

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

Course/Subject: FCS/Culinary Arts  
Topic: Kitchen Basics

Days:  
Grade Level: 9-12

**Key Learning:** Working in a kitchen requires safety, sanitation, equipment, and conservation knowledge.



**Unit Essential Question:** How do basic kitchen practices and equipment used affect work in the foods lab kitchen?

<p><b>Concept:</b> Kitchen Safety and Sanitation</p>	<p><b>Concept</b> Food Borne Illnesses</p>	<p><b>Concept</b> Kitchen Abbreviations &amp; Measurements</p>
<p><b>Standards:</b> 11.3.6.B</p>	<p><b>Standards:</b> 11.3.9.B</p>	<p><b>Standards:</b> 11.3.6.F</p>
↓	↓	↓
<p><b>Lesson Essential Question</b>  _How can common kitchen hazards be prevented and sanitation practiced?</p>	<p><b>Lesson Essential Question</b> How does proper food handling prevent FBI,s?</p>	<p><b>Lesson Essential Question</b> How does the use of abbreviations and knowledge of measurement affect work in the foods lab kitchen?</p>
↓	↓	↓
<p><b>Vocabulary</b> Carbon monoxide CPR Heimlich Maneuver Polarized plugs Hazardous Ultra-concentrated Sanitize and 20-second Scrub Personal hygiene</p>	<p><b>Vocabulary</b> Cross-contamination Food borne illness Freezer burn FDA GRAS list Internal temperature Danger zone Irradiation Pasteurization Spores, toxins, bacteria Staph, salmonella, e-coli, botulism</p>	<p><b>Vocabulary</b> Equivalents Volume Weight Yield *F and *C and formulas dash, pinch, scant, heaping, rounded meniscus, taring, water displacement method</p>

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

<b><u>Concept</u></b> Small Equipment for the Kitchen (including cookware)	<b><u>Concept</u></b>	<b><u>Concept</u></b>
<b><u>Standards:</u></b> 11.3.6.F	<b><u>Standards:</u></b>	<b><u>Standards:</u></b>
↓	↓	↓
<b><u>Lesson Essential Question</u></b> How does knowing names, looks, and uses of small equipment and cookware improve work in the foods lab kitchen?	<b><u>Lesson Essential Question</u></b>	<b><u>Lesson Essential Question</u></b>
↓	↓	↓
<b><u>Vocabulary</u></b> Conduction Convection Cookware materials Pots and pans named Small equipment – 40 named pcs	<b><u>Vocabulary</u></b>	<b><u>Vocabulary</u></b>

<b><u>Additional Information/Resources:</u></b>
---

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

Course/Subject: FCS/Culinary Arts  
Topic: Dietary Guidelines & Choose My Plate

Days:  
Grade Level: 9-12

**Key Learning**

Good health results from consumer awareness and personal responsibility



**Unit Essential Question**

How does understanding the dietary guidelines and using choosemyplate.gov impact my health and wellness?

<b><u>Concept</u></b> Dietary Guidelines	<b><u>Concept</u></b> Choosemyplate.gov	<b><u>Concept</u></b> Fast Food
<b><u>Standards:</u></b> 11.3.6.D	<b><u>Standards:</u></b> 11.3.6.D	<b><u>Standards:</u></b> 11.3.9.D
↓	↓	↓
<b><u>Lesson Essential Question</u></b> What are the Key Recommendations of the Dietary Guidelines?	<b><u>Lesson Essential Question</u></b> How does using technology and choosemyplate.gov lead to better health?	<b><u>Lesson Essential Question</u></b> What does fast food do to your health?
↓	↓	↓
<b><u>Vocabulary</u></b> Dietary Guidelines moderation	<b><u>Vocabulary</u></b> choose my plate food diary nutrient chart	<b><u>Vocabulary</u></b> nutrition content labeling trans fats cholesterol sodium carbohydrates daily caloric needs

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

<b>Concept</b> Food Labels	<b>Concept</b> Breakfast for Teens	<b>Concept</b>
<b>Standards:</b> 11.3.6&9.A	<b>Standards:</b> 11.3.9.E	<b>Standards:</b>
↓	↓	↓
<b>Lesson Essential Question</b> How can a food label lead to better health?	<b>Lesson Essential Question</b> What does a healthy breakfast look like?	<b>Lesson Essential Question</b>
↓	↓	↓
<b>Vocabulary</b> Nutrition facts Serving size Amount per serving Standard notations 6 main nutrients Ingredient list Cholesterol Sodium % DV empty calories enriched fortified	<b>Vocabulary</b> nutrient dense fiber whole grains	<b>Vocabulary</b>

<b>Additional Information/Resources:</b>
--

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

Course/Subject: FCS/Culinary Arts  
Topic: Health and Wellness

Days:  
Grade Level: 9-12

**Key Learning**

Good health and lifetime wellness is the result of building good eating habits using nutrition knowledge.









**Unit Essential Question**

How do you build a nutrition foundation for lifetime health and wellness?

<p><b><u>Concept</u></b> Keeping a Healthy Weight (chapter 11)</p>	<p><b><u>Concept</u></b> Physical Activity</p>	<p><b><u>Concept</u></b> Lifespan Nutrition Adolescents &amp; Teen Athletes (chapter 13)</p>
<p><b><u>Standards:</u></b> 11.3.3&amp;6.C</p>	<p><b><u>Standards:</u></b> 11.3.6&amp;9.E</p>	<p><b><u>Standards:</u></b> 11.3.9.E</p>
<p><b><u>Lesson Essential Question</u></b> How is keeping an appropriate, healthy weight important, even crucial, to wellness?</p>	<p><b><u>Lesson Essential Question</u></b> How can I personally add physical activity to my daily routine?</p>	<p><b><u>Lesson Essential Question</u></b> How do physical changes affect nutrient needs over a person's lifetime?</p>
<p><b><u>Vocabulary</u></b> Behavior modification Crucial Aerobic Anaerobic Body fat % BMI Fad diet Moderation</p>	<p><b><u>Vocabulary</u></b> Physical activity vs Exercise Calories metabolism</p>	<p><b><u>Vocabulary</u></b> Developmental stages Adolescence Adolescents Nutrient Nutrient density Compare Contrast Evaluate</p>

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

<b>Concept</b> Eating Patterns (chapter 14)	<b>Concept</b>	<b>Concept</b>
<b>Standards:</b> 11.2.9&12.A	<b>Standards:</b>	<b>Standards:</b>
		
<b>Lesson Essential Question</b> How can using the decision-making model relate to food choices made?	<b>Lesson Essential Question</b>	<b>Lesson Essential Question</b>
		
<b>Vocabulary</b> Eating pattern Entrée Grazing Resporces Values Option Alternative Evaluation Analyze Food record Food diary	<b>Vocabulary</b>	<b>Vocabulary</b>

<b>Additional Information/Resources:</b>
--

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

Course/Subject: FCS/Culinary Arts  
Topic: Food Science

Days:  
Grade Level: 9-12

**Key Learning**

Food Science principles translate to quality techniques when working in the Foods Lab



**Unit Essential Question**

How does science relate to food and the quality of consumer goods?

<b>Concept</b> Physical and Chemical changes in food	<b>Concept</b> Mixtures and Substances	<b>Concept</b> Phytochemicals
<b>Standards:</b> 11.3.6,9,12.G	<b>Standards:</b> 11.3.6.G	<b>Standards:</b> 11.3.12.G
↓	↓	↓
<b>Lesson Essential Question</b> What is the relevance of scientific principles physical and chemical changes to food processing, preparation, and packaging	<b>Lesson Essential Question</b> How does the science of mixtures and substances affect food preparation?	<b>Lesson Essential Question</b> How do phytochemicals function as phytonutrients?
↓	↓	↓
<b>Vocabulary</b> states of matter phases/phase changes physical changes chemical changes	<b>Vocabulary</b> pure substance element compound mixture homogeneous solute solvent heterogeneous emulsion colloidal dispersion	<b>Vocabulary</b> phytochemicals phytonutrients antioxidants cruciferous

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

<b>Concept</b> Acids and Bases	<b>Concept</b>	<b>Concept</b>
<b>Standards:</b> 11.3.12.G	<b>Standards:</b>	<b>Standards:</b>
↓	↓	↓
<b>Lesson Essential Question</b> How does pH affect food and food preparation? How does pH affect the body?	<b>Lesson Essential Question</b>	<b>Lesson Essential Question</b>
↓	↓	↓
<b>Vocabulary</b> pH scale acids, bases acetic acid, ascorbic/citric acid carbonic acid leavening agents mouthfeel	<b>Vocabulary</b>	<b>Vocabulary</b>

<b>Additional Information/Resources:</b>
--



EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

Course/Subject: FCS/Culinary Arts  
Topic: Energy-Producing Nutrients

Days:  
Grade Level: 9-12

**Key Learning**

Food Science principles related to the three energy-producing nutrients impact food preparation and our health.



**Unit Essential Question**

How do scientific principles impact food, processing, preparation and packaging of the three energy-producing nutrients?

<b><u>Concept</u></b> Food Science of Carbohydrates	<b><u>Concept</u></b> Food Science of Lipids	<b><u>Concept</u></b> Food Science of Protein
<b><u>Standards:</u></b>	<b><u>Standards:</u></b>	<b><u>Standards:</u></b>
↓	↓	↓
<b><u>Lesson Essential Question</u></b> How do the three categories of carbohydrates impact good nutrition?	<b><u>Lesson Essential Question</u></b> How do lipids play both positive and negative roles nutritionally and in foods?	<b><u>Lesson Essential Question</u></b> How do food Science principles of protein affect nutrition, food preparation, and cooking?
↓	↓	↓
<b><u>Vocabulary</u></b> Glucose Sucrose Fructose Lactose Maltose HFC – High Fructose Corn Syrup Thickening agents Gelatinization Syneresis Retrogradation Fortified Enriched Cellulose Pectin Fiber	<b><u>Vocabulary</u></b> Saturated fats Unsaturated fats Trans fats Oxidation Rancidity Omega 3's and 6's Cholesterol Satiety Marbling Emulsions Smoke point Flash point Saute Shallow fry Deep fry Whipping	<b><u>Vocabulary</u></b> Complete protein Incomplete protein Denature Coagulate Colloidal dispersion Functions in body PCM Digestion of proteins RDA for protein Marinating Tenderizing Plant/Vegetable protein Egg protein Meat protein Egg Foams/Stages Gelatin

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

	% of fat /meat, fish, poultry	
--	-------------------------------	--

<u>Concept</u>	<u>Concept</u>	<u>Concept</u>
<u>Standards:</u>	<u>Standards:</u>	<u>Standards:</u>
↓	↓	↓
<u>Lesson Essential Question</u>	<u>Lesson Essential Question</u>	<u>Lesson Essential Question</u>
↓	↓	↓
<u>Vocabulary</u>	<u>Vocabulary</u>	<u>Vocabulary</u>

<u>Additional Information/Resources:</u>
--

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

Course/Subject: FCS/Culinary Arts  
Topic: NonEnergy-Producing Nutrients

Days:  
Grade Level: 9-12

**Key Learning**

Food Science principles related to the three nonenergy-producing nutrients impact food preparation and our health.






**Unit Essential Question**

How do scientific principles impact food, processing, preparation and packaging of the three nonenergy-producing nutrients?

<b><u>Concept</u></b> Food Science of Water	<b><u>Concept</u></b> Food Science of Vitamins in Fruits & Veggies	<b><u>Concept</u></b> Food Science of Minerals
<b><u>Standards:</u></b> 11.3.3.D 11.3.6.F 11.3.9&12.G	<b><u>Standards:</u></b> 11.3.3,9,12.D 11.3.6.F	<b><u>Standards:</u></b> 11.3.3,9,12.D 11.3.6.F
↓	↓	↓
<b><u>Lesson Essential Question</u></b> How do scientific principles of water impact food preparation and our health?	<b><u>Lesson Essential Question</u></b> How do scientific principles of vitamins impact food, processing, preparation and packaging?	<b><u>Lesson Essential Question</u></b> How do scientific principles of minerals impact food, processing, preparation and packaging?
↓	↓	↓
<b><u>Vocabulary</u></b> Refer to the 24-word vocabulary page	<b><u>Vocabulary</u></b> Names of fruits and vegetables Fat soluble vitamins Water soluble vitamins Disease names	<b><u>Vocabulary</u></b> Macro minerals Micro minerals Disease names

<b><u>Concept</u></b>	<b><u>Concept</u></b>	<b><u>Concept</u></b>
<b><u>Standards:</u></b>	<b><u>Standards:</u></b>	<b><u>Standards:</u></b>
↓	↓	↓
<b><u>Lesson Essential Question</u></b>	<b><u>Lesson Essential Question</u></b>	<b><u>Lesson Essential Question</u></b>

EASTERN LEBANON COUNTY SCHOOL DISTRICT  
STUDENT LEARNING MAP

		
<u>Vocabulary</u>	<u>Vocabulary</u>	<u>Vocabulary</u>

<b><u>Additional Information/Resources:</u></b>
---