25 minutes)

- Potato Bake
- Cheesy Broccoli Top that Tater

## Nutrition Nuggets / Fast Facts (5 minutes)

• MyPlate

## **<u>Reflection Connection</u>** (10 minutes)

- Wrap up questions
- 4-H Project Portfolio

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Supplies & Equipment – from the 4-H Curriculum Kit			
Curriculum, Other	Supplies / Equipment	Handout Masters	
Microwave Magic:	4-H Pledge, 4-H Flag	Use & Care Guide Scavenger Hunt	
Helpers Guide	1 quart microwave-safe glass bowl	4-H Project Portfolio	
Level A, Bag of Tricks	thermometer	My Plate for Kids	
Level B, Micro Magicians	1 or 2 cup glass liquid measure		
Level D, micro magicians	Measuring cups	Extended Learning	
4-H Pledge & Wheel of Life Guide	Measuring spoons	Microwave Cookware Comparison Chart	
Hand Washing Songs	Stirring spoon	For Food Safety CHILL	
Kitchen Safety Rules	Mixing bowls		
My Plate poster	Fork		
my rule poster	Whisk		
	Paring knife		
	Cutting board		
Equipment and Supplies	Food Supplies		
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Newsprint		Choosy Broccoli Top that Tator	
Newsprint Markers	Hot Spots	<b>Cheesy Broccoli Top that Tater</b>	
Newsprint Markers Copies of masters (1 per youth)	Hot Spots 6 foam cups	1 Tbsp butter or margarine	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt	Hot Spots 6 foam cups Permanent marker	1 Tbsp butter or margarine <sup>1</sup> / <sub>2</sub> cup shredded cheddar cheese	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio	Hot Spots 6 foam cups	1 Tbsp butter or margarine <sup>1</sup> / <sub>2</sub> cup shredded cheddar cheese 1 Tbsp flour	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio - MyPlate for Kids	Hot Spots 6 foam cups Permanent marker Water	1 Tbsp butter or margarine <sup>1</sup> / <sub>2</sub> cup shredded cheddar cheese 1 Tbsp flour <sup>1</sup> / <sub>2</sub> cup 1% milk	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio - MyPlate for Kids Use & Care Guides from 5-6 small	Hot Spots 6 foam cups Permanent marker Water Power in Watts	1 Tbsp butter or margarine <sup>1</sup> / <sub>2</sub> cup shredded cheddar cheese 1 Tbsp flour <sup>1</sup> / <sub>2</sub> cup 1% milk <sup>1</sup> / <sub>2</sub> cup chopped broccoli	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio - MyPlate for Kids Use & Care Guides from 5-6 small appliances	Hot Spots 6 foam cups Permanent marker Water	<ol> <li>Tbsp butter or margarine</li> <li><sup>1</sup>/<sub>2</sub> cup shredded cheddar cheese</li> <li>Tbsp flour</li> <li><sup>1</sup>/<sub>2</sub> cup 1% milk</li> <li><sup>1</sup>/<sub>2</sub> cup chopped broccoli</li> <li><sup>1</sup>/<sub>4</sub> tsp salt</li> </ol>	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio - MyPlate for Kids Use & Care Guides from 5-6 small appliances Microwave oven	Hot Spots 6 foam cups Permanent marker Water Power in Watts (see kit for supplies)	1 Tbsp butter or margarine <sup>1</sup> / <sub>2</sub> cup shredded cheddar cheese 1 Tbsp flour <sup>1</sup> / <sub>2</sub> cup 1% milk <sup>1</sup> / <sub>2</sub> cup chopped broccoli	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio - MyPlate for Kids Use & Care Guides from 5-6 small appliances Microwave oven Dish washing detergent	Hot Spots 6 foam cups Permanent marker Water Power in Watts (see kit for supplies) Potato Bake	<ol> <li>Tbsp butter or margarine</li> <li>'/2 cup shredded cheddar cheese</li> <li>Tbsp flour</li> <li>'/2 cup 1% milk</li> <li>'/2 cup chopped broccoli</li> <li>'/4 tsp salt</li> <li>'/4 tsp dry mustard</li> </ol>	
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Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio - MyPlate for Kids Use & Care Guides from 5-6 small appliances Microwave oven Dish washing detergent Dish towels	Hot Spots 6 foam cups Permanent marker Water Power in Watts (see kit for supplies) Potato Bake 4 baking potatoes	<ul> <li>1 Tbsp butter or margarine</li> <li><sup>1</sup>/<sub>2</sub> cup shredded cheddar cheese</li> <li>1 Tbsp flour</li> <li><sup>1</sup>/<sub>2</sub> cup 1% milk</li> <li><sup>1</sup>/<sub>2</sub> cup chopped broccoli</li> <li><sup>1</sup>/<sub>4</sub> tsp salt</li> <li><sup>1</sup>/<sub>4</sub> tsp dry mustard</li> <li>Veggie Dip 2</li> <li>1 cup cottage cheese</li> </ul>	
Newsprint Markers Copies of masters (1 per youth) - Use & Care Guide Scavenger Hunt - 4-H Project Portfolio - MyPlate for Kids Use & Care Guides from 5-6 small appliances Microwave oven Dish washing detergent Dish towels Optional:	Hot Spots 6 foam cups Permanent marker Water Power in Watts (see kit for supplies) Potato Bake 4 baking potatoes Veggie Dip 1 – Chili Bean Dip	<ul> <li>1 Tbsp butter or margarine</li> <li>½ cup shredded cheddar cheese</li> <li>1 Tbsp flour</li> <li>½ cup 1% milk</li> <li>½ cup chopped broccoli</li> <li>¼ tsp salt</li> <li>¼ tsp dry mustard</li> </ul> Veggie Dip 2 <ul> <li>1 cup cottage cheese</li> <li>1 Tbsp finely chopped onion</li> </ul>	
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Evaluation Plan	Observations Verbal feedback from youth 4-H Project Portfolio
Other Resources References	Safe and Sanitary Work Habits, Utah Education Network – (source for <i>Dishwashing Dilemma</i> and other worksheets). Go to <a href="http://www.uen.org/Lessonplan/preview.cgi?LPid=1197">http://www.uen.org/Lessonplan/preview.cgi?LPid=1197</a> Fight BAC® – Go to <a href="http://www.fooddetectives.org">www.fooddetectives.org</a> to play interactive games including <i>The Case of the Filthy Fingers, Bacteria that Kept Growing, The Kid Who Knew Enough, Good Food Gone Bad</i> Hand Washing Song – <a href="http://www.azdhs.gov/flu/pdf/school_handwashingsongs.doc">http://www.azdhs.gov/flu/pdf/school_handwashingsongs.doc</a> Food Preparation Experience – General Roles
Preparation and Teaching Tips	<ul> <li>Prior to starting this lesson, become familiar with all curriculum materials.</li> <li>Recommended background reading for this lesson: <ul> <li>Experiential Learning and Youth Learning Characteristics, pages 4-6, <i>Helpers Guide</i></li> <li>Action Demonstrations, page 7, <i>Helpers Guide</i></li> <li>Developing Activity/Project and Life Skills, page 8, <i>Helpers Guide</i></li> <li>Food Safety and Science, Leftover Magic, pages 18-20, <i>Helpers Guide</i></li> <li>Glossary, pages 24-25, <i>Helpers Guide</i></li> <li>Measuring Math, page 26, <i>Helpers Guide</i></li> <li>Tricks of the Trade, pages 6-13, <i>Level A</i>, <i>Bag of Tricks</i></li> <li>Potato Bake and Tater Toppings, pages 10-11, <i>Level B</i>, <i>Micro Magicians</i> and Lesson 2 Recipes and Supplies</li> <li>Healthy Food Selection, pages 12-13, <i>Helpers Guide</i></li> <li>Information on <i>My Plate</i> on website: <a href="http://www.choosemyplate.gov/">http://www.choosemyplate.gov/</a></li> </ul> </li> <li>Review the lesson materials. Gather equipment and supplies. Post the microwave terms for this lesson on a wall and refer to them as you proceed through the lesson.</li> <li>Note – ingredients are listed to make the selected recipe once. If you have a large group with enough space and equipment, you may decide to make more than one batch – if so, multiple the ingredients accordingly.</li> </ul>

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