

LITCHFIELD PUBLIC SCHOOLS
Core Curriculum Scope and Sequence
{Family and Consumer Science – Food Science}

	CT Frameworks/ Standards	Content and Skill Objectives Students will be able to:	Assessments	Resources
Name of Unit Introduction to Food Science Weeks: 2-3	<p>7.23 –<i>Evaluate the impact of science and technology on food composition, safety, and other issues.</i></p> <p>7.19 <i>Evaluate factors that affect food safety, from production through consumption</i></p> <p>8.16 <i>Analyze career paths within the hospitality, food production and services, food science, dietetics and nutrition industries.</i></p>	<p>Differentiate between the 5 areas of Food Science study: Production, Processing, Preparation, Evaluation and Utilization.</p> <p>Evaluate how advances in biotechnology and production practices have affected the global food supply.</p> <p>Classify food as natural or processed.</p> <p>Discriminate between sources of reliable / unreliable food product information</p> <p>Identify economic, environmental and health aspects of purchasing fresh compared to processed foods.</p> <p>Identify career paths in Food Science</p>	<p>Food production research assignment and presentation</p> <p>Biotechnology debate</p> <p>Farm to the Table activity</p> <p>Unit Test</p>	<p>Video: Institute of Food Technologists - From Concept to Consumer: Food Product Development</p> <p>Websites for research</p> <p>Biotechnology articles</p> <p>School garden/local farmers market</p> <p>Video: In Good Taste- Careers in Food Science</p>

<p>Name of Unit</p> <p>Sensory Characteristic of food</p> <p>Weeks: 2</p>	<p><i>7.15 Analyze factors that influence nutrition and wellness practices</i></p>	<p>Explain the role of sensory evaluation in the food industry.</p> <p>Identify sensory and physical properties that influence selection and use of food.</p> <p>Evaluate the influence of food advertising on personal food choices</p>	<p>Sensory Characteristics of Food Lab</p> <p>Sensory evaluation of cultural food project</p> <p>Group activity – food advertisement.</p>	<p>PowerPoint: Sensory science</p> <p>In Good Taste Video</p> <p>Odor recognition lab</p> <p>Mouth feel and Sensory Evaluation handout</p> <p>Cultural pizza recipes</p> <p>Sample food advertisements</p>
<p>Name of Unit</p> <p>Procedures and Measurement in the Laboratory</p> <p>Weeks: 2</p>	<p><i>7.22 Demonstrate the use of technology in food preparation and nutrition analysis.</i></p> <p><i>8.17 Demonstrate facility procedures applied to safety, security, and environmental issues</i></p> <p><i>8.21 Demonstrate selecting, using and maintaining food production equipment</i></p> <p><i>8.25 Apply team strategies to achieve success in the kitchen</i></p>	<p>Demonstrate proper use and maintenance of lab equipment.</p> <p>Measure ingredients with accuracy and precision.</p> <p>Plan and implement descriptive, comparative and experimental food investigations.</p> <p>Analyze quantitative and qualitative data.</p> <p>Demonstrate proper use of and conservation of resources.</p> <p>Demonstrate ability to work cooperatively in a group.</p>	<p>Method of measuring lab</p> <p>Measuring mass activity</p> <p>Microwave vs. convection/conduction heat transfer lab</p> <p>Unit quiz</p>	<p>Supplemental materials:</p> <ul style="list-style-type: none"> -Metric measuring handout -Lab procedures handout -Recipes
<p>Name of Unit</p>				

<p>Microbiology of Food</p> <p>Weeks: 4- 5</p>	<p><i>8.20 Demonstrate food safety and sanitation procedures</i></p> <p><i>7.15 Analyze factors that influence nutrition and wellness practices across the lifespan.</i></p> <p><i>7.18 Evaluate factors that influence nutritionally linked diseases and disorders</i></p> <p><i>7.19 Evaluate factors that affect food safety, from production through consumption.</i></p>	<p>Identify and describe the microorganisms that cause food spoilage.</p> <p>Differentiate between harmful and beneficial microorganisms.</p> <p>Demonstrate food handling and preparation techniques that prevent cross contamination.</p> <p>Use microorganisms to create beneficial food products.</p> <p>Explain the role of various government agencies in keeping our food supply safe.</p> <p>Assess the role of the individual in handling food safely.</p> <p>Demonstrate correct cleaning, sanitizing and storing procedures when working with food.</p>	<p>Yeast growth lab report</p> <p>Making yogurt and other cultured milk products activity/ evaluation.</p> <p>“moldy” pizza lab evaluation</p> <p>Written Test</p> <p>Student demonstration – yeast bread.</p> <p>Lab evaluation – teacher observation</p>	<p>The Great Food Fight video</p> <p>PowerPoint: The twelve most unwanted bacteria</p> <p>Websites: www.cdc.gov/foodsafety/ www.usda.gov www.fda.gov www.recalls.gov</p> <p>Supplemental materials: -Mold, yeast and bacteria handouts -Food safety posters</p>
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<p>Name of Unit Food Preservation Weeks: 3</p>	<p><i>8.23 Demonstrate commercial preparation for all menu categories to produce a variety of food products.</i></p> <p><i>7.22 Demonstrate the use of technology in food preparation and nutrition analysis.</i></p> <p><i>7.23 Evaluate the impact of science and technology on food composition, safety and other issues.</i></p> <p><i>8.27 Use technologically advanced equipment</i></p>	<p>Compare and contrast the effects of canning, irradiation, dehydration and freezing on food.</p> <p>Implement food handling practices and processing techniques that are used to control reactions between ingredients and related materials to achieve food safety and quality</p>	<p>Dehydration Experiment</p> <p>Home Canning Lab</p> <p>Fresh to Frozen Lab</p> <p>Written comparison of Food Preservation Techniques</p>	<p>Cooperative Extension Service</p> <p>Supplemental materials: -recipes and instructions for various processing methods</p>
<p>Name of Unit Food chemistry Weeks: 3-4</p>	<p><i>8.23 Demonstrate commercial preparation for all menu categories to produce a variety of food products</i></p> <p><i>2.26 Demonstrate skills needed for product development, testing and presentation</i></p> <p><i>7.21 Prepare a variety of food products that meet the needs of individual lifestyles and cultures</i></p>	<p>Identify chemical symbols, formulas and equations and explain how they are used in the study of food</p> <p>Analyze chemical and physical changes in food preparation.</p> <p>Describe the role of acids and bases in food.</p> <p>Compare and contrast methods of heat transfer used in the kitchen.</p> <p>Understand the impact of changes in food properties on the development of innovative food products and how</p>	<p>“Mole” molasses lab.</p> <p>Chemical and physical changes that occur when making toffee</p> <p>Chemical leavening activity</p> <p>Effect of acids and bases on green vegetables lab</p> <p>Heat Transfer Lab</p> <p>Enrichment opportunities:</p>	<p>Periodic Table of Elements (student handbook)</p> <p>Supplemental materials: -Lab handouts -recipes and evaluation forms</p>

		foods are selected, stored, prepared and presented.	<i>Denaturizing egg white protein lab</i> <i>Cheese making – coagulation lab</i> <i>Crystallization lab</i> <i>Thickening agents experiment.</i> Final exam	
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