

Columbus County Schools Science Curriculum Guide

SUBJECT: Science	GRADE LEVEL: 8th	GRADING PERIOD:
Module(s): C The Human body	Time Frame: 15 days Dates: March 2nd – March 20th	Unit: 6 Diseases/ Molecular Biology/ Nutrition
Essential Standard: 8. L.1: Understand the hazards caused by agents of diseases that affect living organisms.		
Essential Standard : 8.L.5: Understand the composition of various substances as it relates to their ability to serve as a source of energy and building materials for growth and repair of organisms.		

Lessons:	Technology and Literacy Standards and Tasks	Academic Vocabulary:	Assessment(s):	Additional Resources:
<p>Lesson Name:</p> <p>Infectious Diseases</p> <p>Clarifying Objective:</p> <p>8. L.1.1:</p> <p>Summarize the basic characteristics of viruses, bacteria, fungi and parasites relating to the spread, treatment and prevention of disease.</p> <p>Time Frame: 7 days</p>	<ul style="list-style-type: none"> • CCSS.ELA-Literacy.RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts. • CCSS.ELA-Literacy.RST.6-8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. • CCSS.ELA-Literacy.RST.6-8.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. 	<ul style="list-style-type: none"> ★ virus ★ bacteria ★ fungi ★ disease ★ epidemic ★ pandemic ★ host cell ★ vaccine ★ AIDS ★ influenza ★ common cold ★ polio ★ chicken pox ★ small pox ★ yellow fever ★ meningitis ★ West Nile ★ Ebola ★ rabies ★ Lyme disease 	<p>Formative:</p> <ul style="list-style-type: none"> • Quizzes • Cooperative Activities • Labs, Science Notebook • Foldables • Word Maps (graphic organizers) • Bell Ringer/Exit Tickets <p>Science Formative Assessment 75 practical strategies (Keeley)</p> <ul style="list-style-type: none"> • Juicy questions p.121 • K.W.L. variations 	<p>Use Science Fusion (Module C- Infectious Disease Unit 2 Lesson 2)</p> <p>Pg. 146- 157 teacher pages</p> <p>Use Science Fusion (Module A- Cells and Heredity) Unit 1 Lesson 2- Chemistry of Life</p> <p>Pg. 30- 42 teacher pages</p> <p>Use Science Fusion (Module C- The Human Body) Unit 2 Lesson 3- Health and Nutrition</p> <p>Pg. 158- 171 teacher pages</p> <ul style="list-style-type: none"> • NCDPI Curriculum Units Grade 8:

<p>Essential Question:</p> <p>What causes disease?</p>	<p>CCSS.ELA-Literacy.RST.6-8.6</p> <p>Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.</p> <p>Activity: Write to Learn</p> <p>Biology: 16.4 Disease-causing Bacteria</p> <p>Biology: 16.5 Viral Structures and the Diseases Viruses Can Cause</p>	<ul style="list-style-type: none"> ★ leprosy ★ antibiotic ★ antiviral drug ★ vector ★ infectious disease ★ noninfectious disease ★ pathogen ★ biomedical research ★ tuberculosis 	<p>p.128</p> <ul style="list-style-type: none"> • Odd one out p.142 <p>Uncovering student ideas in science. Vol. 1 (Keeley)</p> <ul style="list-style-type: none"> • Is it living? P.123 <p>Uncovering student ideas in science. Vol. 4 (Keeley)</p> <ul style="list-style-type: none"> • Catching a cold p.125 <p>Summative:</p> <ul style="list-style-type: none"> • Projects (with rubrics: Powerpoint/Flipchart, Animoto, Prezi, brochures, WebQuests, internet based research assignments • ClassScape: Classroom based and County Benchmark • Chapter and Unit tests(Science fusion Test bank) 	<p>“There’s a Small World Out There”</p> <ul style="list-style-type: none"> • <i>McDougal Littell Science Grade 8: Unit E: 5.1, 5.2, 5.3, pp. NC 28-30</i> • <i>North Carolina End of Grade Coach (2013): Chapter 4</i> • <i>Passing the North Carolina EOG Science (American Book Company): Ch. 25, 26, 27</i> • <i>McDougal Littell Science Grade 8: NC 16-20</i>
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<p>Lesson Name: Chemistry of Life</p> <p>Clarifying Objective: 8.L.5.1 Summarize how food provides the energy and the molecules required for building materials, growth and survival of all organisms (to include plants).</p> <p>Time Frame: 3 days</p> <p>Essential Question: What are the building blocks of organisms?</p>	<ul style="list-style-type: none"> • CCSS.ELA-Literacy.RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts. • CCSS.ELA-Literacy.RST.6-8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. • CCSS.ELA-Literacy.RST.6-8.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. • CCSS.ELA-Literacy.RST.6-8.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. <p>Activity: Write to Learn</p> <p>Science 6 7.2 How do organisms get energy?</p> <p>Science 6 2.3 How do</p>	<ul style="list-style-type: none"> ★ Carbohydrates ★ Nucleic acid ★ Lipid ★ Phospholipid ★ Protein ★ macronutrients 	<p>Formative:</p> <ul style="list-style-type: none"> • Quizzes • Cooperative Activities • Labs, Science Notebook • Foldables • Word Maps (graphic organizers) • Bell Ringer/Exit Tickets <p>Science Formative Assessment 75 practical strategies (Keeley)</p> <ul style="list-style-type: none"> • Juicy questions p.121 • K.W.L. variations p.128 • Odd one out p.142 <p>Uncovering student ideas in science. Vol. 1 (Keeley)</p> <ul style="list-style-type: none"> • Is it living? P.123 <p>Uncovering student ideas in science. Vol. 4 (Keeley)</p> <ul style="list-style-type: none"> • Catching a cold p.125 <p>Summative:</p>	<p>Use Science Fusion (Module A- Cells and Heredity) Unit 1 Lesson 2- Chemistry of Life</p> <p>Pg. 30- 42 teacher pages</p> <ul style="list-style-type: none"> • NCDPI Curriculum Units Grade 8: "There's a Small World Out There" • <i>McDougal Littell Science</i> Grade 8: Unit E: 5.1, 5.2, 5.3, pp. NC 28-30 • <i>North Carolina End of Grade Coach (2013):</i> Chapter 4 • <i>Passing the North Carolina EOG Science</i> (American Book Company): Ch. 25, 26, 27 • <i>McDougal Littell Science</i> Grade 8: NC 16-20
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	<p>cells grow and divide?</p> <p>Cells and Heredity: 1.3</p> <p>Chemical Compounds in Cells</p>		<ul style="list-style-type: none"> Projects (with rubrics: Powerpoint/Flipchart, Animoto, Prezi, brochures, WebQuests, internet based research assignments) ClassScape: Classroom based and County Benchmark Chapter and Unit tests(Science fusion Test bank) 	
<p>Lesson Name: Nutrition and Fitness</p> <p>Clarifying Objective: 8. L.5.2: Explain the relationship among a healthy diet, exercise, and the general health of the body (emphasis on the relationship between respiration and digestion.)</p> <p>Time Frame: 5 days</p>	<ul style="list-style-type: none"> CCSS.ELA-Literacy.RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts. CCSS.ELA-Literacy.RST.6-8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. CCSS.ELA-Literacy.RST.6-8.5 Analyze the structure an author uses to organize a text, including how the major 	<ul style="list-style-type: none"> ★ treatment ★ prevention ★ Carbohydrates ★ Nucleic acid ★ Lipid ★ Phospholipid ★ Protein ★ hygiene 	<p>Formative:</p> <ul style="list-style-type: none"> Quizzes Cooperative Activities Labs, Science Notebook Foldables Word Maps (graphic organizers) Bell Ringer/Exit Tickets <p>Science Formative Assessment 75 practical strategies (Keeley)</p>	<p>Use Science Fusion (Module C- The Human Body) Unit 2 Lesson 3- Health and Nutrition</p> <p>Pg. 158- 171 teacher pages</p> <ul style="list-style-type: none"> NCDPI Curriculum Units Grade 8: “There’s a Small World Out There” <i>McDougal Littell Science</i> Grade 8: Unit E: 5.1, 5.2, 5.3, pp. NC 28-30

<p>Essential Question:</p> <p>How are nutrition, fitness, and health related?</p>	<p>sections contribute to the whole and to an understanding of the topic.</p> <p>CCSS.ELA-Literacy.RST.6-8.6</p> <p>Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.</p> <p>Activity: Write to Learn</p> <p>Human Biology and Health: 2.1 Food and Energy</p>		<ul style="list-style-type: none"> • Juicy questions p.121 • K.W.L. variations p.128 • Odd one out p.142 <p>Uncovering student ideas in science. Vol. 1 (Keeley)</p> <ul style="list-style-type: none"> • Is it living? P.123 <p>Uncovering student ideas in science. Vol. 4 (Keeley)</p> <ul style="list-style-type: none"> • Catching a cold p.125 <p>Summative:</p> <ul style="list-style-type: none"> • Projects (with rubrics: Powerpoint/Flipchart, Animoto, Prezi, brochures, WebQuests, internet based research assignments • Chapter and Unit tests(Science fusion Test bank) 	<ul style="list-style-type: none"> • <i>North Carolina End of Grade Coach (2013):</i> Chapter 4 • <i>Passing the North Carolina EOG Science</i> (American Book Company): Ch. 25, 26, 27 • <i>McDougal Littell Science</i> Grade 8: NC 16-20
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