

**Davison Community Schools
Advisory Curriculum Council
Phase II, December 2013**

FOODS AND NUTRITION

COURSE ESSENTIAL QUESTIONS:

- What plans can you implement to help you reach your personal goals for wellness?
- How does each of the six major nutrients play a role in dietary needs?
- How can dietary choices affect the overall health of one's body?
- What negative effects can poor dietary choices have on one's overall health?
- How does one properly read and understand nutritional fact labels and implement that information to make healthy decisions about what food to purchase and consume?
- How do specific considerations (social, cultural, personal needs such as allergies, etc.) affect ones dietary choices and overall health?
- What procedures should be followed to ensure a safe and sanitary food preparation environment?
- What factors should be considered when determining what cooking methods to implement?
- How is an individual able to determine when a particular food has been cooked to meet safety and sanitary standards?

PHASE II CURRICULUM

UNIT: SENSORY DEVELOPMENT

ESSENTIAL QUESTIONS:

1. What is sensory evaluation?
2. How is sensory evaluation used?
3. Why is sensory evaluation used?
4. How do the five senses affect an individual's decision in regards to their diet?
5. How do individuals adjust if a sense is unable to be used while making dietary choices?

ESSENTIAL UNDERSTANDING:

1. Students will know that the scientific definition of sensory evaluation is a scientific discipline used to evoke, measure, analyze and interpret those responses to products that are perceived by the senses of sight, smell, touch, taste and hearing
2. Sensory evaluation is used in academia to help determine how the human body's senses work and laboratories to help companies determine consumers' needs and wants.
3. Sensory evaluation is used to reduce uncertainty about risks and to make cost effective decisions
4. The five sense when present (sight, touch, sound, taste, and smell) all play a large role in dietary needs and wants
5. When a sense is not present, the human body will adjust and make other senses stronger

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CURRICULUM STANDARDS	
<ul style="list-style-type: none"> • Content Standard 4: All students will demonstrate responsible individual and family decision-making <ul style="list-style-type: none"> ○ H4.3 Practice decision-making skills. ○ H4.9 Practice independent decision-making. • Content Standard 6: All students will develop a plan for individual and family wellness <ul style="list-style-type: none"> ○ H6.5 Assess the effect of non-nutritional food choices on individual wellness • Content Standard 8: All students will practice responsible consumer and product behavior, rights, and responsibilities. <ul style="list-style-type: none"> ○ H8.1 Use economic resources responsibly to meet individual and family needs. 	
KNOWLEDGE/CONTENT STUDENTS WILL KNOW ABOUT....	SKILLS/PROCESSES STUDENTS WILL BE ABLE TO...
<ol style="list-style-type: none"> 1. Sensory evaluation and how it applies to their everyday life 2. Sensory evaluation and its uses in both a personal world of an individual and the business sector of food distribution 3. The reasons why sensory evaluation is necessary for continued food production 4. Each of the five senses and what role they play in dietary needs 5. The human body in regards to how it compensates with a particular sense is not present 	<ol style="list-style-type: none"> 1. Identify how one uses sensory evaluation in their every day decisions regarding their dietary choices 2. Identify reasons for sensory evaluation in the academic and business world 3. List and explain reasons why sensory evaluation is essential in continued food production 4. Identify how sight, touch, sound, taste, and smell effect their every day dietary choices 5. Provide examples and explain how the human body compensates when a sense is not present
PHASE III TEXTBOOK/MATERIALS	
Kowtaluk, Helen. (2006). Food for Today. Peoria, Illinois: The Goodheart-Willcox Company, Inc.	
PHASE IV SUMMATIVE ASSESSMENT EVIDENCE	
COMMON SUMMATIVE UNIT ASSESSMENTS:	AGREED UPON INTERIM SUMMATIVE ASSESSMENTS: (*Identifies Performance Tasks)
PHASE V LEARNING PLAN	
PHASE II CURRICULUM	
UNIT: FOOD GUIDELINES, DIETING AND DIGESTION	
ESSENTIAL QUESTIONS:	ESSENTIAL UNDERSTANDING:

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<ol style="list-style-type: none"> 1. Based upon the recommended guidelines from the USDA (United States Department of Agriculture) what does the “Choose My Plate”, and previous food guide pyramid(s) suggest for daily dietary needs? 2. What are the steps and process of digestion? 3. How do you calculate an estimated BMR (Basal Metabolic Rate)? 4. What is anemia and how is it treated? 5. What is bulimia, the warning signs, and treatment options? 6. What is anorexia, the warning signs, and treatment options? 	<ol style="list-style-type: none"> 1. Students will know that choose my plate includes; fruits, grains, vegetables, protein, and dairy while properly proportioning and labeling a diagram. The previous food guide pyramid includes grains (6oz), vegetables (2.5 cups), fruits (2 cups), oils, milk (3 cups), meat and beans (5.5 oz). Finally the original food guide pyramid includes, Bread, Cereal Rice and Pasta Group (6-11 servings), Fruit Group (2-4 servings), Meat, Poultry, Fish, Dry Beans, Eggs & Nuts Group (2-3 servings), Milk Yogurt & Cheese Group (2-3 servings), Vegetable Group (3-5 servings). 2. Eyes: sight of food allows saliva to begin in your mouth. Mouth: Chewing, saliva, and taste. Esophagus: peristalsis occurs. Stomach: gastric juices and acids, churning. Small intestine: Bile, pancreatic juice, bile, intestinal juice, absorption through vili 3. A Basal Metabolic Rate is, the energy that one needs to maintain automatic processes. It is calculated to find an estimate in the following ways; Females: $BMR = 655 + (4.35 \times \text{weight in pounds}) + (4.7 \times \text{height in inches}) - (4.7 \times \text{age in years})$ Males: $BMR = 66 + (6.23 \times \text{weight in pounds}) + (12.7 \times \text{height in inches}) - (6.8 \times \text{age in years})$ 4. Anemia is a blood disorder that causes lack of energy, weakness, shortness of breath, cold hands and feet. Due to a low amount of iron intake. 5. Bulimia nervosa is an eating disorder that combines bingeing with purging.
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	<p>Signs include missing food, empty food containers, the presence of laxatives or diuretics and long periods spent in the bathroom after meals. Family and friends help to persuade the individual to seek help/advice.</p> <p>6. Anorexia nervosa is an intense fear of gaining weight that leads to unhealthy eating and dangerous weight loss. Signs include rigid eating habits and rituals, denial of being hungry, avoid group meals, eat only certain foods at certain times. Family and friends help to persuade the individual to seek help/advice.</p>
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CURRICULUM STANDARDS

- **Content Standard 3:** All students will analyze factors that influence human development.
 - H3.2 Analyze impact of healthful behavior on life goals
- **Content Standard 4:** All students will demonstrate responsible individual and family decision-making.
 - H4.2 Practice implementing an individual plan of action
 - H4.3 Practice decision-making skills.
 - H4.4 Develop strategies to overcome bias
 - H4.5 Analyze an individual decision.
 - H4.6 Evaluate the impact of decisions on individuals, families and communities
 - H4.7 Evaluate the influence and impact of various decisions on individual and family lifestyles
 - H4.8 Employ responsibility in the practice of personal, family, work, and community decision-making responsibilities
 - H4.9 Practice independent decision-making.
- **Content Standard 6:** All students will develop a plan for individual and family wellness
 - H6.1 Demonstrate providing safe and healthy environments
 - H6.3 Practice individual responsibilities for health as it relates to social, emotional, and physical well-being
 - H6.4 Share the responsibility for maintaining a safe and healthy living environment
 - H6.5 Assess the effect of non-nutritional food choices on individual wellness
 - H6.6 Apply food pyramid in food decision making
 - H6.7 Analyze food labeling

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KNOWLEDGE/CONTENT STUDENTS WILL KNOW ABOUT....	SKILLS/PROCESSES STUDENTS WILL BE ABLE TO...
<ol style="list-style-type: none"> 1. The Choose My Plate Resource, and previous food guide pyramid(s) from the USDA 2. The digestion process and how each part of the body plays an essential role 3. How the Basal Metabolic Rate (BMR) is different for each person, and that it is based on a number of factors 4. The different forms of malnutrition and prevention factors for each type 5. Anemia, its causes, effects, and treatment 6. Anorexia, warning signs, effects, and treatments 7. Bulimia, warning signs, effects, and treatments 	<ol style="list-style-type: none"> 1. Properly label the Choose My Plate graphic, and two previous food guide pyramid while being able to provide examples of foods that fall into each section. Following be able to analyze how dietary recommendations have changed over the years. 2. Explain each body process in terms of digestion in order providing an explanation for each organ 3. Provide examples of what may influence the Basal Metabolic Rate (BMR) of a person as well as be able to properly calculate their personal BMR based upon a calculated formula 4. Explain each type of malnutrition and provide prevention strategies 5. Explain anemia, its effects on the body and what one will need to do in order to treat anemia properly 6. Identify anorexia, the warning signs, effects and treatment options 7. Identify bulimia, the warning signs, effects and treatment options
PHASE III TEXTBOOK/MATERIALS	
Kowtaluk, Helen. (2006). Food for Today. Peoria, Illinois: The Goodheart-Willcox Company, Inc.	
PHASE IV SUMMATIVE ASSESSMENT EVIDENCE	
COMMON SUMMATIVE UNIT ASSESSMENTS:	AGREED UPON INTERIM SUMMATIVE ASSESSMENTS: (*Identifies Performance Tasks)
PHASE V LEARNING PLAN	
PHASE II CURRICULUM	
UNIT: SAFETY/SANITATION; COOKING & BAKING TERMS, TOOLS, AND TECHNIQUES, RECIPE READING	
ESSENTIAL QUESTIONS:	ESSENTIAL UNDERSTANDING:
<ol style="list-style-type: none"> 1. What is the definition of sanitation? 2. How long should hands be washed prior to cooking? 	<ol style="list-style-type: none"> 1. The prevention of illness through cleanliness 2. 20 seconds using both water and

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<ol style="list-style-type: none"> 3. What is the definition of cross contamination? 4. What are strategies to prevent cross contamination? 5. Why is the internal temperature while cooking meat important? 6. What is the proper way to thaw food? 7. What is the proper way to serve food? 8. What is the proper way to store food? 9. What is the proper way to freeze food? 10. What role does the FDA play in terms of food processing? 11. What is the GRAS list and why is this important to consumers? 12. What are three ways to prevent kitchen falls? 13. What are three ways to prevent cuts? 14. What are the three ways to prevent burns? 15. What are three strategies for cook top safety? 16. What are the three strategies for oven safety? 17. If a fire were to start, what are the best ways to eliminate the fire? 18. If a grease fire were to start, what are the best ways to eliminate the fire? 19. What are two strategies to be safe while handling electric appliances? 20. What are the components of a well-written recipe? 21. What are the different cooking methods and how do you determine which is appropriate for the food being cooked? 	<p>soap</p> <ol style="list-style-type: none"> 3. The spread of harmful bacteria from one food to another 4. Wash all surfaces, use specific separate cutting boards and knives, wash hands and work surface 5. The temperature deep inside the thickest part of the food should be ideal to help prevent food borne illness 6. Never defrost frozen food at room temperature. Instead, put it into a refrigerator. 7. Keep hot foods hot, cold foods cold, and follow the two hour rule (perishable foods should not sit out more than 2 hours) 8. Follow directions, first in first out rule, follow sell by or use by dates, clean storage areas regularly, buy only as much as you need 9. Freeze proper foods for the recommended amount of time depending on what is being frozen 10. FDA (Food and Drug Administration) regulate what can be used in foods and medicine 11. Generally Recognized as Safe is a long list of additives the FDA has deemed safe to add to foods 12. Floor clear of clutter, wipe up spills and splatters, secure slippery rugs, repair worn flooring, use something sturdy when needing to stand on something 13. Store knives properly, use a cutting board, take care when cleaning sharp objects, do not soak, dry sharp edges carefully, point the blade away from you 14. Keep kitchen clean, use cookware in good condition, keep items away from stove, know where fire safety tools are located, use a potholder,
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	<p>turn off sources of heat when completed,</p> <p>15. Handle with dry oven mitts, turn handles of pans inward, remove a lid of a pot away from you, keep flammable items away, do not use or burn plastic</p> <p>16. Arrange racks prior to turning on oven, stand to one side when opening, use a oven mitt or pot holder that is dry, turn it off when done, clean up spills</p> <p>17. Turn off burner, unplug cord, turn off heat if inside oven, smother fire, use a extinguisher, do not use baking powder or flour, do not use water, do not carry a burning pan anywhere</p> <p>18. Use baking soda</p> <p>19. Limit the number of cords in once location, use a polarized plug, do not staple or nail cords in place, keep them tidy</p> <p>20. A set of directions for making a food or beverage including the list of ingredients, yield (amount or number it makes), cooking method, temperature and time, container size and type, step by step directions, nutritional analysis</p> <p>21. Conduction the method of transferring heat by direct contact, convection the method of transferring heat through the movement of molecules in air or liquid, radiation the method of transferring heat as waves of energy</p>
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CURRICULUM STANDARDS

- **Content Standard 4:** All students will demonstrate responsible individual and family decision-making.
 - H4.2 Practice implementing an individual plan of action
 - H4.3 Practice decision-making skills.
 - H4.5 Analyze an individual decision.
 - H4.6 Evaluate the impact of decisions on individuals, families and communities

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- H4.9 Practice independent decision-making.
- **Content Standard 8:** All students will practice responsible consumer and product behavior, rights, and responsibilities.
 - H8.2 Apply skills relating to consumer rights and responsibilities to meet individual and family needs
 - H8.4 Practice conservation, recycling, maintenance and environmental improvement

KNOWLEDGE/CONTENT STUDENTS WILL KNOW ABOUT	SKILLS/PROCESSES STUDENTS WILL BE ABLE TO...
1. The definition of sanitation 2. How long should hands be washed prior to cooking 3. The definition of cross contamination and strategies for prevention 4. The importance internal temperature while cooking meat and how to determine that this temperature has been reached 5. The proper way to thaw, serve, store, and freeze food 6. The four types of preserving food 7. The role the FDA play in terms of food processing including the GRAS list and why it is important to consumers 8. Three ways to prevent kitchen falls, cuts, and burns 9. Three strategies for cook top and oven safety? 10. The proper ways to eliminate a fire and a grease fire 11. Two strategies to be safe while handling electric appliances 12. The components of a well-written recipe? 13. The proper baking/cooking tools for each type of baking/cooking? 14. The different cooking methods and how to determine which is appropriate for the food being cooked	1. Provide the definition of sanitation 2. Indicate and demonstrate how long should hands be washed prior to cooking 3. Define cross contamination and demonstrate strategies to prevent cross contamination 4. Explain importance internal temperature while cooking meat and be able to demonstrate how to determine this temperature 5. Describe the proper way to thaw, serve, store, and freeze food 6. Describe the four types of preserving food 7. Understand and explain the FDA play in terms of food processing and why the GRAS list is important to consumers 8. Provide and demonstrate three ways to prevent kitchen falls, cuts, and burns 9. Provide and demonstrate three strategies for cook top and oven safety? 10. Provide and demonstrate the proper ways to eliminate a fire and a grease fire 11. Provide and demonstrate two strategies to be safe while handling electric appliances 12. Write a recipe including all proper components 13. Provide and demonstrate the proper baking/cooking tools for each type of

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	baking/cooking 14. Provide and demonstrate the different cooking methods and how to determine which is appropriate for the food being cooked
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PHASE V LEARNING PLAN	
PHASE II CURRICULUM	
UNIT: CARBOHYDRATES, FATS, AND PROTEINS	
ESSENTIAL QUESTIONS: 1. What effect do complex carbohydrates have on the body? 2. What effect do simple carbohydrates have on the body? 3. What are examples of complex carbohydrates 4. What are examples of simple carbohydrates? 5. What does monosaccharide mean? 6. What does disaccharide mean? 7. What are examples of monosaccharide? 8. Which monosaccharide's form disaccharides? 9. What is the difference between a complete and incomplete protein? 10. What are the needs for protein within the body? 11. What are food sources of protein? 12. What do LDLs (Low density lipoproteins) do within the body? 13. What do HDLs (High Density Lipoproteins) do within the body? 14. How do saturated fats affect cholesterol? 15. How can one tell the difference	ESSENTIAL UNDERSTANDING: 1. A carbohydrate that requires more work for the body to digest providing more nutrient dense energy 2. A carbohydrate with a simple chemical structure that is easily digested into sugar 3. Whole grain, whole wheat, starch, etc examples of complex carbohydrates 4. White pasta, white bread, etc examples of simple carbohydrates 5. A sugar with a single chemical unit 6. A sugar of two monosaccharaides 7. Glucose, Fructose, Galactose 8. Sucrose, Lactose, Maltose 9. Complete proteins are a food that contains all nine essential amino acids. A food that lacks one or more essential amino acids is called an incomplete protein. 10. Growth and maintenance, enzymes, hormones, antibodies, and fluid balance 11. Animal sources (meat, eggs, etc), and plant sources for less fat and more fiber (meat and beans, peanut butter, hummus, soybeans, etc.)

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<p>between a saturated and unsaturated fat?</p> <p>16. How do polyunsaturated fats affect cholesterol?</p> <p>17. How do monounsaturated fats affect cholesterol?</p>	<p>12. LDL takes cholesterol from the liver to wherever it is needed in the body. Excess LDL can build up on artery walls.</p> <p>13. HDL picks up excess cholesterol and takes it back to the liver for excretion</p> <p>14. Raise levels of LDL</p> <p>15. Saturated fats are solid at room temperature while unsaturated fats are liquid at room temperature</p> <p>16. Polyunsaturated fats may help to lower cholesterol if used instead of saturated fats</p> <p>17. Monounsaturated fats help to raise HDL and lower LDL</p>
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- **Content Standard 3:** All students will analyze factors that influence human development.
 - H3.2 Analyze impact of healthful behavior on life goals
- **Content Standard 4:** All students will demonstrate responsible individual and family decision-making.
 - H4.2 Practice implementing an individual plan of action
 - H4.3 Practice decision-making skills.
 - H4.4 Develop strategies to overcome bias
 - H4.5 Analyze an individual decision.
 - H4.6 Evaluate the impact of decisions on individuals, families and communities
 - H4.7 Evaluate the influence and impact of various decisions on individual and family lifestyles
 - H4.8 Employ responsibility in the practice of personal, family, work, and community decision-making responsibilities
 - H4.9 Practice independent decision-making.
- **Content Standard 6:** All students will develop a plan for individual and family wellness
 - H6.1 Demonstrate providing safe and healthy environments
 - H6.3 Practice individual responsibilities for health as it relates to social, emotional, and physical well-being
 - H6.4 Share the responsibility for maintaining a safe and healthy living environment
 - H6.5 Assess the effect of non-nutritional food choices on individual wellness
 - H6.6 Apply food pyramid in food decision making
 - H6.7 Analyze food labeling

KNOWLEDGE/CONTENT

SKILLS/PROCESSES

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STUDENTS WILL KNOW ABOUT....	STUDENTS WILL BE ABLE TO...
<ol style="list-style-type: none"> 1. The effect do complex and simple carbohydrates have on the body as well as examples of each 2. The difference between monosaccharide(s) and disaccharide(s) while providing examples for each 3. The monosaccharide's that form disaccharides 4. The difference between complete and incomplete proteins and examples of each 5. The needs for protein within the body 6. What LDLs (Low density lipoproteins) and HDLs (High Density Lipoproteins) do in the body 7. The differences (examples, and how to determine) between saturated and unsaturated fats 8. Effects of polyunsaturated and monounsaturated fats on cholesterol 	<ol style="list-style-type: none"> 1. Describe the effects of complex carbohydrates on the body as well as being able to provide examples of each 2. Describe the difference between mono and disaccharides 3. Indicate the formulas of monosaccharide and which disaccharides they form 4. Describe the difference between complete and incomplete proteins and examples of each 5. Provide examples of incomplete and complete protein rich foods, their use within the body, and examples of food sources 6. Explain the effects of LDL and HDL in the body, and how different fats affect each 7. Explain how to determine if fats are saturated or unsaturated and will be able to provide examples of food 8. Explain how polyunsaturated and monounsaturated fats affect one's cholesterol level
PHASE III TEXTBOOK/MATERIALS	
Kowtaluk, Helen. (2006). Food for Today. Peoria, Illinois: The Goodheart-Willcox Company, Inc.	
PHASE IV SUMMATIVE ASSESSMENT EVIDENCE	
COMMON SUMMATIVE UNIT ASSESSMENTS:	AGREED UPON INTERIM SUMMATIVE ASSESSMENTS: (*Identifies Performance Tasks)
PHASE V LEARNING PLAN	
PHASE II CURRICULUM	
UNIT: VITAMINS AND MINERALS	
ESSENTIAL QUESTIONS	ESSENTIAL UNDERSTANDINGS
<ol style="list-style-type: none"> 1. How do antioxidants help the body? 2. What foods are good sources of antioxidants? 3. How do free radicals damage the body? 	<ol style="list-style-type: none"> 1. Antioxidants are substances that protect cells and the immune system from damage and harmful chemicals 2. Vitamins C and E, selenium, blueberries, citrus fruits are all good

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<ol style="list-style-type: none"> 4. How do antioxidants interact with free radicals? 5. How do water-soluble vitamins enter the blood stream? 6. What are the water-soluble vitamins? 7. What effects does each of the water-soluble vitamins have on the body? 8. How do fat-soluble vitamins enter the blood stream? 9. How long do fat-soluble vitamins stay in the body for? 10. What are the fat-soluble vitamins? 11. What effects does each of the fat-soluble vitamins have on the body? 12. How is a mineral considered a trace or major mineral? 13. What are the major minerals? 14. What are effects that each major mineral has on the body? 15. What are the trace minerals? 16. What are effects that each trace mineral has on the body? 	<p>sources of antioxidants</p> <ol style="list-style-type: none"> 3. A free radical is an unstable substance that can damage body cells. 4. Antioxidants change free radicals to make them less damaging, antioxidants also repair damaged cells 5. Water soluble vitamins enter through the blood stream quickly and stay in the body for a short amount of time (24 hours) 6. Water soluble vitamins include Vitamin C, and all of the B Vitamins 7. Vitamin C maintains healthy capillaries, bones, skin and teeth, B1 is for muscle coordination and a healthy nervous system, B2 helps to release energy from carbohydrates, proteins and fats. It also helps to contribute to body growth and red blood cell production. B3 helps to release energy from carbohydrates, proteins and fats, also a healthy nervous system and mucous membranes. B6 helps to release energy from carbohydrates, proteins and fats also promotes a healthy nervous system and helps to make nonessential amino acids, B9 helps to build red blood cells, B12 helps to release energy from carbohydrates, proteins and fats. B5 helps to release energy from carbohydrates, proteins and fats and promotes normal growth and development 8. Fat soluble vitamins are absorbed slowly and stored in the body until used 9. The fat soluble vitamins are A, D, E, and K 10. Vitamin A promotes good vision and help maintain tissues and skin, also supports reproduction and growth.
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	<p>Vitamin D ensures that bones grow properly, Vitamin E is a powerful antioxidant, Vitamin K helps blood clot and wounds to stop bleeding, also helps with bone health</p> <p>11. Minerals over 100 mg are major minerals, and under 100 mg are trace</p> <p>12. That the major minerals are calcium, phosphorus, magnesium, sodium, chloride, and potassium</p> <p>13. Calcium regulates blood clotting, nerve activity, and other body processes. Magnesium helps build bones and makes proteins. Sodium, Chloride, and Potassium are electrolyte minerals to help fluid balance</p> <p>14. The trace minerals are iodine, zinc, copper, and fluoride</p> <p>15. Iron is essential for making hemoglobin, Iodine produces substances needed for growth and development, Zinc helps enzymes do their work and aids the immune system, Selenium is an antioxidant, Copper helps several enzymes, and Fluoride helps prevent tooth decay and strengthen bones</p>
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CURRICULUM STANDARDS

- **Content Standard 3:** All students will analyze factors that influence human development.
 - H3.2 Analyze impact of healthful behavior on life goals
- **Content Standard 4:** All students will demonstrate responsible individual and family decision-making.
 - H4.2 Practice implementing an individual plan of action
 - H4.3 Practice decision-making skills.
 - H4.4 Develop strategies to overcome bias
 - H4.5 Analyze an individual decision.
 - H4.6 Evaluate the impact of decisions on individuals, families and communities
 - H4.7 Evaluate the influence and impact of various decisions on individual and family lifestyles
 - H4.8 Employ responsibility in the practice of personal, family, work, and community decision-making responsibilities

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- H4.9 Practice independent decision-making.
- **Content Standard 6:** All students will develop a plan for individual and family wellness
 - H6.1 Demonstrate providing safe and healthy environments
 - H6.3 Practice individual responsibilities for health as it relates to social, emotional, and physical well-being
 - H6.4 Share the responsibility for maintaining a safe and healthy living environment
 - H6.5 Assess the effect of non-nutritional food choices on individual wellness
 - H6.6 Apply food pyramid in food decision making
 - H6.7 Analyze food labeling

KNOWLEDGE/CONTENT STUDENTS WILL KNOW ABOUT....	SKILLS/PROCESSES STUDENTS WILL BE ABLE TO...
1. How antioxidants help the body including examples of foods that have a high source of antioxidants 2. How free radicals damage the body 3. How antioxidants interact with free radicals 4. How water-soluble vitamins enter the blood stream, how long they stay in the body, and the affect of each on the body 5. How fat-soluble vitamins enter the blood stream, how long they stay in the body for, and characteristics of each on the body 6. The milligram amount that determines trace versus major minerals 7. The minerals that are considered major minerals and the effect that each has on the body 8. The minerals that are considered trace minerals and the effect that each has on the body	1. Describe how antioxidants help the body as well as provide examples of foods with antioxidants 2. Describe how free radicals damage the body 3. Explain how antioxidants help to reduce the damaging effects of free radicals 4. Describe that water soluble vitamins stay in the body for a short amount of time (24 hours) and enter the body through the blood stream and the characteristics that each (Vitamin C and Bs) have on the body 5. List the fat soluble vitamins and describe that they stay in the body for a longer period of time (until they are used) and are absorbed through body tissues. Describe a characteristic of each vitamin within the body 6. Determine if a mineral is a macro or micro mineral based upon the number of milligrams that is needed per day in a dietary allowance 7. The major minerals and effects that each have on the body 8. The minor minerals and the effect that each have on the body
PHASE III TEXTBOOK/MATERIALS	

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PHASE IV SUMMATIVE ASSESSMENT EVIDENCE	
COMMON SUMMATIVE UNIT ASSESSMENTS:	AGREED UPON INTERIM SUMMATIVE ASSESSMENTS: (*Identifies Performance Tasks)
PHASE V LEARNING PLAN	
PHASE II CURRICULUM	
UNIT: WATER, PHYTOCHEMICALS AND DRINK CHOICES	
ESSENTIAL QUESTIONS	ESSENTIAL UNDERSTANDINGS
<ol style="list-style-type: none"> 1. What are the seven needs for water within the body? 2. What does hydration mean? 3. What are the three natural ways that water exits the body? 4. What is the definition and signs of dehydration? 5. How much water should someone intake in comparison to other fluids? 6. What is a Phytochemical and the benefits of them, and the two main ones that are essential for the human body? 7. What are characteristics of Lycopene? 8. What are characteristics of Beta Carotene 	<ol style="list-style-type: none"> 1. Chemical reactions, transportation, cushioning and moisturizing, waste removal, temperature regulation, breathing, over all welling being 2. Hydration means getting enough t water to meet all of the body’s needs 3. Sweat, breathing and waste 4. Dehydration is a condition in which the body has too little water. Signs include dark urine, dry lips and skin, constipation, headaches, dizziness, nausea, light-headedness, and muscle fatigue 5. Teens and adults should drink 8-12 cups of water or other beverages (not diaphoretic) per day. Divide weight in half (pounds) that number is how many ounces should be consumed a day. 6. Phytochemical is a chemical compound that occurs naturally in plants that act as antioxidants, boost resistance, keep cancer cells from forming and multiplying, influence production of cholesterol, protect against diseases. The two main phytochemcials needed for the body are Lycopene and Beta Carotene 7. Red fruits and vegetables. It helps to reduce the risk of cancer and heart disease

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	8. Orange or red phytochemicals. Good antioxidant and may help to prevent cancer
CURRICULUM STANDARDS	
<ul style="list-style-type: none"> • Content Standard 3: All students will analyze factors that influence human development. <ul style="list-style-type: none"> ○ H3.2 Analyze impact of healthful behavior on life goals • Content Standard 4: All students will demonstrate responsible individual and family decision-making. <ul style="list-style-type: none"> ○ H4.2 Practice implementing an individual plan of action ○ H4.3 Practice decision-making skills. ○ H4.4 Develop strategies to overcome bias ○ H4.5 Analyze an individual decision. ○ H4.6 Evaluate the impact of decisions on individuals, families and communities ○ H4.7 Evaluate the influence and impact of various decisions on individual and family lifestyles ○ H4.8 Employ responsibility in the practice of personal, family, work, and community decision-making responsibilities ○ H4.9 Practice independent decision-making. • Content Standard 6: All students will develop a plan for individual and family wellness <ul style="list-style-type: none"> ○ H6.1 Demonstrate providing safe and healthy environments ○ H6.3 Practice individual responsibilities for health as it relates to social, emotional, and physical well-being ○ H6.4 Share the responsibility for maintaining a safe and healthy living environment ○ H6.5 Assess the effect of non-nutritional food choices on individual wellness ○ H6.6 Apply food pyramid in food decision making ○ H6.7 Analyze food labeling 	
KNOWLEDGE/CONTENT STUDENTS WILL KNOW ABOUT....	SKILLS/PROCESSES STUDENTS WILL BE ABLE TO...
<ol style="list-style-type: none"> 1. The seven needs for water within the body? 2. The meaning of hydration and dehydration, and providing signs of each 3. The three natural ways that water exits the body 4. The amount of water someone should intake in comparison to other fluids 	<ol style="list-style-type: none"> 1. List and describe the seven needs for water within the body 2. Define hydration and dehydration and provide signs of each 3. Describe the three natural ways that water exits the body 4. Compare and contrast water to other fluids when deciding how many ounces of water to consumer when other fluids are taken in also

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<ol style="list-style-type: none"> 5. The definition of a Phytochemical and describe the benefits of each 6. The characteristics of Lycopene 7. The characteristics of Beta Carotene 	<ol style="list-style-type: none"> 5. List the two main phytochemicals needed within the body and describe the affect of each within the body 6. Describe the characteristics of lycopene 7. Describe the characteristics of Beta Carotene
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PHASE III TEXTBOOK/MATERIALS

Kowtaluk, Helen. (2006). Food for Today. Peoria, Illinois: The Goodheart-Willcox Company, Inc.

PHASE IV SUMMATIVE ASSESSMENT EVIDENCE

COMMON SUMMATIVE UNIT ASSESSMENTS:

AGREED UPON INTERIM SUMMATIVE ASSESSMENTS:

(*Identifies Performance Tasks)

PHASE V LEARNING PLAN

PHASE II CURRICULUM

UNIT: LABEL READING AND SHOPPING FOR FOOD

ESSENTIAL QUESTIONS

1. What are the components of a nutrition label?
2. What are five places that you are able to shop for food?
3. What is code dating?
4. What is open dating?
5. What is comparison shopping?
6. How do you determine the unit price?
7. How do you determine cost per serving?

ESSENTIAL UNDERSTANDINGS

1. Amount of Food in the package, List of ingredients, Name and address of manufacturer, Packer or distributor, Instructions for safe storage
2. Supercenters, warehouse stores, warehouse clubs, health food supermarkets, independent grocers, specialty stores, food cooperatives, convenience stores, farmers markets, online food retailers
3. Code dating is the use of a series of numbers or letters that indicate where and when the product was packaged
4. Open dating is the use of a day, monthly, and sometimes a year to indicate a product's freshness
5. Comparison shopping means matching process and characteristics of similar items to determine which offers the best value
6. The unit prices the cost per ounce, quart, pound, or other unit of an item. If no price is given, you can

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	<p>calculate it yourself by dividing the item's total price by the number of units</p> <p>7. To find the cost per serving determine how many servings are in a certain food. Divide the price by the number of servings</p>
CURRICULUM STANDARDS	
<ul style="list-style-type: none"> • Content Standard 3: All students will analyze factors that influence human development. <ul style="list-style-type: none"> ○ H3.2 Analyze impact of healthful behavior on life goals • Content Standard 4: All students will demonstrate responsible individual and family decision-making. <ul style="list-style-type: none"> ○ H4.2 Practice implementing an individual plan of action ○ H4.3 Practice decision-making skills. ○ H4.4 Develop strategies to overcome bias ○ H4.5 Analyze an individual decision. ○ H4.6 Evaluate the impact of decisions on individuals, families and communities ○ H4.7 Evaluate the influence and impact of various decisions on individual and family lifestyles ○ H4.8 Employ responsibility in the practice of personal, family, work, and community decision-making responsibilities ○ H4.9 Practice independent decision-making. • Content Standard 6: All students will develop a plan for individual and family wellness <ul style="list-style-type: none"> ○ H6.1 Demonstrate providing safe and healthy environments ○ H6.3 Practice individual responsibilities for health as it relates to social, emotional, and physical well-being ○ H6.4 Share the responsibility for maintaining a safe and healthy living environment ○ H6.5 Assess the effect of non-nutritional food choices on individual wellness ○ H6.6 Apply food pyramid in food decision making ○ H6.7 Analyze food labeling 	
KNOWLEDGE/CONTENT STUDENTS WILL KNOW ABOUT	SKILLS/PROCESSES STUDENTS WILL BE ABLE TO...
<ol style="list-style-type: none"> 1. The components of a nutrition label 2. The five common places to shop for food 3. The code dating process 4. The open dating process 5. Comparison shopping 	<ol style="list-style-type: none"> 1. List and describe the components of a nutrition label 2. List and describe the five most common places to shop for food 3. Explain and recognize the code dating process

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6. Determination of price per unit 7. Determination of cost per serving	4. Explain and recognize the open dating process 5. Explain and demonstrate comparison shopping 6. Demonstration the calculations of price per unit 7. Demonstrate the calculations of cost per serving
PHASE III TEXTBOOK/MATERIALS	
Kowtaluk, Helen. (2006). Food for Today. Peoria, Illinois: The Goodheart-Willcox Company, Inc.	
PHASE IV SUMMATIVE ASSESSMENT EVIDENCE	
COMMON SUMMATIVE UNIT ASSESSMENTS:	AGREED UPON INTERIM SUMMATIVE ASSESSMENTS: (*Identifies Performance Tasks)
PHASE V LEARNING PLAN	