

\*Anoka-Hennepin Secondary Curriculum Unit Plan

Department:	Science	Course:	Science 7 (Life Science)	Unit 6 Title:	Human Body	Grade Level(s):	7th Grade
Assessed Trimester:	Trimester 3	Pacing:	25-30 Days	Date Created:		Last Revision Date:	6.24.14

**Course Understandings:** *Students will understand that:*

- All living things are composed of cells and multicellular organisms have specialized cells, tissues, organs and organ systems that work together to maintain internal balance (homeostasis).

DESIRED RESULTS (Stage 1) - WHAT WE WANT STUDENT TO KNOW AND BE ABLE TO DO?

Established Goals
<ul style="list-style-type: none"><li>• <b>Standard:</b> Structure and Function in Living Systems Tissues, organs and organ systems are composed of cells and function to serve the needs of all cells for food, air and waste removal. <b>Benchmark:</b>     <b>7.4.1.1.2:</b> Describe how the organs in the respiratory, circulatory, digestive, nervous, skin and urinary systems interact to serve the needs of vertebrate organisms.</li><li>• <b>Standard:</b> Human Interactions with Living Systems Human beings are constantly interacting with other organisms that cause disease. <b>Benchmark:</b>     <b>7.4.4.2.1:</b> Explain how viruses, bacteria, fungi and parasites may infect the human body and interfere with normal body functions.     <b>7.4.4.2.2:</b> Recognize that a microorganism can cause specific diseases and that there are a variety of medicines available that can be used to combat a given microorganism.     <b>7.4.4.2.3:</b> Recognize that vaccines induce the body to build immunity to a disease without actually causing the disease itself.     <b>7.4.4.2.4:</b> Recognize that the human immune system protects against microscopic organisms and foreign substances that enter from outside the body and against some cancer cells that arise from within.</li><li>• <b>Standard:</b> Science Literacy <b>Reading Benchmark:</b> <i>Key ideas and details</i>     <b>6.13.1.1:</b> Cite specific textual evidence to support analysis of science and technical texts.     <b>6.13.2.2:</b> Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions     <b>6.13.3.3:</b> Follow precisely a multistep procedure when carrying out experiments, designing solutions, taking measurements, or performing technical tasks. <i>Craft and structure</i>     <b>6.13.4.4:</b> Determine the meaning of symbols, equations, graphical representations, tabular representations, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 6–8 texts and topics</i>.     <b>6.13.5.5:</b> 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. <i>Integration of knowledge and ideas</i>     <b>6.13.9.9:</b> Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. <i>Range of reading and level of text complexity</i>     <b>6.13.10.10:</b> By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. <b>Writing Benchmark:</b> <i>Text types and purposes</i>     <b>6.14.1.1:</b> Write arguments focused on <i>discipline-specific content</i>.         a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.         b. Support claim(s) with logical reasoning and relevant, accurate data and credible evidence that demonstrate an understanding of the topic or text, using credible sources.         c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.         d. Establish and maintain a formal style.     Provide a concluding statement or section that follows from and supports the argument presented. <i>Research to build and present knowledge</i></li></ul>

<div>6.14.9.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.</div> <div>Range of writing</div> <div>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, purposed, and audiences.</div>	
Transfer	
<div>Students will be able to independently use their learning to: (product, high order reasoning)</div> <div><ul style="list-style-type: none"><li>To understand that all human body systems are interdependent. 7.4.1.1.2</li><li>To understand that disease affects the ability of our bodies to function normally. 7.4.4.2.1, 7.4.4.2.2, 7.4.4.2.3, 7.4.4.2.4</li><li>To recognize that some diseases come from inside the body and some diseases come from outside the body. 7.4.4.2.4</li><li>To understand the language of science allows us to communicate effectively and efficiently.</li></ul></div>	
Meaning	
<div>Unit Understanding(s):</div> <div>Students will understand that:</div> <div><ul style="list-style-type: none"><li>The human body relies on interdependence among systems in its structure and functions. 7.4.1.1.2</li><li>Human wellness depends on the maintenance and sustainability of body systems. 7.4.1.1.2</li><li>Disease can be caused by genetics, infections by other organisms, exposure to environmental factors, or a combination of these. 7.4.4.2.1, 7.4.4.2.2, 7.4.4.2.3, 7.4.4.2.4</li><li>Proper food, exercise, and rest help to maintain body systems. 7.4.1.1.2</li></ul></div>	<div>Essential Question(s):</div> <div>Students will keep considering:</div> <div><ul style="list-style-type: none"><li>How does my body work?</li><li>Why do I get sick?</li><li>How can I keep myself healthy?</li></ul></div>
Acquisition	
<div>Knowledge - Students will:</div> <div><ul style="list-style-type: none"><li>Know and identify the major organs in the respiratory, circulatory, digestive, nervous, skin and urinary systems. 7.4.1.1.2</li><li>Understand the difference between viruses and bacteria. 7.4.4.2.1</li><li>Because of 7.4.1.1.1, I know the normal body functions. 7.4.4.2.1</li><li>Analyze how viruses, bacteria, fungus and parasites interfere with normal body function. 7.4.4.2.1</li><li>Recognize that a microorganism can cause disease.</li><li>Know that there are a variety of medicines available to fight microorganisms. 7.4.4.2.2</li><li>Recognize that vaccines help the body build immunity without causing illness. 7.4.4.2.3</li><li>Recognize the basic function of the immune system. 7.4.4.2.4</li><li>Recognize that disease causing cancer cells can come from within the body. 7.4.4.2.4</li><li>Distinguish between internal and external causes of disease. 7.4.4.2.4</li></ul></div>	<div>Reasoning - Students will:</div> <div><ul style="list-style-type: none"><li>Analyze how organ systems interact to serve the needs of vertebrates. 7.4.1.1.2</li></ul></div> <div>Skills - Students will:</div> <div><ul style="list-style-type: none"><li></li></ul></div>

<div>Common Misunderstandings</div> <div><ul style="list-style-type: none"><li>Organ systems operate in isolation from each other.</li><li>Viruses are alive.</li><li>All illnesses can be cured with medicine.</li><li>Every illness is caused by germs.</li><li>All diseases are caused by the same type of germ.</li></ul></div>	<div>Essential new vocabulary</div> <div><div><ul style="list-style-type: none"><li>Cell</li><li>Tissue</li><li>Organ</li><li>Organ System</li><li>Organism</li><li>Virus</li><li>Bacteria</li></ul></div><div><ul style="list-style-type: none"><li>Fungi</li><li>Parasites</li><li>Microorganism</li><li>Immunity</li><li>Cancer</li><li>Disease</li><li>Vaccine</li></ul></div></div>
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