
Nutrition

Curriculum Guide

Dunmore School District

Dunmore, PA



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Nutrition

Prerequisite:

- Successful completion of Science 9 and Biology

Nutrition focuses on the importance of eating a healthy diet. Roles of nutrients in the body are discussed along with how to include these nutrients in the diet. Aspects of Wellness are also discussed and create the foundation on which the course is presented. Students who successfully complete this course will have the information and experience to manage their nutritional health for their own well-being and will be prepared to further their education in a Nutrition-related field of study.

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Year-at-a-glance

Subject: Nutrition	Grade Level: 12	Date Completed: 3/21/2018
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1st Quarter

Topic	Resources	Standards
Making Wellness a Lifestyle	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 1	3.3, 10.1, 10.2
Factors Affecting Food Choices	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 2	3.3, 11.3, 10.1
How Nutrients Become You	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 3	3.3, 3.4, 10.1, 11.3

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2nd Quarter

Topic	Resources	Standards
Nutrition Guidelines	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 4	3.3, 11.3, 10.1, 10.2
Carbohydrates	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 5	3.3, 3.4, 10.1, 11.3
Fats	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 6	3.3, 3.4, 10.1, 11.3
Proteins	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 7	3.3, 3.4, 10.1, 11.3

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3rd Quarter

Topic	Resources	Standards
Vitamins	<i>Nutrition, Food and Fitness; Dorothy West (2006)</i> Goodheart-Wilcox Chapter 8	3.3, 3.4, 10.1, 11.3
Minerals	<i>Nutrition, Food and Fitness; Dorothy West (2006)</i> Goodheart-Wilcox Chapter 9	3.3, 3.4, 10.1, 11.3
Water	<i>Nutrition, Food and Fitness; Dorothy West (2006)</i> Goodheart-Wilcox Chapter 10	3.3, 3.4, 10.1, 11.3
Energy Balance	<i>Nutrition, Food and Fitness; Dorothy West (2006)</i> Goodheart-Wilcox Chapter 12	10.1, 10.2, 10.4

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4th Quarter

Topic	Resources	Standards
Healthy Weight Management	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 13	10.1, 10.2, 3.3
Eating Disorders	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter 14	10.1, 10.2, 3.3
Careers in Nutrition and Fitness	<i>Nutrition, Food and Fitness</i> ; Dorothy West (2006) Goodheart-Wilcox Chapter	3.8
Review and Final Exam		

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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
Making Wellness a Lifestyle	<p>PA Academic Standards: Health, Safety and Physical Education:</p> <p>10.1.A Concepts of Health Evaluate factors that impact growth and development during adulthood and late adulthood.</p> <p>10.2.A Healthful Living Analyze how personal choice, disease and genetics can impact health maintenance and disease prevention.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing</p>	<p>Essential Knowledge/Skills: Evaluate factors that impact the body systems and apply protective/ preventive strategies.</p> <ul style="list-style-type: none"> • fitness level • environment (e.g., pollutants, available health care) • health status (e.g., physical, mental, social) • nutrition <p>Compare and contrast the positive and negative effects of the media on adult personal health and safety Analyze the interrelationship between environmental factors and community health Explain the relationship between health-related information and consumer choices.</p> <p>Vocabulary: body image advertising dietary guidelines</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 1</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	<p>12 days</p>

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	<p>Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>eating disorders peer influence food groups number of servings variety of food nutrients infectious diseases (e.g., colds, flu, chickenpox) noninfectious diseases (e.g. asthma, hay fever, allergies, lyme disease) germs pathogens heredity wellness fitness mental health physical health social health peer pressure quality of life risk factor nutrient nutrition</p>			
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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
Factors Affecting Food Choices	<p>PA Academic Standards: Health, Safety and Physical Education :</p> <p>10.1 Analyze factors that impact nutritional choices of adolescents. Analyze factors that impact nutritional choices of adults.</p> <p>10.2 Assess factors that impact adult health consumer choices. Identify media sources that influence health and safety.</p> <p>Family and Consumer Sciences: 11.3 Explain how scientific and technological developments enhance our food supply (e.g., food preservation techniques, packaging, nutrient fortification)</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension,</p>	<p>Essential Knowledge/Skills: Identify and analyze factors that influence the prevention and control of health problems. Analyze media health and safety messages and describe their impact on personal health and safety Compare and contrast the positive and negative effects of the media on adult personal health and safety. Identify media sources that influence health and safety. Analyze relationship between diet and disease and risk factors (e.g., calcium and osteoporosis; fat, cholesterol and heart disease; folate and birth defects; sodium and hypertension). Evaluate sources of food and nutrition information. Demonstrate knowledge of techniques used to evaluate food in various forms (e.g., canned, frozen, dried, irradiated).</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 2</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	<p>12 days</p>

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	<p>making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12</p> <p>3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>Vocabulary: culture ethnic food soul food food norm food taboo kosher food value status food staple food technology aseptic packaging media, advertising</p>			
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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
How Nutrients Become You	<p>PA Academic Standards:</p> <p>Science</p> <p>3.3 Describe and explain the chemical and structural basis of living organisms.</p> <p>3.4 Recognize basic concepts about the structure and properties of matter. Characterize and identify important classes of compounds</p> <p>Family and Consumer Sciences</p> <p>11.3 Analyze the breakdown of foods, absorption of nutrients and their conversion to energy by the body. Analyze relationship between diet and disease and risk factors (e.g., calcium and osteoporosis; fat, cholesterol and heart disease; folate and birth defects; sodium and hypertension)</p> <p>Health, Safety and Physical Education</p> <p>10.1 Analyze how personal choice, disease and genetics can impact health maintenance and disease prevention.</p>	<p>Essential Knowledge/Skills:</p> <p>Describe and explain the chemical and structural basis of living organisms.</p> <p>Identify the cause, effect and prevention of microbial contamination, parasites and toxic chemicals in food.</p> <p>Analyze relationship between diet and disease and risk factors (e.g., calcium and osteoporosis; fat, cholesterol and heart disease; folate and birth defects; sodium and hypertension). Evaluate the application of nutrition and meal planning principles in the selection, planning, preparation and serving of meals that meet the specific nutritional needs of individuals across their lifespan. Explain the importance of eating a varied diet in maintaining health</p> <p>Vocabulary:</p> <p>kilocalorie digestion enzyme gastrointestinal tract</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 3</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	<p>12 days</p>

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	<p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text- with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>mastication peristalsis gastric juice chyme bile feces absorption villi metabolism ATP food allergy diarrhea constipation indigestion heartburn ulcer gallstones diverticulosis saliva salivary gland, salivary amylase epiglottis esophagus pancreas rectum anus duodenum</p>			
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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
Nutrition Guidelines	<p>PA Academic Standards: Family and Consumer Sciences 11.3 Classify foods by food group within the food guide pyramid including the serving size and nutrient function within the body. Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Explain the role of the food guide pyramid in helping people eat a healthy diet.</p> <ul style="list-style-type: none"> • food groups • number of servings • variety of food • nutrients <p>Health, Safety and Physical Education 10.2 Analyze the relationship between health-related information and adolescent consumer choices.</p> <p>PA Core Standards: Reading for Science and</p>	<p>Essential Knowledge/Skills: Describe a well-balanced daily menu using the dietary guidelines and the food guide pyramid. Analyze factors that impact nutritional choices of adolescents.</p> <ul style="list-style-type: none"> • body image • advertising • dietary guidelines • eating disorders • peer influence • athletic goals <p>Evaluate the role of Government agencies in safeguarding our food supply (e.g., USDA, FDA, EPA and CDC). Analyze the energy requirements, nutrient requirements and body composition for individuals at various stages of the life cycle. Analyze factors that impact nutritional choices of adolescents Analyze factors that impact nutritional choices of adults. Examine and apply a decision-making process to the development</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 4</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p> <p>MyPyramid.gov</p>	<p>12 days</p>

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	<p>Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>of short and long-term health goals.</p> <p>Vocabulary: Dietary Reference Intakes (DRI) Recommended Dietary Allowance (RDA) Estimated Average Requirement (EAR) Adequate Intake (AI) Upper Tolerable Intake Level (UL) Dietary Guidelines for Americans MyPyramid portion size serving size Daily Value Nutrient Density food diary food groups variety moderation personalization whole grain Nutrition Facts Panel menu planning</p>			
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	PA Academic and Core Standards				
Carbohydrates: The Preferred Body Fuel	<p>PA Academic Standards: Science and Technology 3.3 Explain cell functions and processes in terms of chemical reactions and energy changes.</p> <p>Science and Technology: 3.4 Explain concepts about the structure and properties of matter.</p> <p>Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p>	<p>Essential Knowledge/Skills: Explain the repeating pattern of chemical properties by using the repeating patterns of atomic structure. Describe the relationship between the structure of organic molecules and the function they serve in living organisms. Analyze the energy requirements, nutrient requirements and body composition Define energy-yielding nutrients and calories. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes. Analyze the major functions of carbohydrates.</p> <p>Vocabulary: carbohydrates monosaccharide glucose fructose galactose disaccharide sucrose</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 5</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	12 days

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	<p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>lactose maltose polysaccharide starch cellulose fiber soluble fiber insoluble fiber simple carbohydrate complex carbohydrate hormone insulin glucagon glycogen refined sugar pancreas liver diabetes mellitus hypoglycemia hyperglycemia lactase lactose intolerance satiety dental caries hyperactivity</p>			
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	PA Academic and Core Standards				
Fats: A Concentrated Energy Source	<p>PA Academic Standards: Science and Technology 3.3 Explain cell functions and processes in terms of chemical reactions and energy changes.</p> <p>Science and Technology 3.4 Explain concepts about the structure and properties of matter.</p> <p>Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p>	<p>Essential Knowledge/Skills: Explain the repeating pattern of chemical properties by using the repeating patterns of atomic structure. Describe the relationship between the structure of organic molecules and the function they serve in living organisms. Analyze the energy requirements, nutrient requirements and body composition Define energy-yielding nutrients and calories. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes. Analyze the major functions of fats and oils.</p> <p>Vocabulary: lipid triglycerides fatty acid saturated fatty acid unsaturated fatty acid monounsaturated fatty acid polyunsaturated fatty acid</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 6</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	12 days

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	<p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>hydrogenation rancid trans-fatty acid phospholipids lecithin emulsifier sterols cholesterol essential fatty acid adipose tissue chylomicron lipoprotein very low-density lipoprotein (VLDL) low-density lipoprotein (LDL) high-density lipoprotein (HDL) coronary heart disease plaque atherosclerosis heart attack stroke hypertension blood lipid profile omega-3 fatty acid omega-6 fatty acid, cancer fat replacer blood serum</p>			
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	PA Academic and Core Standards				
Proteins: The Body's Building Blocks	<p>PA Academic Standards: Science and Technology 3.3 Explain cell functions and processes in terms of chemical reactions and energy changes.</p> <p>Science and Technology 3.4 Explain concepts about the structure and properties of matter.</p> <p>Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p>	<p>Essential Knowledge/Skills: Explain the repeating pattern of chemical properties by using the repeating patterns of atomic structure. Describe the relationship between the structure of organic molecules and the function they serve in living organisms. Analyze the energy requirements, nutrient requirements and body composition Define energy-yielding nutrients and calories. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes. Analyze the major functions of proteins and amino acids.</p> <p>Vocabulary: protein, amino acid amino group carboxyl group denature nonessential amino acid essential amino acid</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 7</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	<p>12 days</p>

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	<p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>antibody acid base acid-base balance buffer legume vegetarian vegan complete protein incomplete protein complementary proteins nitrogen balance deficiency protein-energy malnutrition (PEM) kwashiorkor marasmus enzymes hemoglobin actin myosin lacto-vegetarian lacto-ovo-vegetarian semi-vegetarian tofu seitan</p>			
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	PA Academic and Core Standards				
Vitamins: Drivers of Cell Processes	<p>PA Academic Standards: Science and Technology 3.3 Explain cell functions and processes in terms of chemical reactions and energy changes.</p> <p>Science and Technology 3.4 Explain concepts about the structure and properties of matter.</p> <p>Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p>	<p>Essential Knowledge/Skills: Explain the repeating pattern of chemical properties by using the repeating patterns of atomic structure. Describe the relationship between the structure of organic molecules and the function they serve in living organisms. Analyze the energy requirements, nutrient requirements and body composition Define energy-yielding nutrients and calories. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes. Analyze the major functions of all vitamins in the body.</p> <p>Vocabulary: vitamin provitamin fat-soluble water soluble toxicity epithelial cells deficiency disease</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 8</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	<p>12 days</p>

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	<p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>night blindness fortified foods ricket osteomalacia antioxidant free radical erythrocyte hemolysis coagulation coenzyme enriched food beriberi pellagra pernicious anemia scurvy collagen phytochemicals riboflavin niacin niacin flush biotin panthothenic acid thiamine folic acid tocopherol acetate retinol carotene beta-carotene jaundice ascorbic acid, choline inositol</p>			
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	PA Academic and Core Standards				
Minerals: Regulators of Body Functions	<p>PA Academic Standards: Science and Technology 3.3 Explain cell functions and processes in terms of chemical reactions and energy changes.</p> <p>Science and Technology 3.4 Explain concepts about the structure and properties of matter.</p> <p>Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for</p>	<p>Essential Knowledge/Skills: Explain the repeating pattern of chemical properties by using the repeating patterns of atomic structure. Describe the relationship between the structure of organic molecules and the function they serve in living organisms. Analyze the energy requirements, nutrient requirements and body composition Define energy-yielding nutrients and calories. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes. Analyze the major functions of all minerals in the body.</p> <p>Vocabulary: mineral macromineral micromineral osteoporosis menopause amenorrhea osmosis</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 9</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	12 days

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	<p>Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>pH acid base hemoglobin myoglobin Iron (Fe) iron-deficiency anemia cofactor enzyme thyroid gland thyroxine metabolism goiter Iodine (I) cretinism fluorosis trace minerals calcium (Ca) phosphorus (P) magnesium (Mg) Sulfur (S) Sodium (Na) Potassium (K) Chlorine (Cl) zinc (Zn) Copper (Cu) ATP</p>			
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	PA Academic and Core Standards				
Water: The Forgotten Nutrient	<p>PA Academic Standards: Science and Technology 3.3 Explain cell functions and processes in terms of chemical reactions and energy changes.</p> <p>Science and Technology 3.4 Explain concepts about the structure and properties of matter.</p> <p>Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p>	<p>Essential Knowledge/Skills: Explain the repeating pattern of chemical properties by using the repeating patterns of atomic structure. Describe the relationship between the structure of organic molecules and the function they serve in living organisms. Analyze the energy requirements, nutrient requirements and body composition Define energy-yielding nutrients and calories. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes Analyze the major functions of water in the body.</p> <p>Vocabulary: reactant solvent solute solution lubricant intracellular water extracellular fluid</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 10</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	<p>12 days</p>

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	<p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>tissue fluid cytosol plasma water intoxication hypotonic hypertonic isotonic diuretic dehydration fatigue hydrogen bonds polar non-polar perspiration urine saliva homeostasis percent water content</p>			
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	PA Academic and Core Standards				
The Energy Balancing Act	<p>PA Academic Standards: Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>Health, Safety and Physical Education 10.2 Explain the relationship between health-related information and consumer choices.</p> <ul style="list-style-type: none"> • dietary guidelines/food selection • sun exposure guidelines/sunscreen selection, <p>Health, Safety and Physical Education 10.4 Analyze and engage in physical activities that are developmentally/ individually appropriate and support achievement of personal fitness and activity goals.</p> <p>PA Core Standards:</p>	<p>Essential Knowledge/Skills: Explain the relationship between calories, nutrient and food input versus energy output; describe digestion. Analyze the breakdown of foods, absorption of nutrients and their conversion to energy by the body. Explain the relationship between calories, nutrient and food input versus energy output. Analyze the effects of regular participation in moderate to vigorous physical activities in relation to adolescent health improvement.</p> <ul style="list-style-type: none"> • stress management • disease prevention • weight management <p>Identify and apply ways to monitor and assess the body's response to moderate to vigorous physical activity.</p> <ul style="list-style-type: none"> • heart rate monitoring • checking blood pressure • fitness assessment <p>Vocabulary: energy</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 12</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	<p>12 days</p>

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	<p>Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>calorie calorie density nutrient density basal metabolism basal metabolic rate (BMR) body composition body weight sedentary activity thermic effect of food ketone bodies ketosis acidosis body mass index (BMI) healthy weight overweight obese underweight percent body fat lean tissue skinfold test underwater weight subcutaneous fat bioelectrical impedance Height-weight tables waist-hip ratio</p>			
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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
Healthy Weight Management	<p>PA Academic Standards: Family and Consumer Sciences 11.3 Evaluate sources of food and nutrition information.</p> <p>Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>Health, Safety and Physical Education 10.2 Explain the relationship between health-related information and consumer choices.</p> <ul style="list-style-type: none"> • dietary guidelines/food selection • sun exposure guidelines/sunscreen selection, <p>Health, Safety and Physical Education 10.4 Analyze and engage in physical activities that are developmentally/ individually appropriate and support achievement of personal fitness and activity goals.</p>	<p>Essential Knowledge/Skills: Explain the relationship between calories, nutrient and food input versus energy output; describe digestion. Analyze the breakdown of foods, absorption of nutrients and their conversion to energy by the body. Explain the relationship between calories, nutrient and food input versus energy output. Analyze the effects of regular participation in moderate to vigorous physical activities in relation to adolescent health improvement. Identify and apply ways to monitor and assess the body’s response to moderate to vigorous physical activity.</p> <ul style="list-style-type: none"> • heart rate monitoring • checking blood pressure • fitness assessment. <p>Evaluate how changes in adult health status may affect the responses of the body systems during moderate to vigorous physical activity</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 13</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	12 days

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	<p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text- with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>Vocabulary: weight management habit, environmental cue fad diet yo-yo dieting crash diet fasting weight cycling set point theory obesity metabolic syndrome weight status heredity lifestyle choices bone density</p>			
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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
Eating Disorders	<p>PA Academic Standards: Health, Safety and Physical Education 10.1 Analyze nutritional concepts that impact health.</p> <p>Health, Safety and Physical Education 10.2 Explain the relationship between health-related information and consumer choices.</p> <ul style="list-style-type: none"> • dietary guidelines/food selection • sun exposure guidelines/sunscreen selection. <p>Science and Technology 3.3 Explain cell functions and processes in terms of chemical reactions and energy changes.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and</p>	<p>Essential Knowledge/Skills: Analyze factors that impact growth and development between adolescence and adulthood. Evaluate factors that impact the body systems and apply protective/preventive strategies. Analyze nutritional concepts that impact health. Identify and analyze factors that influence the prevention and control of health problems. Compare and contrast the positive and negative effects of the media on adult personal health and safety. Analyze the signs and symptoms of eating disorders.</p> <p>Vocabulary: eating disorder anorexia nervosa bulimia nervosa binge eating purging female athlete triad depression antidepressant outpatient</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 14</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	12 days

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	<p>between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12</p> <p>3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>laxatives amenorrhea muscle atrophy tooth enamel social pressure <i>reward</i> center dopamine serotonin psychological influences genetic influences genes traits heredity</p>			
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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
Careers in Nutrition	<p>PA Academic Standards: Science, Technology and Human Endeavors 3.8 Analyze the relationship between societal demands and scientific and technological enterprises.</p> <p>PA Core Standards: Reading for Science and Technical Subjects, 6-12 3.5 Reading Informational Text Students read, understand, and respond to informational text- with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.</p> <p>PA Core Standards: Writing for Science and Technical Subjects, 6-12 3.6 Writing Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.</p>	<p>Essential Knowledge/Skills: Evaluate career opportunities, job titles, responsibilities and qualifications. Determine licensing and certifications necessary, use effective techniques to find, keep and leave a job.</p> <p>Vocabulary: bachelor’s degree dietitian dietetics registered dietitian (RD) master’s degree doctoral degree dietetic technician associate degree preventative healthcare certification license aptitude ability goal employability skill problem solving entry-level job portfolio networking resume</p>	<p>Approved textbook <i>Nutrition Food and Fitness</i>, Chapter 25</p>	<p>Teacher prepared tests, quizzes, etc.</p> <p>Series available assessments online. (Optional)</p>	12 days

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		reference job interview mentor ethics entrepreneur			
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General Topic	Anchor Descriptor	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
	PA Academic and Core Standards				
Final Exam					12 days

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PA Core Standards:

Reading for Science and Technical Subjects, 6-12

3.5 Reading Informational Text

Students read, understand, and respond to informational text-with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.

Grades 9-10

CC.3.5.9-10.A.

Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.

CC.3.5.9-10.B.

Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.

CC.3.5.9-10.C.

Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.

CC.3.5.9-10.D.

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 to grades 9–10 texts and topics.

CC.3.5.9-10.E.

Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).

CC.3.5.9-10.F.

Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.

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CC.3.5.9-10.G.

Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

CC.3.5.9-10.H.

Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.

CC.3.5.9-10.I.

Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.

CC.3.5.9-10.J.

By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.

Grades 11-12

CC.3.5.11-12.A.

Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

CC.3.5.11-12.B.

Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

CC.3.5.11-12.C.

Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

CC.3.5.11-12.D.

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 to grades 11–12 texts and topics.

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CC.3.5.11-12.E.

Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

CC.3.5.11-12.F.

Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

CC.3.5.11-12.G.

Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CC.3.5.11-12.H.

Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

CC.3.5.11-12.I.

Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

CC.3.5.11-12.J.

By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.

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PA Core Standards:

Writing for Science and Technical Subjects, 6-12

3.6 Writing

Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.

Grades 9-10

CC.3.6.9-10.A.

Write arguments focused on discipline-specific content.

- Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.
- Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience’s knowledge level and concerns.
- Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
- Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- Provide a concluding statement or section that follows from or supports the argument presented.

CC.3.6.9-10B. *

Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

- Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
- Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.
- Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.
- Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers.
- Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.

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- Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

CC.3.6.9-10.C.

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CC.3.6.9-10.D.

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience

CC.3.6.9-10.E.

Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

CC.3.6.9-10.F.

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

CC.3.6.9-10.G.

Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

CC.3.6.9-10.H.

Draw evidence from informational texts to support analysis, reflection, and research.

CC.3.6.9-10.I.

Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Grades 11-12

CC.3.6.11-12.A.

Write arguments focused on discipline-specific content.

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- Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.
- Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline appropriate form that anticipates the audience’s knowledge level, concerns, values, and possible biases.
- Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
- Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- Provide a concluding statement or section that follows from or supports the argument presented.

CC.3.6.11-12. B *Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

- Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
- Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.
- Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
- Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.
- Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic)

CC.3.6.11-12.C.

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CC.3.6.11-12.D.

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

CC.3.6.11-12.E.

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

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CC.3.6.11-12.F.

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

CC.3.6.11-12.G.

Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

CC.3.6.11-12.H.

Draw evidence from informational texts to support analysis, reflection, and research.

CC.3.6.11-12.I.

Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.