

Brick Township Public Schools Family and Consumer Science Curriculum
8th Grade Consumer Science

Aligned to the Next Generation Science Standards, National Standards for Family and Consumer Science Education, New Jersey Student Learning Standards for Health and Physical Education, Common Core Math, Common Core ELA/Literacy, National Educational Technology Standards, 21st Century Life and Careers Standards
ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY GLOBAL SKILLS

BRICK TOWNSHIP PUBLIC SCHOOLS
Family and Consumer Science Curriculum

Content Area: Family and Consumer Science Education

Course Title: Consumer Science

Grade Level: 8th

Sanitation and Safety

One-Two Weeks

Kitchen Essentials

Ten Weeks

Culinary Techniques

Ten Weeks

Nutrition Principles

Two Weeks

Financial Literacy

One Week

Food Science

One Week

Date Created: August 17, 2017

Board Approved on: September 14, 2017

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BRICK TOWNSHIP PUBLIC SCHOOLS
Family and Consumer Science Sanitation and Safety Unit 1

Content Area: Family and Consumer Science

Unit Title: Sanitation and Safety

Target Course/Grade Level: 8th Grade Consumer Science

Unit Summary:

This unit introduces students to accident prevention and safe work habits as well as food handling techniques in the lab as well as at home.

Students will be exposed to:

- Food Borne Illnesses
- Safe Food Handling
- Safe use of Equipment
- Food Safety and Sanitation

Primary interdisciplinary connections:

Next Generation Science Standards
National Standards for Family and Consumer Science
Common Core, Math
Common Core, ELA. Literacy
21st Century Life and Career Standards
National Educational Technology Standards

21st Century Themes:

- Enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society
- Students will be able to be financially literate and financially responsible at home and in the broader community
- Self-reflection and seek to improve the essential life and career practices that lead to success
- Effective communication and collaboration skills and resources to interact with a global society
- Seeks to attain skills and content mastery to achieve success in a chosen career path

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Technology connections:

Projector and White Board
 Kitchen Safety DVDs and Safety YouTube Videos
 Google Classroom Assignments
 Chrome Books
 FDA and USDA resources about food safety- <http://www.foodsafety.gov>
 Food Safety News- <http://www.foodsafetynews.com>
 Be Food Safe- <https://www.fsis.usda.gov/wps/potal/fsis/topics/food-safety-education/teach-others/fsis-educational-campaigns/be-food-safe>
 Ninja Kitchen- www.brainpop.com/games/ninjakitchen

Learning Targets

Content Standards:

Infused within the Safety and Sanitation unit are connections to the Next Generation Science Standards, 21st Century Life and Careers Standards, National Family and Consumer Science Standards, National Educational Technology Standards, Common Core Math Standards, and Common Core ELA Standards.

CONTENT STANDARDS LINK:

For further clarification refer to <http://www.state.nj.us/education>

CPI #	Cumulative Progress Indicator (CPI)
	Next Generation Science Standards
MS-ETS1-1	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
MS-ETS1-2	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
MS-ETS1-3	Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
	21st Century Life and Careers
CAEP.9.2.8.B.6	Demonstrate understanding of the necessary preparation and legal requirements to enter the workforce.
CAEP.9.2.8.B.3	Evaluate communication, collaboration, and leadership skills that can be developed through school, home, work, and extracurricular activities for use in a career.

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	National Standards for Family and Consumer Science	
FAM.9-12.13.5.1	Create an environment that encourages and respects the ideas, perspectives, and contributions of all group members.	
FAM.9-12.14.4.1	Analyze conditions and practices that promote safe food handling.	
	National Educational Technology Standards	
TEC.6-8.4	Participate in a cooperative learning project in an online learning community.	
TEC.6-8.7	Select and use the appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.	
	Common Core, Math	
5.MD.B.2	Represent and interpret data	
	Common Core, ELA/ Literacy	
RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in specific scientific or technical relevant to texts and topics.	
Unit Essential Question		Unit Enduring Understandings
<p>How do you ensure the safe production and consumption of food? Why is safety and sanitation important in the home and in the foods lab?</p>		<p><i>Students will understand...</i></p> <ul style="list-style-type: none"> • Characteristics of major food borne pathogens, their role in causing illnesses, foods involved, and methods of prevention. • Safe food handling and preparation techniques that prevent cross contamination • Professional skills in safe handling of knives, tools, and equipment • Food service management safety and sanitation program
Unit Objectives		Unit Objectives
<p><i>Students will know...</i></p> <ul style="list-style-type: none"> • Hand-washing procedures • Food-borne illness • Cross contamination • Food Storing procedures • Temperature and danger zones • Food safety and sanitation vocabulary 		<p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Identify characteristics of bacteria, pathogens, and viruses • Determine conditions and practices to reduce incidences of food borne illnesses • Be able to wash their hands to begin lab and throughout lab as needed • Use different cutting boards and utensils to prevent cross contamination

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<ul style="list-style-type: none">• Proper use and sanitary maintenance of food service equipment and small wares• Safety and sanitation applications and concepts in all work place application tasks	<ul style="list-style-type: none">• Prepare a recipe using the principles of food safety• Select proper equipment to complete the lab• Demonstrate how to grip a knife properly and stabilize their cutting board to prevent slipping• Consistently use proper safety procedures for all lab equipment• Properly clean and store food preparation equipment and appliances• Properly wash, dry, and organize all equipment, appliances, and utensils• Properly clean and sanitize all surfaces
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BRICK TOWNSHIP PUBLIC SCHOOLS

Evidence of Learning

Formative Assessments

- Oral Questioning
- Oral Response
- Index Card Summary/ Questions
- Self assessment
- Learning Goals and Scales
- Exit Card
- Lab Evaluation

Summative Assessments

- Safety and Sanitation Test
- Performance assessments
- Projects

Modifications (ELLs, Special Education, Gifted and Talented)

The Safety and Sanitation unit provides group activity options, which can be assigned to individuals or chosen by students in groups. Employing peer teaching/ modeling, allows students to demonstrate an alternative method of conveying their knowledge, instead of solely writing. In addition, the use of multimedia options appeals to 21st century learners. Also, accessible laboratory or alternative grouping during labs helps students assist each other with division of responsibilities to meet the students individual needs. During this unit different visual aids are provided as well as multiple hand-on activities. Close monitoring, information is presented orally, and graphic organizers are provided to students when necessary. Also, students are provided individualize time lines for completing tasks depending on their learning pace (increase or decrease for different learners).

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Curriculum Development Resources/Instructional Materials/Equipment Needed/Teacher Resources:

- Projector and White Board
- Kitchen Safety DVDs and Safety YouTube Videos
- Google Classroom Assignments
- Chrome Books with computer resources
- Safety and Sanitation handouts
- Glo-Germ Activity
- Lab Equipment
- FDA and USDA resources about food safety- <http://www.foodsafety.gov>
- Food Safety News- <http://www.foodsafetynews.com>
- Be Food Safe- <https://www.fsis.usda.gov/wps/potal/fsis/topics/food-safety-education/teach-others/fsis-educational-campaigns/be-food-safe>
- Ninja Kitchen- www.brainpop.com/games/ninjakitchen
- Teacher's Guide for Middle Level Classrooms- Science and Our Food Supply: Investigating Food Safety from Farm to Table

Teacher Notes:

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BRICK TOWNSHIP PUBLIC SCHOOLS
Family and Consumer Science Kitchen Essentials Unit 2

Content Area: Family and Consumer Science

Unit Title: Kitchen Essentials

Target Course/Grade Level: 8th Grade Consumer Science

Unit Summary:

- Meal planning and finished product
- Prepare requisitions for food, equipment, and supplies to meet production requirements
- Time management
- Work collaboratively with others

Primary interdisciplinary connections:

Next Generation Science Standards
National Standards for Family and Consumer Science Education
Common Core, Math
Common Core, ELA/Literacy
21st Century Life and Career Standards

21st Century Themes:

- Enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society
- Students will be able to be financially literate and financially responsible at home and in the broader community
- Self-reflection and seek to improve the essential life and career practices that lead to success
- Effective communication and collaboration skills and resources to interact with a global society
- Seeks to attain skills and content mastery to achieve success in a chosen career path

Technology Connections:

Projector and white board
DVD's and Relevant You Tube videos
Google Classroom assignments
Chromebooks

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Learning Targets

Content Standards:

Infused within the Kitchen Essentials Unit are connections to the Next Generation Science Standards, 21st Century Life and Careers Standards, National Family and Consumer Science Standards, National Educational Technology Standards, Common Core Math Standards, and Common Core ELA Standards.

CONTENT STANDARDS LINK:

For further clarification refer to <http://www.state.nj.us/education>

CPI #	Cumulative Progress Indicator (CPI)
	Common Core, Math
CCSS.Math.6.RP.A.3.d	Use ratio and rate reasoning to solve real-world and mathematical problems
CCSS.Math.6.RP.A.3.d	Use ratio reasoning to convert measurement units, manipulate and transform units appropriately when multiplying or dividing quantities
	National Family and Consumer Science Standards
FAM 9-12.1.2.3	Apply communication skills in school, community and workplace
FAM 9-12.1.2.4	Demonstrate teamwork skills in school, work and community
	Common Core, ELA/Literacy
RST.6-8.4	Determine the meaning of symbols, key terms and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant and topics
	Next Generation Science Standards
MS-EST1-2	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem
	National Educational Technology Standards
TEC.6-8.7	Select and use the appropriate tools and digital resources to accomplish a variety of tasks and to solve problems
<p>Unit Essential Questions</p> <p>How can we use food, equipment and supplies to create a recipe within a group?</p> <p>How can we complete labs in a timely manner while working collaboratively?</p>	<p>Unit Enduring Understandings</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Food, equipment and supplies to meet production requirements • Working collaboratively with others

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<p>Unit Objectives <i>Students will know...</i></p> <ul style="list-style-type: none"> • How to follow instructions • How to employ organizational skills • How to work as a team to achieve a collective goal • How to solve real world mathematical problems 	<p>Unit Objectives <i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Read a recipe and plan responsibilities for members of their kitchen before planning a lab • Identify abbreviations used in recipes • Identify proper equipment needed to complete each task • Define culinary terms • Prepare food items according to the recipe • Utilize time saving strategies to complete lab on time • Demonstrate commitment to team goals by positively accepting responsibility and completing tasks • Demonstrate effective communication when working in a group <p>Successfully accomplish tasks when working with a group</p>
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BRICK TOWNSHIP PUBLIC SCHOOLS
Evidence of Learning

- Formative Assessments**
- Oral Questioning
 - Oral Response
 - Index card summary/ questions
 - Self assessment
 - Debriefing
 - Exit cards
 - Quizzes

- Summative Assessments**
- Performance assessments
 - Projects
 - Quizzes/tests
 - Rubrics

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Modifications (ELLs, Special Education, Gifted and Talented)

The Kitchen Essentials unit provides group activity options, which can be assigned to individuals or chosen by students in groups. Employing peer teaching/ modeling, allows students to demonstrate an alternative method of conveying their knowledge, instead of solely writing. In addition, the use of multimedia options appeals to 21st century learners. Also, accessible laboratory or alternative grouping during labs helps students assist each other with division of responsibilities to meet the students individual needs. During this unit different visual aids are provided as well as multiple hand-on activities. Close monitoring, information is presented orally, and graphic organizers are provided to students when necessary. Also, students are provided individualize time lines for completing tasks depending on their learning pace (increase or decrease for different learners).

Curriculum Development Resources/Instructional Materials/Equipment Needed/Teacher Resources:

Projector and white board
DVD's
Relevant You-Tube videos
Google Classroom assignments
Chrome books with computer resources
Teacher generated hand-outs
Lab equipment
Lab evaluation
Group reflection form
Kitchen essentials scale and learning goals handouts

Teacher Notes:

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BRICK TOWNSHIP PUBLIC SCHOOLS
Family and Consumer Science Culinary Techniques Unit 3

Content Area: Family and Consumer Science

Unit Title: Culinary Techniques

Target Course/Grade Level: 8th Grade Consumer Science

Unit Summary:

Measuring Skills
Equivalents and Converting Recipes
Fruits, Vegetables and Grains
Baked Goods
Egg Cookery

Primary interdisciplinary connections:

Next Generation Science Standards
National Standards for Family and Consumer Science Education
National Health Education Standards
Common Core, Math
Common Core, ELA/Literacy
21st Century Life and Career Standards

21st Century Themes:

- Enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society
- Students will be able to be financially literate and financially responsible at home and in the broader community
- Self-reflection and seek to improve the essential life and career practices that lead to success
- Effective communication and collaboration skills and resources to interact with a global society
- Seeks to attain skills and content mastery to achieve success in a chosen career path

Technology connections:

Projector and white board
DVD's and relevant You Tube Videos
Google Classroom assignments
Chromebooks

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Learning Targets

Content Standards:

Infused within the Culinary Techniques Unit are connections to the Next Generation Science Standards, 21st Century Life and Careers Standards, National Family and Consumer Science Standards, National Educational Technology Standards, Common Core Math Standards, and Common Core ELA Standards.

CONTENT STANDARDS LINK:

For further clarification refer to <http://www.state.nj.us/education>

CPI #	Cumulative Progress Indicator (CPI)
	Common Core, Math
CCSS.Math.6.RP.A.3.d	Use ratio and rate reasoning to solve real-world and mathematical problems
CCSS.Math.6.RP.A.3.d	Use ratio reasoning to convert measurement units, manipulate and transform units appropriately when multiplying or dividing quantities
	National Family and Consumer Science Standards
FAM 9-12.1.2.3	Apply communication skills in school, community and workplace
FAM 9-12.1.2.4	Demonstrate teamwork skills in school, work and community
	Common Core, ELA/Literacy
RST.6-8.4	Determine the meaning of symbols, key terms and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant and topics
	Next Generation Science Standards
MS-EST1-2	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem
	National Educational Technology Standards
TEC.6-8.7	Select and use the appropriate tools and digital resources to accomplish a variety of tasks and to solve problems
Unit Essential Question	Unit Enduring Understandings
How can tools in our kitchen be properly utilized for correct measuring techniques?	<i>Students will understand that...</i>
How much is a proper portion of different food types?	<ul style="list-style-type: none"> • Utilize weight and measurement tools to demonstrate knowledge of measurement techniques • Utilize weight and measurement tools to demonstrate knowledge of portion control and proper scaling • Prepare various fruits, vegetables and starches using safe handling and professional preparations techniques
How should fruits, vegetables, starches, breads and baked goods be prepared to optimize nutrient value and safe handling?	

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	<ul style="list-style-type: none"> • Prepare breads, baked goods, and desserts using safe handling and professional preparations techniques • Prepare eggs using safe handling and professional preparations techniques
<p>Unit Objectives <i>Students will know...</i></p> <ul style="list-style-type: none"> • Proper methods of measuring • Proper use of measuring tools • Portion control and proper scaling • Proper preparation for optimal nutrient value in fruits, vegetables, grains, eggs and baked goods • How to use mathematical calculations to change the yield of a recipe 	<p>Unit Objectives <i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Properly measure a variety of ingredients and demonstrate proper technique • Change the yield of a recipe • Prepare various fruits, vegetables and grains using techniques to maximize nutrient retention • Prepare cookies, muffins, quick breads, and yeast breads using correct mixing methods • Prepare eggs as a thickener, binder, foam and leavening agent

BRICK TOWNSHIP PUBLIC SCHOOLS
Evidence of Learning

Formative Assessments

- Oral Questioning
- Oral Response
- Index card summary/ questions
- Self assessment
- Debriefing
- Exit cards
- Quizzes

Summative Assessments

- Performance assessments
- Projects
- Tests

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Modifications (ELLs, Special Education, Gifted and Talented)

The Culinary Techniques unit provides group activity options, which can be assigned to individuals or chosen by students in groups. Employing peer teaching/ modeling, allows students to demonstrate an alternative method of conveying their knowledge, instead of solely writing. In addition, the use of multimedia options appeals to 21st century learners. Also, accessible laboratory or alternative grouping during labs helps students assist each other with division of responsibilities to meet the students individual needs. During this unit different visual aids are provided as well as multiple hand-on activities. Close monitoring, information is presented orally, and graphic organizers are provided to students when necessary. Also, students are provided individualize time lines for completing tasks depending on their learning pace (increase or decrease for different learners).

Curriculum Development Resources/Instructional Materials/Equipment Needed/Teacher Resources:

Projector and white board
DVD's and relevant You Tube Videos
Google Classroom assignments
Chromebooks
Lab Evaluations
Lab Reflection Forms
Culinary techniques learning goals and scale

Teacher Notes:

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BRICK TOWNSHIP PUBLIC SCHOOLS
Family and Consumer Science Nutrition Principles Unit 4

Content Area: Family and Consumer Science

Unit Title: Nutrition Principles

Target Course/Grade Level: 8th Grade Consumer Science

Unit Summary:

Good nutrition in childhood and adolescence sets the stage for better health. This unit will help students to establish good habits as they are learning to make these decisions that will have a tremendous long-term impact.

The students will learn that nutrition plays a vital role throughout the lifespan by:

- Food habits and how they affect wellness and nutrition
- Calories and serving size: what they are and why they matter/the buzz behind a nutrient-dense daily diet
- Sodium and its impact on health
- Emotional, social, and physical influences on nutrition
- Nutrients and their functions
- Inside look at sugars
- Meal planning: adding up what's on your plate
- Cooking healthy foods

Primary interdisciplinary connections:

Next Generation Science Standards

National Standards for Family and Consumer Science

Common Core, Math

Common Core, ELA. Literacy

New Jersey Student Learning Standards Health and Physical Education

21st Century Themes:

- Enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society
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Technology connections:

Projector and White Board
Nutrients and Nutrition DVDs and YouTube Videos
Google Classroom Assignments
Chrome Books
www.fda.gov
www.choosemyplate.gov

Learning Targets

Content Standards

Infused within the Nutrition Principles unit are connections to the Next Generation Science Standards, National Family and Consumer Science Standards, Common Core Math Standards, and Common Core ELA Standards, and the New Jersey Student Learning Standards for Health and Physical Education

CONTENT STANDARDS LINK:

For further clarification refer to <http://www.state.nj.us/education>

CPI #	Cumulative Progress Indicator (CPI)
	Next Generation Science Standards- Matter and Energy in Organisms & Ecosystems
MS-LS1-7	Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
MS-LS2-1	Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
MS-LS2-3	Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem
	Next Generation Science Standards-Growth, Development. And Reproduction of Organisms
MS-LS1-5	Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
	Next Generation Science Standards- Structure and Properties of Matter
MS-PS1-1	Develop models to describe the atomic composition of simple molecules and extended structures.
	National Standards for Family and Consumer Science Education- Food Science, Dietetics, and Nutrition
9.3.1	Analyze nutrient requirement across the life span addressing the diversity of people, culture, and religions.
9.3.2	Analyze nutritional data
9.3.6	Critique the selection of foods to promote a healthy lifestyle
9.4.1	Analyze nutritional needs of individuals

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	National Standards for Family and Consumer Science Education-Nutrition and Wellness	
14.2.1	Analyze the effect of nutrients on health, appearance, and peak performance	
14.2.2	Analyze the relationship of nutrition and wellness to individual and family health throughout the life span	
14.2.4	Analyze sources of food and nutrition information, including food labels, related to health and wellness	
14.3.1	Apply various dietary guidelines in planning to meet nutrition and wellness needs	
	Common Core, Math	
6.EE.C9	Use variables to represent two quantities in a real world problem that change in relationship to one another	
5.OA.A	Operations and Algebraic Thinking: Write and interpret numerical expressions	
5.MD.A.1	Measurement and Data: Convert like measurement unit within a given measurement system	
5.MD.B.2	Represent and interpret data	
5.MD.C.3	Geometric measurement: Understand concepts of volume	
	New Jersey Student Learning Standards-Health and Physical Education	
HPE.2.1.8.B.1	Analyze how culture, health status, age, and eating environment influence personal eating patterns and recommend ways to provide balance.	
HPE.2.1.8.B.3	Design a weekly nutritional plan for families with different lifestyles, resources, special needs, and cultural backgrounds	
	Common Core, ELA/Literacy	
RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific or technical context and topics	
Unit Essential Questions		Unit Enduring Understandings
<p>How do my food habits affect my wellness?</p> <p>What are the guidelines to shape healthy lifestyle choices?</p> <p>What do nutrition and wellness mean?</p> <p>What emotional, social, physical factors influence food choices?</p> <p>What gives our body energy to perform tasks?</p> <p>Are nutrition needs the same during my lifetime?</p> <p>How can I prepare nutritional food that is appealing to me?</p> <p>How can I develop menus that have a variety of taste, texture, and nutritional appeal?</p>		<p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> • There is relationship between nutrition and health • Wellness is a lifestyle • Factors that affect food choices are culture, society, emotions, and agriculture • Nutrient utilization involves nutrients, digestion, absorption, and metabolism • Guidelines are in place to assist the public with analyzing eating habits • Nutrition needs change throughout life. • Preparation of nutrition food that is appealing is rewarding psychologically and physically

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8th Grade Consumer Science

Aligned to the Next Generation Science Standards, National Standards for Family and Consumer Science Education, New Jersey Student Learning Standards for Health and Physical Education, Common Core Math, Common Core ELA/Literacy, National Educational Technology Standards, 21st Century Life and Careers Standards
ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY GLOBAL SKILLS

<p>How do I make wise selections of prepared food?</p>	<ul style="list-style-type: none"> • Menu’s should have a variety of tastes, textures and colors to have visual and nutritional appeal • There are many options to acquire food in our society Reading a nutrition fact label will assist with making wise food selections • There are many career options within the food and nutrition industry
<p>Unit Objectives <i>Students will know...</i></p> <ul style="list-style-type: none"> • How nutrition impacts health • The meaning of wellness and nutrition • Which emotional, social, and physical factors influence food choices • The organs that compromise the digestive system • How nutrients are absorbed and utilized • Nutritional needs change throughout life. • Food sources of carbohydrate, protein, fat and fiber. How to cook healthy recipes. • The definitions and functions of carbohydrates, protein, fat and fiber. • How to make nutritious meals. • Reading a fact label provides important information. 	<p>Unit Objectives <i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Define wellness and nutrition • Identify factors affecting food choices Describe how nutrients are digested, absorbed, and utilized. • Evaluate diet with tools such as RDA, dietary guidelines, or MyPlate • Identify food sources of carbohydrate, protein and fat. • Identify and prepare recipes featuring healthy carbohydrates, proteins, fiber, and fats. • Explain the definitions and functions of carbohydrates, proteins, fats and fiber. • Calculate how many calories they should eat in one day and how that will change through the lifespan. • Read and analyze nutrition facts labels.

BRICK TOWNSHIP PUBLIC SCHOOLS
Evidence of Learning

<p>Formative Assessments</p> <ul style="list-style-type: none"> • Oral questioning • Oral response • Index card summary/ questions • Self assessment • Debriefing • Exit card • Quizzes • Rubrics
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- Lab evaluation

Summative Assessments

- Performance assessments
- Projects
- Quizzes/Tests
- Written assessments

Modifications (ELLs, Special Education, Gifted and Talented)

The Nutrition Principles unit provides group activity options, which can be assigned to individuals or chosen by students in groups. Employing peer teaching/ modeling, allows students to demonstrate an alternative method of conveying their knowledge, instead of solely writing. In addition, the use of multimedia options appeals to 21st century learners. Also, accessible laboratory or alternative grouping during labs helps students assist each other with division of responsibilities to meet the students individual needs. During this unit different visual aids are provided as well as multiple hand-on activities. Close monitoring, information is presented orally, and graphic organizers are provided to students when necessary. Also, students are provided individualize time lines for completing tasks depending on their learning pace (increase or decrease for different learners).

Curriculum Development Resources/Instructional Materials/Equipment Needed/Teacher Resources:

- Projector and White Board
- Nutrition DVDs and YouTube Videos
- Google Classroom Assignments
- Chrome Books with computer resources
- Nutrition handouts
- Lab Equipment
- Recipes
- MyPlate Activities at www.choosemyplate.gov
- Teacher's Guide for Middle Level Classrooms: [Science and Our Food Supply: Using the Nutrition Facts Label to Make Healthy Food Choices](#)
- Teacher's Guide for Middle Level Classrooms: [Science and Our Food Supply: Investigating Food Safety from Farm to Table](#)
- FDA's Guide: [Nutrition Facts: Read the Label](#)
- FDA's Guide: [Healthy Eating Away From Home](#)
- Resources and activities at www.fda.gov
- Resources and activities at www.usda.gov

Teacher Notes:

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BRICK TOWNSHIP PUBLIC SCHOOLS
Family and Consumer Science Financial Literacy Unit 5

Content Area: Family and Consumer Science

Unit Title: Financial Literacy

Target Course/Grade Level: 8th Grade

Unit Summary:

This Financial Literacy unit will empower students to make informed financial decisions and recognize outcomes that promote financial independence. Students will be able to set and prioritize financial goals, develop spending plans, and calculate the time value of money.

Students will be exposed to:

- Income
- Careers
- Money management
- Credit
- Debt Management
- Planning
- Saving
- Becoming a critical consumer

Primary interdisciplinary connections:

National Standards for Family and Consumer Science

Common Core, Math

Common Core, ELA. Literacy

21st Century Life and Career Standards- Personal Financial Literacy

21st Century Themes:

- Enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society
- Students will be able to be financially literate and financially responsible at home and in the broader community
- Self-reflection and seek to improve the essential life and career practices that lead to success
- Effective communication and collaboration skills and resources to interact with a global society
- Seeks to attain skills and content mastery to achieve success in a chosen career path

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Technology connections:

Projector and White Board
 Financial Literacy DVDs and YouTube Videos
 Google Classroom Assignments
 Chrome Books
www.MyMoney.gov
www.treasury.gov

Learning Targets

Content Standards

Infused within the Financial Literacy unit are connections to the 21st Century Life and Careers- Personal Financial Literacy Standards, National Family and Consumer Science Standards, Common Core Math Standards, and Common Core ELA Standards.

CONTENT STANDARDS LINK:

For further clarification refer to <http://www.state.nj.us/education>

CPI #	Cumulative Progress Indicator (CPI)
	National Family and Consumer Science Standards
FAM.9 12.2.5.1	Analyze the use of resources in making choices that satisfy needs and wants of individuals
FAM.9-12.2.6.1	Evaluate the need for personal and family financial planning.
	21st Century Life and Careers- Personal Financial Literacy
PFL.9.1.8.A.2	Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.
PFL.9.1.8.A.6	Explain how income affects spending decisions
PFL.9.1.8.D.1	Determine how saving contributes to financial well-being
PFL.9.1.8.E.1	Explain what it means to be a responsible consumer and the factors to consider when making consumer decisions
	Common Core, Math
5.MD.A.1	Represent and interpret data

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6.EE.C9	Use variables to represent two quantities in a real-world problem that change in relationship to one another
	Common Core, ELA/Literacy
RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific or technical context relevant
<p>Unit Essential Questions:</p> <p>What is the relationship between education, income, and a desired lifestyle?</p> <p>How do the economic, social, and political climates as well as personal skills play a role in the level of individual financial risk and impact spending and other financial decisions?</p> <p>What constitutes a wise financial decision, and how do individuals make educated choices about spending?</p> <p>What are the element or criteria for a solid financial plan?</p> <p>Why is it important to understand the value, features, and planning process associated with saving and investing?</p> <p>What are the consumer resources available to help make sound decisions?</p>	<p>Unit Enduring Understandings:</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Educational achievement, career choice, and entrepreneurial skills all play a role in achieving a desired lifestyle • Income often comes from different sources, including alternative sources, and affects spending decisions and lifestyle • Money management involves setting financial goals • Money management requires understanding of cash flow systems and business practices as well as developing and maintain personal spending plans to achieve established financial goals • A critical consumer must be able to prioritize wants and needs and assess the risk of their spending practices • Gathering information about products, services, and other consumer rights is the responsibility of the consumer • There are common financial risks and ways to manage them
<p>Unit Objectives</p> <p><i>Students will know...</i></p> <ul style="list-style-type: none"> • The economy can affect prices, income, career choices, and decisions • Sources of earned income include wages, salaries, tips, commissions, and self-employment • Disposable income refers to the money a person has available to spend or save after taxes have been paid • A person's education and the decisions they make can affect the income they will earn for the rest of their life 	<p>Unit Objectives</p> <p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Understand how education choices affect income • Determine how saving contributes to financial well being • Explain how the job market and career choices affect the money a person may earn over a lifetime. • List sources of income • Describe recordkeeping methods used in the budgeting process.

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|---|---|
| <ul style="list-style-type: none">• Inflation affects spending, saving, and investing decisions• Budgeting is a critical part of managing money and financial resources• Using a budget allows you to compare your financial resources with your financial needs• Financial goals help make achieving person goal possible• Risks have potential consequences that may be serious and may involve personal or financial loss• Credit is the ability to borrow money with the agreement to pay it back later, usually with interest• Using credit has many advantages, such as convince and increased spending power• Credit counseling, debt management, and deb consolidation are ways of avoiding bankruptcy | <ul style="list-style-type: none">• Explain how basic needs, other needs, and wants differ. Apply a decision-making process to personal financial choices.• Explain the purpose and use of a checking account.• Explain why comparison-shopping leads to better buying decisions. |
|---|---|

BRICK TOWNSHIP PUBLIC SCHOOLS

Evidence of Learning

Formative Assessments

- Oral Questioning
- Oral Response
- Index Card Summary/ Questions
- Self assessment
- Debriefing
- Exit Card
- Quizzes

Summative Assessments

- Performance assessments
- Projects
- Post assessment
- Rubrics

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- Written assessments

Modifications (ELLs, Special Education, Gifted and Talented)

The Financial Literacy unit provides group activity options, which can be assigned to individuals or chosen by students in groups. Employing peer teaching/ modeling, allows students to demonstrate an alternative method of conveying their knowledge, instead of solely writing. In addition, the use of multimedia options appeals to 21st century learners. Also, accessible laboratory or alternative grouping during labs helps students assist each other with division of responsibilities to meet the students individual needs. During this unit different visual aids are provided as well as multiple hand-on activities. Close monitoring, information is presented orally, and graphic organizers are provided to students when necessary. Also, students are provided individualize time lines for completing tasks depending on their learning pace (increase or decrease for different learners).

Curriculum Development Resources/Instructional Materials/Equipment Needed/Teacher Resources:

- Projector and White Board
- Financial Literacy DVDs and YouTube Videos
- Google Classroom Assignments
- Chrome Books with computer resources
- Handouts
- Game of Life
- Monopoly
- www.MyMoney.gov
- www.treasury.gov

Teacher Notes:

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BRICK TOWNSHIP PUBLIC SCHOOLS Family and Consumer Science Food Science Unit 6

Content Area: Family and Consumer Science

Unit Title: Food Science

Target Course/Grade Level: 8th Grade Consumer Science

Unit Summary:

Students will learn about:

- How food science has developed over the years
- Science and Our Food Supply FDA laboratory activities using the scientific methods
- Understanding bacteria and foodborne pathogens
- Study the nature of foods, causes of deterioration, and the farm to table process
- Processing and transportation
- Pasteurization Technology
- Outbreak Analysis
- Food processing
- Improvement of food for the consuming public

Primary interdisciplinary connections:

Next Generation Science Standards
National Standards for Family and Consumer Science
Common Core, Math
Common Core, ELA. Literacy
21st Century Life and Career Standards
National Educational Technology Standards

21st Century Themes:

- Enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society
- Self-reflection and seek to improve the essential life and career practices that lead to success
- Effective communication and collaboration skills and resources to interact with a global society
- Seeks to attain skills and content mastery to achieve success in a chosen career path

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- Enable students to understand the ability to reason, to think critically and creatively, and to reflect on one's actions
- Empower students to act responsibly towards themselves, their families, and the larger society.

Technology connections:

Projector and White Board

Dr. X DVD, Career Profiles DVD, and several different YouTube videos on Food Science

Google Classroom Assignments

Chromebooks

www.usda.gov

www.fda.gov

www.myplate.gov

www.foodsafetynews.com

What's Lurking in Lunch Game: <http://askbiologist.asu.edu/whats-lurking-lunch>

Pathogen Tracker Game: <http://game.pathogentracker.net>

Learning Targets

Content Standards

Infused within the Food Science Unit are connections to the Next Generation Science Standards, 21st Century Life and Careers Standards, National Family and Consumer Science Standards, Common Core Math Standards, and Common Core ELA Standards.

CONTENT STANDARDS LINK:

For further clarification refer to <http://www.state.nj.us/education>

CPI #	Cumulative Progress Indicator (CPI)
	Next Generation Science Standards- Matter and Energy in Organisms & Ecosystems
MS-LS1-7	Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
MS-LS2-1	Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
MS-LS2-3	Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem
	Next Generation Science Standards-Growth, Development. And Reproduction of Organisms
MS-LS1-5	Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
	Next Generation Science Standards- Structure and Properties of Matter

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MS-PS1-1	Develop models to describe the atomic composition of simple molecules and extended structures.		
	National Standards for Family and Consumer Science Education- Food Science, Dietetics, and Nutrition		
9.3.1	Analyze nutrient requirement across the life span addressing the diversity of people, culture, and religions.		
9.3.2	Analyze nutritional data		
9.3.6	Critique the selection of foods to promote a healthy lifestyle		
9.4.1	Analyze nutritional needs of individuals		
	National Standards for Family and Consumer Science Education- Nutrition and Wellness		
14.2.1	Analyze the effect of nutrients on health, appearance, and peak performance		
14.2.2	Analyze the relationship of nutrition and wellness to individual and family health throughout the life span		
14.2.4	Analyze sources of food and nutrition information, including food labels, related to health and wellness		
14.3.1	Apply various dietary guidelines in planning to meet nutrition and wellness needs		
	Common Core, Math		
6.EE.C9	Use variables to represent two quantities in a real world problem that change in relationship to one another		
5.OA.A	Operations and Algebraic Thinking: Write and interpret numerical expressions		
5.MD.A.1	Measurement and Data: Convert like measurement unit within a given measurement system		
5.MD.B.2	Represent and interpret data		
5.MD.C.3	Geometric measurement: Understand concepts of volume		
	Common Core, ELA/Literacy		
RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific or technical context and topics		
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Unit Essential Questions:</p> <p>Why study food science? How has the food science industry benefited individuals and how will it benefit us in the future? How do I safely use, clean and store food science lab equipment? How do I properly dispose of materials in a food science lab? How can studying food science help me add to my choices when considering careers?</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Unit Enduring Understandings <i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Food science reaches into every aspect of the food supply, including food service, food processing, food technology and nutrition. • Each application of food science represents a variety of careers. • Everyday people in this field are involved in work of all kinds. • Comparing personal interests and characteristics may help students to find a career goal that they never considered before. </td> </tr> </table>		<p>Unit Essential Questions:</p> <p>Why study food science? How has the food science industry benefited individuals and how will it benefit us in the future? How do I safely use, clean and store food science lab equipment? How do I properly dispose of materials in a food science lab? How can studying food science help me add to my choices when considering careers?</p>	<p>Unit Enduring Understandings <i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Food science reaches into every aspect of the food supply, including food service, food processing, food technology and nutrition. • Each application of food science represents a variety of careers. • Everyday people in this field are involved in work of all kinds. • Comparing personal interests and characteristics may help students to find a career goal that they never considered before.
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<p>Unit Objectives <i>Students will ...</i></p> <ul style="list-style-type: none"> • Describe areas included in the field of food science. • Choose proper laboratory equipment that is suited for specific tasks. • Describe personal benefits of studying topics in food science and the contributions to our food supply. • Choose food science lab equipment that is suited for specific tasks and demonstrate its proper use and safety. • Demonstrate how to make accurate and precise laboratory measurements. 	<p>Unit Objectives <i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Describe various aspects of food science. • Explain contributions of food science to increasing food supplies, preserving the environment, nutrition and food safety. • Identify different types of work that food scientists do. • Trace the development of the scientific study of food. • Identify different types of work that food scientists do careers and the educational requirements for careers in food science.

BRICK TOWNSHIP PUBLIC SCHOOLS
Evidence of Learning

- Formative Assessments**
- Oral questioning
 - Oral response
 - Index card summary and questions
 - Self assessment using learning goal reflection sheet
 - Self assessment using lab evaluation sheet
 - Debriefing
 - Exit card

- Summative Assessments**
- Performance assessment
 - Food Science Project
 - Food Science Quizzes
 - Food Science Tests

Modifications (ELLs, Special Education, Gifted and Talented)
 The Food Science unit provides group activity options, which can be assigned to individuals or chosen by students in groups. Employing peer teaching/ modeling, allows students to demonstrate an alternative method of conveying their knowledge, instead of solely writing. In addition, the use of multimedia options appeals to 21st century learners. Also, accessible laboratory or alternative grouping during labs

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Curriculum Development Resources/Instructional Materials/Equipment Needed/Teacher

Resources:

Projector and White Board

Dr. X DVD, Career Profiles DVD, and several different YouTube videos on Food Science

Google Classroom Assignments

Chromebooks

www.usda.gov

www.fda.gov

www.myplate.gov

www.foodsafetynews.com

What's Lurking in Lunch Game: <http://askbiologist.asu.edu/whats-lurking-lunch>

Pathogen Tracker Game: <http://game.pathogentracker.net>

Teacher's guide for Middle Level Classrooms- Science and Our Food Supply: Investigating Food Safety for Farm to Table

Teacher's Guide for Middle Level Classrooms- Science and Our Food Supply: Nutrition Facts Label

FDA Bag Bug Book- Provides basic facts regarding foodborne pathogenic, microorganisms and natural toxins

Food Science Lab Equipment Needed:

- Beakers
- Goggles
- Aprons
- Holding devices (ring stand, iron rings, clamps)
- Laboratory thermometer
- Petri dishes
- Test tubes
- Test tube racks
- Electronic scales
- Pipettes
- Safety Gloves
- Paraflim
- Microscopes
- Methylene Blue
- UHT Milk
- Pasteurized Milk
- Whole Milk
- Raw Ground Beef

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Teacher Notes: