

**Inquiry Investigations™**  
**Human Biology and Health Issues MODULE - 1287211**  
**Grades: 7-10**

Frey Scientific  
 80 Northwest Boulevard  
 Nashua, NH 03063-4067  
 1-800-225-3739  
 www.freyscientific.com  
 www.freyscientific.com/inquiryinvestigations

**Mississippi K-12 Curriculum Framework**  
**Science**  
**Grade 7**

COMPETENCY	MS.1	Compare and contrast structure and function in living systems. (L)
OBJECTIVE	1.b.	Describe the process of respiration and the use of its products. <ul style="list-style-type: none"> <li>Teacher Resource CD: The Human Machine</li> </ul>
OBJECTIVE	1.c.	Illustrate the parts of the digestive system and the interaction of each part. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	Illustrate the parts of and interaction between the respiratory and circulatory system. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.e.	Illustrate the parts of the excretory system and the interaction of each part. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>

<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Determine how organisms co-exist in their environment. (L)</b>
<b>OBJECTIVE</b>	<b>3.b.</b>	Investigate homeostasis as it relates to plants and animals. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> <li>Teacher Resource CD: Human Physiology</li> <li>Teacher Resource CD: The Human Machine</li> </ul>

Mississippi K-12 Curriculum Framework  
Science  
Grade 8

<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Analyze and relate structure and function in living systems. (L)</b>
<b>OBJECTIVE</b>	<b>1.a.</b>	Analyze body systems and their functions. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> <li>Teacher Resource CD: Human Physiology</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>OBJECTIVE</b>	<b>1.b.</b>	Relate interactions among body systems. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>OBJECTIVE</b>	<b>1.c.</b>	Identify the parts of and show the interaction between the reproductive and endocrine systems. <ul style="list-style-type: none"> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>OBJECTIVE</b>	<b>1.d.</b>	Examine diseases that are the result of body system failures or infection by other organisms. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>

<b>COMPETENCY</b>	<b>MS.8.</b>	<b>Analyze the properties of matter. (P)</b>
<b>OBJECTIVE</b>	<b>8.f.</b>	Determine experimentally how acidic or basic a substance is using a pH scale indicator. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>

Mississippi K-12 Curriculum Framework  
Science  
Grade 9

<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Biology 1: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)</b>
-------------------	--------------	---

OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in biology.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	Observe and practice safe procedures in the classroom and laboratory.

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Biology I: Investigate the biochemical basis of life. (L, P)
OBJECTIVE	2.d.	<p>Classify solutions using the pH scale and relate the importance of pH to organism survival.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
OBJECTIVE	2.e.	Compare the structure, properties and functions of carbohydrates, lipids,

		<p>proteins and nucleic acids in living organisms.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Teacher Resource CD: Human Physiology</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Biology I: Investigate cell structures, functions, and methods of reproduction. (L)</b>
<b>OBJECTIVE</b>	<b>3.c.</b>	<p>Identify and describe the structure and basic functions of the major eukaryotic organelles.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>OBJECTIVE</b>	<b>3.d.</b>	<p>Describe the way in which cells are organized in multicellular organisms.</p> <ul style="list-style-type: none"> <li>• Teacher Resource CD: The Human Machine</li> </ul>
<b>OBJECTIVE</b>	<b>3.e.</b>	<p>Relate cell membrane structure to its function in passive and active transport.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Teacher Resource CD: Human Physiology</li> </ul>
<b>COMPETENCY</b>	<b>MS.5.</b>	<b>Biology I: Investigate the principles, mechanisms, and methodology of classical and molecular genetics. (L, P)</b>
<b>OBJECTIVE</b>	<b>5.b.</b>	<p>Identify and illustrate how changes in DNA cause mutations and evaluate the significance of these changes.</p> <ul style="list-style-type: none"> <li>• Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.6.</b>	<b>Biology I: Investigate concepts of natural selection as they relate to diversity of life. (L)</b>
<b>OBJECTIVE</b>	<b>6.d.</b>	<p>Compare the structures and functions of viruses and bacteria relating their impact on other living organisms.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> </ul>

		<ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Biology II: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)</b>
<b>OBJECTIVE</b>	<b>1.a.</b>	<p>Demonstrate the proper use and care for scientific equipment used in biology.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2:</li> </ul>

		<p>Measuring Range of Vision</p> <ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Biology II: Investigate chemical processes of the cell that maintain life. (L, P)</b>
<b>OBJECTIVE</b>	<b>2.a.</b>	<p>Relate chemical structure and characteristics of organic compounds to cell and organism functions.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.4.</b>	<b>Biology II: Investigate the role that natural selection plays in maintaining diversity. (L, E)</b>
<b>OBJECTIVE</b>	<b>4.c.</b>	<p>Examine factors that affect populations, such as distribution, competition, migration, isolation, and disease.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.6.</b>	<b>Biology II: Examine the behavior of organisms. (L)</b>
<b>OBJECTIVE</b>	<b>6.a.</b>	<p>Analyze the behavioral responses of an organism to internal and external stimuli.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1:</li> </ul>

		<p>Measuring Reaction Time</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
OBJECTIVE	6.b.	<p>Associate function of the nervous system to behavior.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	6.d.	<p>Compare the selective advantage of several behavioral responses.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>
COMPETENCY	MS.1.	Physical Science: Demonstrate the proper use of scientific methods and investigative techniques. (P)
OBJECTIVE	1.c.	<p>Demonstrate safe and proper use of scientific equipment.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Physical Science: Identify basic structure of matter. (P)</b>
<b>OBJECTIVE</b>	<b>3.d.</b>	<p>Differentiate between elements, compounds, solutions, and mixtures.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
<b>COMPETENCY</b>	<b>MS.13.</b>	<b>Earth Science: Demonstrate the proper use of scientific methods and investigative techniques. (L, E, P)</b>
<b>OBJECTIVE</b>	<b>13.c.</b>	<p>Demonstrate safe and proper use of scientific equipment.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Chemistry I: Explain how the properties of matter relate to structure and changes in structure. (P)</b>
<b>OBJECTIVE</b>	<b>1.b.</b>	<p>Observe and practice safe procedures in classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is</li> </ul>

		<p>There a Hole in Your Hand?</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Apply the language of chemistry appropriately including terms such as element, atom, compound, and molecule.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	1.e.	<p>Classify a material as element, compound, solution or heterogeneous mixture.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
COMPETENCY	MS.11	Chemistry I: Describe and explain the solution process. (P)

OBJECTIVE	11.a.	Describe solutions in terms of solute and solvent; electrolyte or non-electrolyte; soluble or insoluble; unsaturated, saturated or supersaturated; miscible or immiscible. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
COMPETENCY	MS.13.	Chemistry I: Visualize and explain acid-base interactions applying concepts of chemical bonding and solutions. (P, L)
OBJECTIVE	13.a.	Compare properties of acids and bases, including how they affect indicators and the relative pH of the solution. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
OBJECTIVE	13.e.	Describe the role of indicators in experimental prediction of pH. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> </ul>
COMPETENCY	MS.4.	Chemistry II: Apply stoichiometric principles to reactions that occur in aqueous solution. (P)
OBJECTIVE	4.a.	Represent reactions in aqueous solution with net ionic equations. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
COMPETENCY	MS.10.	Chemistry II: Describe the structure, reactions, and uses of selected organic compounds. (P, L)
OBJECTIVE	10.a.	Determine the name or structural formula for given hydrocarbons and functional groups. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	10.b.	Illustrate some common reactions of hydrocarbons. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1:</li> </ul>

		Testing for Food Nutrient Content
OBJECTIVE	10.d.	Describe the structure and function of biochemical compounds. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.1.	Physics I: Apply fundamental mathematics used in physical concepts. (P)
OBJECTIVE	1.d.	Manipulate equations to solve problems. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> </ul>
COMPETENCY	MS.6.	Physics I: Investigate the principles related to electromagnetic radiation. (P)
OBJECTIVE	6.c.	Describe the characteristics of lenses and mirrors conceptually, mathematically and/or pictorially. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> </ul>
COMPETENCY	MS.1.	Human Anatomy and Physiology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	Demonstrate the proper use and care for scientific equipment used in life science. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<p><b>OBJECTIVE</b></p>	<p>1.c.</p>	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Human Anatomy and Physiology: Describe the basic organization of the body using the appropriate anatomical concepts. (L)</b>
<b>OBJECTIVE</b>	2.a.	<p>Define the terms: anatomy, physiology, and homeostasis; explain the importance of the interaction between structure and function of organs and organ systems in the human body.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1:</li> </ul>

		<p>Testing for Food Nutrient Content</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Teacher Resource CD: Human Health Issues and Disease</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Teacher Resource CD: The Human Machine</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.b.	<p>Describe the anatomical position and apply anatomical terms, terms of direction, and planes of section to describe the body and the relationship of its parts.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A</li> </ul>

		<p>Closer Look at Blood</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Teacher Resource CD: Human Health Issues and Disease</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Teacher Resource CD: The Human Machine</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.c.	<p>Identify the cavities of the body and locate the essential organs in each.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> <li>Teacher Resource CD: Human Physiology</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Human Anatomy and Physiology: Discuss the biochemical composition of the human body. (L, P)</b>
<b>OBJECTIVE</b>	<b>3.a.</b>	<p>Identify the major elements that form the bulk of body matter.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>3.b.</b>	<p>Explain the relationships among atoms, molecules, elements, and compounds.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>3.c.</b>	<p>Explain the importance of water to body homeostasis.</p>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> <li>Teacher Resource CD: Human Physiology</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
OBJECTIVE	3.d.	<p>Describe the concept of pH and its relationship to acids and bases in the human body.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
OBJECTIVE	3.e.	<p>Name the four major groups of organic substances in the human body and give examples and functions of specific members of each group.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.4.	Human Anatomy and Physiology: Explore the relationship of the cell to the more complex levels of organization within the body. (L)
OBJECTIVE	4.b.	<p>Relate plasma membrane structure to active and passive transport mechanisms.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
OBJECTIVE	4.c.	<p>Name the four major categories of tissues and compare the location, structure, and function of each.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.5.	Human Anatomy and Physiology: Identify the structure and function of the

		human body systems, explore the interactions among the systems and investigate major disorders/diseases. (L)
OBJECTIVE	5.a.	<p>Associated with each of the following: Integumentary; Skeletal; Muscular; Nervous; Endocrine; Digestive; Respiratory; Circulatory; Lymphatic; Urinary; Reproductive.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Teacher Resource CD: The Human Machine</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.1.	Science Skills and Reasoning: Observe and practice safe procedures in the classroom and laboratory. (L, E, P)
OBJECTIVE	1.a.	<p>Demonstrate knowledge of safety rules before working in the laboratory and model all safety rules in each lab activity.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Demonstrate proper use and care of scientific equipment to include the compound light microscope.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Demonstrate accuracy and precision when using scientific equipment.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Science Skills and Reasoning: Utilize critical thinking and scientific problem solving in designing and performing scientific research and experimentation. (L, E, P)
OBJECTIVE	2.c.	<p>Demonstrate an ability to record and organize data from a variety of sources (scientific articles, magazines, and journals).</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4:</li> </ul>

		<p>Responding to Sound</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.d.	<p>Identify and apply the components of scientific methods in classroom and laboratory investigations using the processes of predicting, observing, gathering data, and drawing conclusions.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.3.	Science Skills and Reasoning: Interpret and communicate results of scientific investigations in oral, written, and graphic form. (L, E, P)
OBJECTIVE	3.a.	<p>Demonstrate graphing techniques: plotting points, labeling x- and y-axis, title, and legends for pie, bar, and line graphs.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>
OBJECTIVE	3.b.	<p>Generate and interpret graphs from classroom experiments.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>
OBJECTIVE	3.c.	<p>Draw conclusions about current scientific issues using graphs found in scientific literature.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1:</li> </ul>

		<p>Determining ABO-Rh Blood Type</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.4.</b>	<b>Science Skills and Reasoning: Investigate the chemical basis of life. (L, P)</b>
<b>OBJECTIVE</b>	4.a.	<p>Describe differences among atoms, elements, ions, molecules and compounds.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
<b>OBJECTIVE</b>	4.c.	<p>Identify the chemical symbols of elements needed for life.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	4.e.	<p>Identify properties of acids and bases and use pH to classify substances as basic, acidic, or neutral.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
<b>OBJECTIVE</b>	4.f.	<p>Identify the functions of carbohydrates, proteins, lipids, and nucleic acids in living organisms with examples of each.</p>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>COMPETENCY</b>	<b>MS.5.</b>	<b>Science Skills and Reasoning: Investigate cell structures, functions, and methods of reproduction. (L)</b>
<b>OBJECTIVE</b>	<b>5.b.</b>	<p>Distinguish between plant and animal eukaryotic cell structures.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>OBJECTIVE</b>	<b>5.c.</b>	<p>Identify and describe the structure and basic functions of the major eukaryotic organelles.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>OBJECTIVE</b>	<b>5.d.</b>	<p>Explain the differences among tissues, organs, and organ systems.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>OBJECTIVE</b>	<b>5.e.</b>	<p>Describe the structure and function of a selectively permeable membrane and its role in diffusion and osmosis.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Biomedical Research: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, E, P)</b>

OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in the laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	Observe and practice safe procedures in the classroom and laboratory.

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Biomedical Research: Explore the processes and technologies by which biomedical scientific literature is stored, catalogued and retrieved. (L)
OBJECTIVE	2.b.	<p>Prepare a glossary of technical scientific terminology from the information presented in the recovered publication(s).</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.5.	Biomedical Research: Analyze contemporary issues, related to the practice or application of biomedical research, that pose an ethical dilemma or dilemmas to our society. (L)
OBJECTIVE	5.a.	<p>Suggested areas of initial focus including fetal tissue research, legalization of drugs, drug abuse, euthanasia, research fraud, use of non-human animals in research, genetic engineering, and universal health care.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1:</li> </ul>

		Learning How Pollutants Accumulate in the Lungs
COMPETENCY	MS.7.	Biomedical Research: Describe key areas of human physiology towards which a major commitment of United States federal funding of biomedical research is applied. (L)  <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.8.	Biomedical Research: Describe important principles of organic chemical reactions that form the basis of life processes. (L, P)
OBJECTIVE	8.a.	Classify hydrocarbons according to bonding families.  <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	8.b.	Name and write structural formulas for substituted and non-substituted hydrocarbons.  <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.9.	Biomedical Research: Demonstrate proficiency in the application of fundamental technical procedures related to biomedical laboratory research activities. (L, P)
OBJECTIVE	9.e.	Prepare a series of protein concentrations using accurate and safe pipetting techniques.  <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1:</li> </ul>

		<p>Testing for Food Nutrient Content</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	9.f.	<p>Practice preparation of sample organic compounds, including methane, ethane, acetic acid, ethyl ethanoate, and methanol.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.1.	Genetics: Use critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in genetics.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<p><b>OBJECTIVE</b></p>	<p>1.d.</p>	<p>Communicate results of scientific investigations in oral, written and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Genetics: Review the structure and function of the cell as it applies to genetics. (L)
OBJECTIVE	2.a.	<p>Review the structures and functions of the cell.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.6.	Genetics: Discuss genetic diversity in humans. (L)
OBJECTIVE	6.a.	<p>Explore genetic differences among humans such as blood type, race, and simple inheritance patterns of genetic diversity.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> </ul>
OBJECTIVE	6.b.	<p>Analyze genetic disorders and relate the cause to the following inheritance patterns: autosomal dominant, autosomal recessive, sex-linked, polygenic, chromosomal abnormalities.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.1.	Microbiology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	Demonstrate the proper use and care for scientific equipment used in

		<p>microbiology.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	Observe and practice safe procedures in the classroom and laboratory.

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Microbiology: Describe the major historical events that have transformed microbiology into a 'true' science. (L)</b>
<b>OBJECTIVE</b>	2.a.	Describe the contributions of ancient cultures to early understandings of the spread of disease. <ul style="list-style-type: none"> <li>• Teacher Resource CD: Human Health Issues and Disease</li> </ul>

OBJECTIVE	2.b.	<p>Describe the development of the microscope.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.c.	<p>Describe the germ theory of disease and summarize the historical events that led to its formation.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.3.	Microbiology: Demonstrate current methods used to culture and study microorganisms. (L)
OBJECTIVE	3.a.	<p>Demonstrate the use of aseptic technique.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2:</li> </ul>

		<p>Exploring Transdermal Drug Delivery</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	3.b.	<p>Demonstrate proper use of the microscope and slide preparation techniques.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	3.c.	<p>Name and describe the different types of stains used in microbiology.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> </ul>
OBJECTIVE	3.d.	<p>Name and describe the types of culture media and explain how each type provides the nutritional requirements for microbial growth.</p> <ul style="list-style-type: none"> <li>• Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	3.e.	<p>Demonstrate proper techniques for isolating, culturing, and staining microorganisms.</p> <ul style="list-style-type: none"> <li>• Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.4.	Microbiology: Describe the classification, morphology, characteristics,

		pathology and benefits associated with bacteria. (L)
OBJECTIVE	4.c.	Identify and describe the structure and function of internal and external bacterial cell components. <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	4.d.	Identify the most common pathogenic bacteria. <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.5.	Microbiology: Describe the classification, morphology, characteristics and pathology associated with viruses. (L)
OBJECTIVE	5.a.	Describe the general characteristics of viruses. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	5.b.	Identify and describe the major characteristics of each group of viruses. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	5.c.	Describe the mechanisms of replication in virulent and temperate phages. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	5.d.	Identify the most common viruses and the diseases associated with each. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.6.	Microbiology: Describe the classification, morphology, characteristics, benefits and associated pathology of fungi. (L)
OBJECTIVE	6.c.	Identify the most common types of pathogenic fungi and the diseases associated with each. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.7.	Microbiology: Describe the classification, morphology, characteristics and associated pathology of protists. (L)
OBJECTIVE	7.c.	Identify the most common pathogenic protists and the diseases associated with each. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> </ul>

		<ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Molecular Biology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)</b>
<b>OBJECTIVE</b>	<b>1.a.</b>	<p>Demonstrate the proper use and care for scientific equipment used in molecular biology.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2:</li> </ul>

		<p>Measuring Range of Vision</p> <ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Molecular Biology: Review the structure, functions, and processes of the cell involved in maintaining life. (L, P)</b>
<b>OBJECTIVE</b>	<b>2.a.</b>	<p>Review organic compounds and biochemical processes in the cell.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>2.b.</b>	<p>Review the structure and function of the cell.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Botany: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)</b>
<b>OBJECTIVE</b>	<b>1.a.</b>	<p>Demonstrate the proper use and care for scientific equipment used in botany.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A</li> </ul>

		<p>Closer Look at Blood</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Botany: Examine plant cell structures and functions to include the formation of specialized tissue. (L)
OBJECTIVE	2.a.	<p>Identify the major organelles, their structures and functions.</p> <ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.1.	Zoology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in zoology.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A</li> </ul>

		<p>Closer Look at Blood</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Zoology: Review the general characteristics and phylogeny of animals. (L)</b>
<b>OBJECTIVE</b>	<b>2.a.</b>	<p>Explain the levels of organization of structures in animals (cells, tissues, organs and systems).</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Environmental Science: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)</b>
<b>OBJECTIVE</b>	<b>1.a.</b>	<p>Demonstrate the proper use and care for scientific equipment used in environmental science.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1:</li> </ul>

		<p>Determining ABO-Rh Blood Type</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<p><b>OBJECTIVE</b></p>	<p>1.c.</p>	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A</li> </ul>

		<p>Closer Look at Blood</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<p><b>OBJECTIVE</b></p>	<p>1.d.</p>	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1:</li> </ul>

		<p>Testing for Food Nutrient Content</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.1.	Organic Chemistry: Apply IUPAC nomenclature, and draw or recognize the structure of aliphatic, aromatic, and cyclic hydrocarbon compounds. (P, L)
OBJECTIVE	1.a.	<p>Describe the nomenclature system of naming hydrocarbon compounds.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	1.b.	<p>Draw structures of hydrocarbon compounds.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	1.d.	<p>Relate structure to physical and chemical properties of hydrocarbons.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.2.	Organic Chemistry: Write, complete and classify common reactions for aliphatic, aromatic, and cyclic hydrocarbons. (P)
OBJECTIVE	2.a.	<p>Write and identify equations representing oxidation reactions.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	2.b.	<p>Write and identify equations representing substitution reactions.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>

OBJECTIVE	2.c.	Write and identify equations representing dehydrogenation reactions. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	2.d.	Write and identify equations representing addition reactions. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.3.	Organic Chemistry: Describe functional groups (alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines, amides, and nitriles) by their structure and chemical and physical properties. (P)
OBJECTIVE	3.a.	Recognize and draw structural formulas from functional group names, and vice-versa. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	3.c.	Recognize and write equations representing the transformation of one functional group into another. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.5.	Organic Chemistry: Relate organic chemicals to their application in industry, drug manufacture, and biological chemistry. (P, L)
OBJECTIVE	5.c.	Investigate significant biologically active compounds in terms of functional group substrate interaction. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
OBJECTIVE	5.d.	Describe the use of organic compounds in medicine, drugs, and personal care products. <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Physiology</li> </ul>

Mississippi K-12 Curriculum Framework

Science

Grade 10

COMPETENCY	MS.1.	Biology I: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	Demonstrate the proper use and care for scientific equipment used in biology. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1:</li> </ul>

		<p>Learning How Our Body is Organized and Functions</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Biology I: Investigate the biochemical basis of life. (L, P)</b>
<b>OBJECTIVE</b>	2.d.	<p>Classify solutions using the pH scale and relate the importance of pH to organism survival.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
<b>OBJECTIVE</b>	2.e.	<p>Compare the structure, properties and functions of carbohydrates, lipids, proteins and nucleic acids in living organisms.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Biology I: Investigate cell structures, functions, and methods of reproduction. (L)</b>
<b>OBJECTIVE</b>	<b>3.c.</b>	<p>Identify and describe the structure and basic functions of the major eukaryotic organelles.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>OBJECTIVE</b>	<b>3.d.</b>	<p>Describe the way in which cells are organized in multicellular organisms.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>OBJECTIVE</b>	<b>3.e.</b>	<p>Relate cell membrane structure to its function in passive and active transport.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>COMPETENCY</b>	<b>MS.5.</b>	<b>Biology I: Investigate the principles, mechanisms, and methodology of classical and molecular genetics. (L, P)</b>
<b>OBJECTIVE</b>	<b>5.b.</b>	<p>Identify and illustrate how changes in DNA cause mutations and evaluate the significance of these changes.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.6.</b>	<b>Biology I: Investigate concepts of natural selection as they relate to diversity of life. (L)</b>
<b>OBJECTIVE</b>	<b>6.d.</b>	<p>Compare the structures and functions of viruses and bacteria relating their impact on other living organisms.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Biology II: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P,</b>

OBJECTIVE	1.a.	E)
		<p>Demonstrate the proper use and care for scientific equipment used in biology.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>

OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Biology II: Investigate chemical processes of the cell that maintain life. (L, P)
OBJECTIVE	2.a.	<p>Relate chemical structure and characteristics of organic compounds to cell and organism functions.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.4.</b>	<b>Biology II: Investigate the role that natural selection plays in maintaining diversity. (L, E)</b>
<b>OBJECTIVE</b>	<b>4.c.</b>	<p>Examine factors that affect populations, such as distribution, competition, migration, isolation, and disease.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.6.</b>	<b>Biology II: Examine the behavior of organisms. (L)</b>
<b>OBJECTIVE</b>	<b>6.a.</b>	<p>Analyze the behavioral responses of an organism to internal and external stimuli.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>6.b.</b>	<p>Associate function of the nervous system to behavior.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Teacher Resource CD: The Human Machine</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	6.d.	<p>Compare the selective advantage of several behavioral responses.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1:</li> </ul>

		<p>Modeling Kidney Function</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Physical Science: Demonstrate the proper use of scientific methods and investigative techniques. (P)</b>
<b>OBJECTIVE</b>	<b>1.c.</b>	<p>Demonstrate safe and proper use of scientific equipment.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2:</li> </ul>

		<p>Physical and Microscopic Characteristics of Urine</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Physical Science: Identify basic structure of matter. (P)</b>
<b>OBJECTIVE</b>	<b>3.d.</b>	<p>Differentiate between elements, compounds, solutions, and mixtures.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
<b>COMPETENCY</b>	<b>MS.13.</b>	<b>Earth Science: Demonstrate the proper use of scientific methods and investigative techniques. (L, E, P)</b>
<b>OBJECTIVE</b>	<b>13.c.</b>	<p>Demonstrate safe and proper use of scientific equipment.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1:</li> </ul>

		<p>Determining ABO-Rh Blood Type</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Chemistry I: Explain how the properties of matter relate to structure and changes in structure. (P)</b>
<b>OBJECTIVE</b>	<b>1.b.</b>	<p>Observe and practice safe procedures in classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Apply the language of chemistry appropriately including terms such as element, atom, compound, and molecule.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	1.e.	<p>Classify a material as element, compound, solution or heterogeneous mixture.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
COMPETENCY	MS.11	Chemistry I: Describe and explain the solution process. (P)
OBJECTIVE	11.a.	<p>Describe solutions in terms of solute and solvent; electrolyte or non-electrolyte; soluble or insoluble; unsaturated, saturated or supersaturated; miscible or immiscible.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2:</li> </ul>

		Physical and Microscopic Characteristics of Urine
COMPETENCY	MS.13	Chemistry I: Visualize and explain acid-base interactions applying concepts of chemical bonding and solutions. (P, L)
OBJECTIVE	13.a.	Compare properties of acids and bases, including how they affect indicators and the relative pH of the solution. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
OBJECTIVE	13.e.	Describe the role of indicators in experimental prediction of pH. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> </ul>
COMPETENCY	MS.4.	Chemistry II: Apply stoichiometric principles to reactions that occur in aqueous solution. (P)
OBJECTIVE	4.a.	Represent reactions in aqueous solution with net ionic equations. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
COMPETENCY	MS.10.	Chemistry II: Describe the structure, reactions, and uses of selected organic compounds. (P, L)
OBJECTIVE	10.a.	Determine the name or structural formula for given hydrocarbons and functional groups. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	10.b.	Illustrate some common reactions of hydrocarbons. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	10.d.	Describe the structure and function of biochemical compounds. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.1.	Physics I: Apply fundamental mathematics used in physical concepts. (P)
OBJECTIVE	1.d.	<p>Manipulate equations to solve problems.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> </ul>
COMPETENCY	MS.6.	Physics I: Investigate the principles related to electromagnetic radiation. (P)
OBJECTIVE	6.c.	<p>Describe the characteristics of lenses and mirrors conceptually, mathematically and/or pictorially.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> </ul>
COMPETENCY	MS.1.	Human Anatomy and Physiology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in life science.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Human Anatomy and Physiology: Describe the basic organization of the body using the appropriate anatomical concepts. (L)
OBJECTIVE	2.a.	<p>Define the terms: anatomy, physiology, and homeostasis; explain the importance of the interaction between structure and function of organs and organ systems in the human body.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3:</li> </ul>

		<p>Protein Test of Simulated Urine Samples</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Teacher Resource CD: Human Health Issues and Disease</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Teacher Resource CD: The Human Machine</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.b.	<p>Describe the anatomical position and apply anatomical terms, terms of direction, and planes of section to describe the body and the relationship of its parts.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2:</li> </ul>

		<p>Physical and Microscopic Characteristics of Urine</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Teacher Resource CD: Human Health Issues and Disease</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Teacher Resource CD: The Human Machine</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.c.	<p>Identify the cavities of the body and locate the essential organs in each.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> <li>Teacher Resource CD: Human Physiology</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Human Anatomy and Physiology: Discuss the biochemical composition of the human body. (L, P)</b>
<b>OBJECTIVE</b>	<b>3.a.</b>	<p>Identify the major elements that form the bulk of body matter.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>3.b.</b>	<p>Explain the relationships among atoms, molecules, elements, and compounds.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>3.c.</b>	<p>Explain the importance of water to body homeostasis.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> <li>Teacher Resource CD: Human Physiology</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>OBJECTIVE</b>	<b>3.d.</b>	<p>Describe the concept of pH and its relationship to acids and bases in the human body.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2:</li> </ul>

		Physical and Microscopic Characteristics of Urine
OBJECTIVE	3.e.	<p>Name the four major groups of organic substances in the human body and give examples and functions of specific members of each group.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.4.	Human Anatomy and Physiology: Explore the relationship of the cell to the more complex levels of organization within the body. (L)
OBJECTIVE	4.b.	<p>Relate plasma membrane structure to active and passive transport mechanisms.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
OBJECTIVE	4.c.	<p>Name the four major categories of tissues and compare the location, structure, and function of each.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Teacher Resource CD: The Human Machine</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.5.	Human Anatomy and Physiology: Identify the structure and function of the human body systems, explore the interactions among the systems and investigate major disorders/diseases. (L)
OBJECTIVE	5.a.	<p>Associated with each of the following: Integumentary; Skeletal; Muscular; Nervous; Endocrine; Digestive; Respiratory; Circulatory; Lymphatic; Urinary; Reproductive.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2:</li> </ul>

		<p>Thermoreceptors - Responding to Heat and Cold</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Teacher Resource CD: The Human Machine</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Science Skills and Reasoning: Observe and practice safe procedures in the classroom and laboratory. (L, E, P)</b>
<b>OBJECTIVE</b>	1.a.	<p>Demonstrate knowledge of safety rules before working in the laboratory and model all safety rules in each lab activity.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4:</li> </ul>

		<p>Photographic Ambiguities</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Demonstrate proper use and care of scientific equipment to include the compound light microscope.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5:</li> </ul>

		<p>Typographic Illusions</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Demonstrate accuracy and precision when using scientific equipment.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Science Skills and Reasoning: Utilize critical thinking and scientific problem solving in designing and performing scientific research and experimentation. (L, E, P)
OBJECTIVE	2.c.	<p>Demonstrate an ability to record and organize data from a variety of sources (scientific articles, magazines, and journals).</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6:</li> </ul>

		<p>Contrast and Color Illusions</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.d.	<p>Identify and apply the components of scientific methods in classroom and laboratory investigations using the processes of predicting, observing, gathering data, and drawing conclusions.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Science Skills and Reasoning: Interpret and communicate results of scientific investigations in oral, written, and graphic form. (L, E, P)</b>
<b>OBJECTIVE</b>	<b>3.a.</b>	<p>Demonstrate graphing techniques: plotting points, labeling x- and y-axis, title, and legends for pie, bar, and line graphs.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>
OBJECTIVE	3.b.	<p>Generate and interpret graphs from classroom experiments.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>
OBJECTIVE	3.c.	<p>Draw conclusions about current scientific issues using graphs found in scientific literature.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2:</li> </ul>

		<p>Physical and Microscopic Characteristics of Urine</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.4.</b>	<b>Science Skills and Reasoning: Investigate the chemical basis of life. (L, P)</b>
<b>OBJECTIVE</b>	<b>4.a.</b>	<p>Describe differences among atoms, elements, ions, molecules and compounds.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
<b>OBJECTIVE</b>	<b>4.c.</b>	<p>Identify the chemical symbols of elements needed for life.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>4.e.</b>	<p>Identify properties of acids and bases and use pH to classify substances as basic, acidic, or neutral.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>
<b>OBJECTIVE</b>	<b>4.f.</b>	<p>Identify the functions of carbohydrates, proteins, lipids, and nucleic acids in living organisms with examples of each.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Teacher Resource CD: Human Physiology</li> </ul>
<b>COMPETENCY</b>	<b>MS.5.</b>	<b>Science Skills and Reasoning: Investigate cell structures, functions, and methods of reproduction. (L)</b>
<b>OBJECTIVE</b>	<b>5.b.</b>	Distinguish between plant and animal eukaryotic cell structures.

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	5.c.	<p>Identify and describe the structure and basic functions of the major eukaryotic organelles.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	5.d.	<p>Explain the differences among tissues, organs, and organ systems.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
OBJECTIVE	5.e.	<p>Describe the structure and function of a selectively permeable membrane and its role in diffusion and osmosis.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.1.	<p>Biomedical Research: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, E, P)</p>
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in the laboratory.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4:</li> </ul>

		<p>Responding to Sound</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Biomedical Research: Explore the processes and technologies by which biomedical scientific literature is stored, catalogued and retrieved. (L)</b>
<b>OBJECTIVE</b>	<b>2.b.</b>	<p>Prepare a glossary of technical scientific terminology from the information presented in the recovered publication(s).</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.5.	Biomedical Research: Analyze contemporary issues, related to the practice or application of biomedical research, that pose an ethical dilemma or dilemmas to our society. (L)
OBJECTIVE	5.a.	<p>Suggested areas of initial focus including fetal tissue research, legalization of drugs, drug abuse, euthanasia, research fraud, use of non-human animals in research, genetic engineering, and universal health care.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> </ul>
COMPETENCY	MS.7.	Biomedical Research: Describe key areas of human physiology towards which a major commitment of United States federal funding of biomedical research is applied. (L)
		<ul style="list-style-type: none"> <li>• Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.8.	Biomedical Research: Describe important principles of organic chemical reactions that form the basis of life processes. (L, P)
OBJECTIVE	8.a.	<p>Classify hydrocarbons according to bonding families.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1:</li> </ul>

		Testing for Food Nutrient Content
OBJECTIVE	8.b.	<p>Name and write structural formulas for substituted and non-substituted hydrocarbons.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.9.	Biomedical Research: Demonstrate proficiency in the application of fundamental technical procedures related to biomedical laboratory research activities. (L, P)
OBJECTIVE	9.e.	<p>Prepare a series of protein concentrations using accurate and safe pipetting techniques.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1:</li> </ul>

		<p>Learning How Pollutants Accumulate in the Lungs</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	9.f.	<p>Practice preparation of sample organic compounds, including methane, ethane, acetic acid, ethyl ethanoate, and methanol.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.1.	Genetics: Use critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in genetics.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Genetics: Review the structure and function of the cell as it applies to genetics. (L)
OBJECTIVE	2.a.	<p>Review the structures and functions of the cell.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Teacher Resource CD: Human Physiology</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.6.	Genetics: Discuss genetic diversity in humans. (L)
OBJECTIVE	6.a.	<p>Explore genetic differences among humans such as blood type, race, and simple inheritance patterns of genetic diversity.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> </ul>
OBJECTIVE	6.b.	<p>Analyze genetic disorders and relate the cause to the following inheritance patterns: autosomal dominant, autosomal recessive, sex-linked, polygenic, chromosomal abnormalities.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.1.	Microbiology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in microbiology.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Microbiology: Describe the major historical events that have transformed microbiology into a 'true' science. (L)
OBJECTIVE	2.a.	Describe the contributions of ancient cultures to early understandings of the spread of disease. <ul style="list-style-type: none"> <li>• Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	2.b.	Describe the development of the microscope. <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	2.c.	Describe the germ theory of disease and summarize the historical events that led to its formation.

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
<b>COMPETENCY</b>	<b>MS.3.</b>	<b>Microbiology: Demonstrate current methods used to culture and study microorganisms. (L)</b>
<b>OBJECTIVE</b>	<b>3.a.</b>	<p>Demonstrate the use of aseptic technique.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	3.b.	<p>Demonstrate proper use of the microscope and slide preparation techniques.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	3.c.	<p>Name and describe the different types of stains used in microbiology.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> </ul>
OBJECTIVE	3.d.	<p>Name and describe the types of culture media and explain how each type provides the nutritional requirements for microbial growth.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	3.e.	<p>Demonstrate proper techniques for isolating, culturing, and staining microorganisms.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.4.	<b>Microbiology: Describe the classification, morphology, characteristics, pathology and benefits associated with bacteria. (L)</b>
OBJECTIVE	4.c.	<p>Identify and describe the structure and function of internal and external bacterial cell components.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	4.d.	<p>Identify the most common pathogenic bacteria.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.5.	<b>Microbiology: Describe the classification, morphology, characteristics and pathology associated with viruses. (L)</b>
OBJECTIVE	5.a.	<p>Describe the general characteristics of viruses.</p>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	5.b.	<p>Identify and describe the major characteristics of each group of viruses.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	5.c.	<p>Describe the mechanisms of replication in virulent and temperate phages.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
OBJECTIVE	5.d.	<p>Identify the most common viruses and the diseases associated with each.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.6.	Microbiology: Describe the classification, morphology, characteristics, benefits and associated pathology of fungi. (L)
OBJECTIVE	6.c.	<p>Identify the most common types of pathogenic fungi and the diseases associated with each.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.7.	Microbiology: Describe the classification, morphology, characteristics and associated pathology of protists. (L)
OBJECTIVE	7.c.	<p>Identify the most common pathogenic protists and the diseases associated with each.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Teacher Resource CD: Human Health Issues and Disease</li> </ul>
COMPETENCY	MS.1.	Molecular Biology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in molecular biology.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3:</li> </ul>

		<p>Distribution and Sensitivity of Touch Receptors</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Molecular Biology: Review the structure, functions, and processes of the cell involved in maintaining life. (L, P)</b>
<b>OBJECTIVE</b>	<b>2.a.</b>	<p>Review organic compounds and biochemical processes in the cell.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Teacher Resource CD: Human Physiology</li> </ul>
<b>OBJECTIVE</b>	<b>2.b.</b>	<p>Review the structure and function of the cell.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Teacher Resource CD: Human Physiology</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Botany: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)</b>
<b>OBJECTIVE</b>	<b>1.a.</b>	<p>Demonstrate the proper use and care for scientific equipment used in botany.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> </ul>

		<ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.2.	Botany: Examine plant cell structures and functions to include the formation of specialized tissue. (L)
OBJECTIVE	2.a.	<p>Identify the major organelles, their structures and functions.</p> <ul style="list-style-type: none"> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.3.	Botany: Identify plant products that impact humans. (L, P)
OBJECTIVE	3.c.	<p>Determine the origin of a wide variety of assorted plant products - spices, herbs, fossil fuels, fibers.</p> <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Physiology</li> </ul>
COMPETENCY	MS.1.	Zoology: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)
OBJECTIVE	1.a.	<p>Demonstrate the proper use and care for scientific equipment used in zoology.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 2:</li> </ul>

		<p>Physical and Microscopic Characteristics of Urine</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
<b>COMPETENCY</b>	<b>MS.2.</b>	<b>Zoology: Review the general characteristics and phylogeny of animals. (L)</b>
<b>OBJECTIVE</b>	<b>2.a.</b>	<p>Explain the levels of organization of structures in animals (cells, tissues, organs and systems).</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Teacher Resource CD: The Human Machine</li> </ul>
<b>COMPETENCY</b>	<b>MS.1.</b>	<b>Environmental Science: Utilize critical thinking and scientific problem solving in designing and performing biological research and experimentation. (L, P, E)</b>
<b>OBJECTIVE</b>	<b>1.a.</b>	<p>Demonstrate the proper use and care for scientific equipment used in environmental science.</p> <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 1:</li> </ul>

		<p>Modeling Kidney Function</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.b.	<p>Observe and practice safe procedures in the classroom and laboratory.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.c.	<p>Apply the components of scientific processes and methods in the classroom and laboratory investigations.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>• Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>• Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>• Virtual Laboratory: Identifying Human Tissues</li> </ul>
OBJECTIVE	1.d.	<p>Communicate results of scientific investigations in oral, written, and graphic form.</p> <ul style="list-style-type: none"> <li>• Human Biology and Health Issues: Unit 1 Lab 1 Activity 1: Learning How Our Body is Organized and Functions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 1: Testing Taste Receptors in the Tongue</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 2: Thermoreceptors - Responding to Heat and Cold</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 3: Distribution and Sensitivity of Touch Receptors</li> <li>• Human Biology and Health Issues: Unit 1 Lab 2 Activity 4: Responding to Sound</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 1: Exploring the Eye-Brain Connection</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 2: Measuring Vision</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 3: Is There a Hole in Your Hand?</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 4: Photographic Ambiguities</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 5: Typographic Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 3 Activity 6: Contrast and Color Illusions</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 1: Determining ABO-Rh Blood Type</li> <li>• Human Biology and Health Issues: Unit 1 Lab 4 Activity 2: A Closer Look at Blood</li> <li>• Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 1: Demonstrating Selective Permeability in Simulated Skin Cells</li> <li>• Human Biology and Health Issues: Unit 2 Lab 6 Activity 2: Exploring Transdermal Drug Delivery</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 1: Modeling Kidney Function</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 2: Physical and Microscopic Characteristics of Urine</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>• Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> </ul>

		<ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 3 Lab 8 Activity 1: Learning How Pollutants Accumulate in the Lungs</li> <li>Human Biology and Health Issues: Unit 3 Lab 9 Activity 1: Simulating the Transmission of the Ebola Virus</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 1: Measuring Reaction Time</li> <li>Human Biology and Health Issues: Unit 4 Lab 10 Activity 2: Measuring Range of Vision</li> <li>Virtual Laboratory: Identifying Human Tissues</li> </ul>
COMPETENCY	MS.1.	Organic Chemistry: Apply IUPAC nomenclature, and draw or recognize the structure of aliphatic, aromatic, and cyclic hydrocarbon compounds. (P, L)
OBJECTIVE	1.a.	Describe the nomenclature system of naming hydrocarbon compounds. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	1.b.	Draw structures of hydrocarbon compounds. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	1.d.	Relate structure to physical and chemical properties of hydrocarbons. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.2.	Organic Chemistry: Write, complete and classify common reactions for aliphatic, aromatic, and cyclic hydrocarbons. (P)
OBJECTIVE	2.a.	Write and identify equations representing oxidation reactions. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	2.b.	Write and identify equations representing substitution reactions. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	2.c.	Write and identify equations representing dehydrogenation reactions. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	2.d.	Write and identify equations representing addition reactions. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.3.	Organic Chemistry: Describe functional groups (alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines, amides, and nitriles) by their structure and chemical and physical properties. (P)

OBJECTIVE	3.a.	Recognize and draw structural formulas from functional group names, and vice-versa. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
OBJECTIVE	3.c.	Recognize and write equations representing the transformation of one functional group into another. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> </ul>
COMPETENCY	MS.5.	Organic Chemistry: Relate organic chemicals to their application in industry, drug manufacture, and biological chemistry. (P, L)
OBJECTIVE	5.c.	Investigate significant biologically active compounds in terms of functional group substrate interaction. <ul style="list-style-type: none"> <li>Human Biology and Health Issues: Unit 2 Lab 5 Activity 1: Testing for Food Nutrient Content</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 3: Protein Test of Simulated Urine Samples</li> <li>Human Biology and Health Issues: Unit 2 Lab 7 Activity 4: Glucose Test of Simulated Urine Samples</li> <li>Teacher Resource CD: Human Physiology</li> </ul>
OBJECTIVE	5.d.	Describe the use of organic compounds in medicine, drugs, and personal care products. <ul style="list-style-type: none"> <li>Teacher Resource CD: Human Physiology</li> </ul>

© 2008, EdGate Correlation Services, LLC. All Rights reserved.