

Anatomy and Physiology  
Pacing Guide

First Quarter	Second Quarter	Third Quarter	Fourth Quarter
<b>FCIM/Focus Calendar</b>	<b>FCIM/Focus Calendar</b>	<b>FCIM/Focus Calendar</b>	<b>FCIM/Focus Calendar</b>
<p><b>1) Lab Safety &amp; Class Procedures</b></p> <p>**Flinn lab safety rules &amp; quiz</p> <p><b>2) Introduction to the Body</b></p> <ul style="list-style-type: none"> <li>• Structural organization</li> <li>• Life functions &amp; needs</li> <li>• Feedback loops</li> <li>• Anatomy terminology</li> </ul> <p><b>3) Chemistry &amp; Cells overview</b></p> <ul style="list-style-type: none"> <li>• Enzymes</li> <li>• Organic molecules</li> <li>• Cells, Cell division, Cancer</li> <li>• Membrane transport</li> </ul> <p><b>4) Body Tissues</b></p> <ul style="list-style-type: none"> <li>• Epithelial Tissue</li> <li>• Connective tissue</li> <li>• Muscle Tissue</li> <li>• Nervous Tissue</li> </ul> <p><b>5) Integument System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function</li> </ul>	<p><b>1) Skeletal System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function of bone</li> <li>• Axial Skeleton</li> <li>• Appendicular Skeleton</li> </ul> <p><b>2) Muscular System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; function</li> <li>• Muscle tissue anatomy</li> <li>• Muscle Contraction</li> <li>• Muscle identification</li> <li>• Myoneural junction</li> </ul> <p><b>3) Nervous System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; function</li> <li>• CNS &amp; PNS</li> <li>• Nerve impulse transmission</li> <li>• Reflex arcs</li> <li>• Sympathetic &amp; Parasympathetic divisions</li> <li>• Sense organs</li> </ul>	<p><b>1) Endocrine</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function</li> <li>• Endocrine control</li> </ul> <p><b>2) Blood</b></p> <ul style="list-style-type: none"> <li>• Composition</li> <li>• Functions</li> <li>• Hemostasis/coagulation</li> <li>• Blood types/transfusions</li> </ul> <p><b>3) Circulatory System</b></p> <ul style="list-style-type: none"> <li>• Anatomy of the heart</li> <li>• Blood flow</li> <li>• Circulation pathways</li> <li>• Physiology of circulation</li> </ul> <p><b>4) Lymphatic System &amp; Body Defenses</b></p> <ul style="list-style-type: none"> <li>• Nonspecific body defenses</li> <li>• Specific body defenses</li> <li>• Lymphatic structure &amp; function</li> <li>• Vaccines &amp; antibiotics</li> </ul>	<p><b>1) Respiration</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function</li> <li>• Respiratory physiology</li> </ul> <p><b>2) Digestive System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; function</li> <li>• Mechanical &amp; chemical digestion, absorption</li> <li>• Neural &amp; hormonal control</li> </ul> <p><b>3) Urinary System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function</li> <li>• Formation of urine</li> </ul> <p><b>4) Reproduction System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function</li> <li>• Pregnancy &amp; Fetal development</li> </ul>

## Anatomy & Physiology

**Topic- Introduction to the Body, Chemistry & Cells, Body Tissues, Integument System**

**Time Frame – 1<sup>st</sup> quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>Why do we have safety procedures in place in a lab?</p>	<p><b>1)Lab Safety,</b></p> <p>Class Procedures,</p> <p>review of the scientific method</p> <p><b>**Flinn lab safety rules &amp; quiz</b></p>	<p><b>SC. 912.N.1.1</b> Define a problem based on a specific body of knowledge, for example: biology, chemistry, physics, and earth/space science, and do the following:</p> <ol style="list-style-type: none"> <li>1. pose questions about the natural world,</li> <li>2. conduct systematic observations,</li> <li>3. examine books and other sources of information to see what is already known,</li> <li>4. review what is known in light of empirical evidence,</li> <li>5. plan investigations,</li> <li>6. use tools to gather, analyze, and interpret data (this includes the use of measurement in metric and other systems, and also the generation and interpretation of graphical representations of data, including data tables and graphs),</li> <li>7. pose answers, explanations, or descriptions of events,</li> <li>8. generate explanations that explicate or describe natural</li> </ol>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Flinn Safety quiz (80% on Quiz )</li> </ul> <p>Informal:</p> <ul style="list-style-type: none"> <li>• Discussion</li> </ul> <p><b>Word Wall</b>                      Problem, hypothesis, independent variable, dependent variable, control, peer review,</p> <p><a href="http://www.cloudnet.com/~edrbsass/edsci.htm#scientificmethod">http://www.cloudnet.com/~edrbsass/edsci.htm#scientificmethod</a></p>

**Anatomy & Physiology**

**Topic- Introduction to the Body, Chemistry & Cells, Body Tissues, Integument System**  
**Time Frame – 1<sup>st</sup> quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>How is the body organized?</p> <p>What does the body do to maintain life?</p>	<p><b>2) Introduction to the Body</b></p> <ul style="list-style-type: none"> <li>• Structural organization               <ul style="list-style-type: none"> <li>○ Cells → body systems</li> </ul> </li> <li>• Life functions &amp; needs               <ul style="list-style-type: none"> <li>○ Maintaining boundaries</li> <li>○ Movement</li> <li>○ Responsiveness</li> <li>○ Digestion</li> <li>○ Metabolism</li> <li>○ Excretion</li> <li>○ Reproduction</li> </ul> </li> </ul>	<p>phenomena (inferences),</p> <p>9. use appropriate evidence and reasoning to justify these explanations to others,</p> <p>10. communicate results of scientific investigations, and</p> <p>11. evaluate the merits of the explanations produced by others</p> <p>SC.912.N.1.2 Describe and explain what characterizes science and its methods information</p> <p>SC.912.L.14.6 Explain the significance of genetic factors, environmental factors, and pathogenic agents to health from the perspectives of both individual and public health.</p> <p>SC.912.L.16.10 Evaluate the impact of biotechnology on the individual, society and the environment, including medical and ethical issues.</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Life Size body diagrams with terms labeled</li> <li>• System poster</li> <li>• Anatomy Simon Says</li> </ul>

## Anatomy & Physiology

**Topic- Introduction to the Body, Chemistry & Cells, Body Tissues, Integument System**

**Time Frame – 1<sup>st</sup> quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>What terms are essential to understanding the anatomy of the human body?</p>	<ul style="list-style-type: none"> <li>○ Growth</li> <li>○ Nutrients</li> <li>○ Oxygen</li> <li>○ Water</li> <li>○ Body temperature</li> <li>○ Atmospheric pressure</li> <li>● Feedback loops                             <ul style="list-style-type: none"> <li>○ Homeostasis</li> <li>○ Positive feedback</li> <li>○ Negative feedback</li> </ul> </li> <li>● Anatomy terminology                             <ul style="list-style-type: none"> <li>○ Regional terms</li> <li>○ Directional terms</li> <li>○ Body planes &amp; Sections</li> <li>○ Body cavities</li> </ul> </li> </ul>		<p><b>Word Wall Activity:</b> Anatomy, physiology, metabolism, homeostasis, receptor, anatomical position, section, plane</p>
<p>How are chemical reactions controlled in the human body?</p>	<p><b>3) Chemistry &amp; Cells overview</b></p> <ul style="list-style-type: none"> <li>● Enzymes                             <ul style="list-style-type: none"> <li>○ Role in chemical reactions</li> <li>○ Effects of pH and temperature on enzyme activity</li> </ul> </li> </ul>	<p><b>SC.912.L.18.1:</b> Describe the basic molecular structures and primary functions of the four major categories of biological macromolecules.</p> <p>SC.912.L.18.11 Explain the role of enzymes as catalysts that lower the activation energy of biochemical reactions. Identify factors, such as pH and temperature and their effect on enzyme activity.</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>● Vocabulary Quiz</li> <li>● Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>● Enzyme lab</li> <li>● Cell project</li> </ul> <p><b>Word Wall Activity:</b> Enzyme, catalyst, carbohydrate, lipid,</p>





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**Topic- Introduction to the Body, Chemistry & Cells, Body Tissues, Integument System**

**Time Frame – 1<sup>st</sup> quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>What is the purpose of the integumentary system?</p> <p>What are various diseases associated with the integumentary system?</p>	<p><b>5) Integument System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; function               <ul style="list-style-type: none"> <li>○ Skin</li> <li>○ Hair</li> <li>○ Nails</li> <li>○ Skin diseases</li> </ul> </li> </ul>	<p>SC.912.L.14.51 Describe the function of the vertebrate integumentary system.</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Skin disease pamphlet</li> </ul> <p><b>Word Wall Activity:</b> Epithelial membrane, cutaneous membrane, mucous membrane, serous membrane, keratin, melanin, sebaceous glands, sudoriferous glands</p>

## Anatomy & Physiology

**Topic- Skeletal System, Muscular System, Nervous System**

**Time Frame – 2<sup>nd</sup> Quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>What are functions of the skeletal system?</p> <p>How are bones formed and maintained?</p> <p>What diseases are associated with this system?</p>	<p><b>1) Skeletal System</b></p> <ul style="list-style-type: none"> <li>• Anatomy &amp; Function of bone tissue               <ul style="list-style-type: none"> <li>○ Types and parts of a bone</li> <li>○ Functions: support, protection, movement, storage and blood cell formation</li> </ul> </li> <li>• Axial Skeleton               <ul style="list-style-type: none"> <li>○ Identify major bones</li> </ul> </li> <li>• Appendicular Skeleton               <ul style="list-style-type: none"> <li>○ Identify major bones</li> </ul> </li> </ul>	<p>SC.912.14.12 Describe the anatomy and histology of bone tissue</p> <p>SC.912.L.14.14 Identify the major bones of the axial and appendicular skeleton</p> <p>SC.912.L.14.13 Distinguish between the bones of the axial and appendicular skeleton</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Bone Practical</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Clay/toothpick skeleton model</li> </ul> <p><b>Word Wall activity:</b> Axial skeleton, appendicular skeleton, osteocytes, ossification, osteoclasts, fracture, hematoma, fontanel, articulation</p> <p><a href="http://homes.bio.psu.edu/people/faculty/strauss/anatomy/skel/skeletal.htm">http://homes.bio.psu.edu/people/faculty/strauss/anatomy/skel/skeletal.htm</a></p>
<p>Why is the muscular system important?</p> <p>How do muscles contract?</p> <p>What diseases are associated</p>	<p><b>2) Muscular System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; function               <ul style="list-style-type: none"> <li>○ 3 types of muscles</li> </ul> </li> <li>• Muscle anatomy               <ul style="list-style-type: none"> <li>○ Microscopic make up of a skeletal muscle</li> <li>○ Physiology of a skeletal muscle</li> </ul> </li> </ul>	<p>SC.912.L.14.16 Describe the anatomy and histology, including ultrastructure, of muscle tissue</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Muscle anatomy models</li> <li>• Muscle fatigue activity</li> </ul>







## Anatomy & Physiology

**Topic-Endocrine, Blood, Circulatory System, Lymphatic System & Body Defenses**  
**Time Frame – 3<sup>rd</sup> Quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>Why is the endocrine system important?</p> <p>How does the endocrine system control body functions?</p> <p>What diseases are associated with this system?</p>	<p><b>1) Endocrine</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function <ul style="list-style-type: none"> <li>○ Relate the glands to the hormones they secrete</li> </ul> </li> <li>• Hormones <ul style="list-style-type: none"> <li>○ Compare endocrine and neural controls</li> </ul> </li> </ul> <p>**If times allows cover endocrine disorders</p>	<p>SC.912.L.14.29 Define the terms endocrine and exocrine</p> <p>SC.912.L.14.30 Compare endocrine and neural controls of physiology</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Endocrine flashcards</li> </ul> <p><b>Word Wall activity:</b>  Hormone, negative feedback, positive feedback, acromegaly, goiter, diabetes mellitus, insulin, glucagon</p> <p><a href="http://www.hormone.org/public/conditions.cfm">http://www.hormone.org/public/conditions.cfm</a></p>
<p>Why is blood essential for the maintenance of the body?</p> <p>What are some diseases associated with blood?</p>	<p><b>2) Blood</b></p> <ul style="list-style-type: none"> <li>• Composition <ul style="list-style-type: none"> <li>○ Plasma and formed elements</li> </ul> </li> <li>• Functions <ul style="list-style-type: none"> <li>○ Plasma and formed elements</li> </ul> </li> <li>• Hemostasis <ul style="list-style-type: none"> <li>○ Steps of hemostasis</li> <li>○ Mechanism of coagulation</li> </ul> </li> <li>• Blood types <ul style="list-style-type: none"> <li>○ Process</li> <li>○ Transfusion reactions</li> </ul> </li> </ul>	<p>SC.912.L.14.34 <b>Describe</b> the composition and physiology of blood, including that of the plasma and the formed elements.</p> <p>SC.912.L.14.35 Describe the steps in hemostasis, including the mechanism of coagulation. Include. Include the basis for blood typing and transfusion reactions.</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Synthetic blood typing lab</li> </ul> <p><b>Word Wall activity:</b>  Formed elements, hematocrit, hemoglobin, anemia, leukocytes,</p>

## Anatomy & Physiology

**Topic-Endocrine, Blood, Circulatory System, Lymphatic System & Body Defenses**  
**Time Frame – 3<sup>rd</sup> Quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>How does the circulatory system function to cycle blood through the body?</p> <p>How does the heart beat?</p> <p>What factors affect the heart?</p> <p>How does the fetal circulatory system change after birth?</p> <p>What diseases are associated with this system?</p>	<p><b>3) Circulatory System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function               <ul style="list-style-type: none"> <li>○ Anatomy of the heart, blood vessels</li> </ul> </li> <li>• Blood flow               <ul style="list-style-type: none"> <li>○ Pathway through the heart</li> <li>○ Factors that affect blood flow</li> </ul> </li> <li>• Pathways of circulation               <ul style="list-style-type: none"> <li>○ Systemic circulation</li> <li>○ Arterial supply to the brain</li> <li>○ Hepatic portal circulation</li> <li>○ Fetal circulation</li> </ul> </li> <li>• Physiology of circulation               <ul style="list-style-type: none"> <li>○ Heart sounds and what they mean</li> <li>○ Hypertension and risk factors</li> </ul> </li> </ul>	<p><b>SC.912.L.14.36</b> Describe the factors affecting blood flow through the cardiovascular system</p> <p>SC.912.L.14.41 Describe fetal circulation and changes that occur to the circulatory system at birth</p> <p>SC.912.L.14.38 Describe the normal heart sounds and what they mean.</p> <p>SC.912.L.14.39 Describe hypertension and some factors that produce it.</p>	<p>erythrocytes, hemostasis, hemophilia, antigen, antibodies, hemolysis</p> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Blood flow foldable</li> <li>• Blood flow activity</li> <li>• Cardiac output activity</li> <li>• Heart dissection</li> </ul> <p><b>Word Wall activity:</b>            Myocardium, atria, ventricles, aorta, nodal system, cardiac cycle, cardiac output, artery, vein</p> <p><a href="http://www.howstuffworks.com/blood.htm">www.howstuffworks.com/blood.htm</a></p>

## Anatomy & Physiology

**Topic-Endocrine, Blood, Circulatory System, Lymphatic System & Body Defenses**  
**Time Frame – 3<sup>rd</sup> Quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>How do nonspecific and specific body defenses keep the human body healthy?</p> <p>How does the lymphatic system function in helping the body stay healthy?</p> <p>What is difference between vaccines and antibiotics?</p> <p>What diseases are associated with this system?</p>	<p><b>4) Lymphatic System &amp; Body Defenses</b></p> <ul style="list-style-type: none"> <li>• Nonspecific body defenses               <ul style="list-style-type: none"> <li>○ Skin</li> <li>○ Mucous membranes</li> <li>○ Secretions</li> <li>○ Phagocytes</li> <li>○ Antimicrobial proteins</li> <li>○ Inflammatory response</li> </ul> </li> <li>• Specific body defenses               <ul style="list-style-type: none"> <li>○ Lymphocytes</li> <li>○ Antibodies</li> <li>○ Macrophages</li> </ul> </li> <li>• Lymphatic structure &amp; function</li> <li>• Vaccines &amp; antibiotics</li> </ul>	<p>SC.912.L.14.42 Describe the anatomy and physiology of the lymph system</p> <p><b>SC.912.L.14.52</b> Explain the basic functions of the human immune system, including specific and nonspecific immune response, vaccines, and antibiotics</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Specific and non-specific folables</li> </ul> <p><b>Word Wall activity:</b>            Edema, lymph, immunity, pathogen, phagocytes, inflammatory response, diapedesis, pyrogens, antigen, vaccine</p> <p><a href="http://uhaweb.hartford.edu/BUGL/immune.htm">http://uhaweb.hartford.edu/BUGL/immune.htm</a></p>



## Anatomy & Physiology Honors

**Topic- Respiration, Digestive System, Urinary System, Reproductive System**  
**Time Frame – 4<sup>th</sup> Quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>How does the respiratory system and circulatory system work together to transport vital gases throughout the body?</p> <p>What diseases are associated with this system?</p>	<p><b>1) Respiration</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function               <ul style="list-style-type: none"> <li>○ Organs of respiratory system</li> </ul> </li> <li>• Respiratory physiology               <ul style="list-style-type: none"> <li>○ Process of ventilation</li> <li>○ Gas exchange</li> <li>○ Gas transport</li> <li>○ Mechanisms that control ventilation</li> </ul> </li> </ul>	<p>SC.912.L.14.44 Describe the physiology of the respiratory system including the mechanisms of ventilation, gas exchange, gas transport and the mechanisms that control the rate of ventilation</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Exhaling CO<sub>2</sub> Lab Report</li> <li>• Clay models of system</li> </ul> <p><b>Word Wall activity:</b>            Pharynx, larynx, bronchi, alveoli, respiration, diaphragm, eupnea, cyanosis, cystic fibrosis</p> <p><a href="http://www.getbodysmart.com/ap/respiratorysystem/menu/animation.html">http://www.getbodysmart.com/ap/respiratorysystem/menu/animation.html</a></p>
<p>How does the digestive system provide the body with vital nutrients?</p> <p>What diseases are associated with</p>	<p><b>2) Digestive System</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function</li> <li>• Mechanical &amp; chemical digestion, absorption               <ul style="list-style-type: none"> <li>○ Location of each process</li> <li>○ Describe how each process</li> </ul> </li> </ul>	<p>SC.912.L.14.46 Describe the physiology of the digestive system, including mechanical digestion, chemical digestion, absorption and neural and hormonal</p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Digestive System Project</li> <li>• Clay models of digestive system</li> </ul> <p><b>Word Wall activity:</b>            Alimentary canal,</p>

**Anatomy & Physiology Honors**

**Topic- Respiration, Digestive System, Urinary System, Reproductive System**  
**Time Frame – 4<sup>th</sup> Quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>this system?</p> <p>How does the urinary system filter blood?</p> <p>What diseases are associated with this system?</p>	<p>works to digest food and supply the body with nutrients</p> <ul style="list-style-type: none"> <li>• Hormonal/neural control</li> </ul> <p><b>3) Urinary system</b></p> <ul style="list-style-type: none"> <li>• Structure &amp; Function</li> <li>• Urine Formation                             <ul style="list-style-type: none"> <li>○ Filtration, tubular reabsorption, tubular secretion</li> <li>○ Components of urine (normal &amp; abnormal)</li> </ul> </li> </ul>	<p>SC. 912.L.14.47 Describe the physiology of urine formation by the kidney</p>	<p>mastication, microvilli, peristalsis, deglutition, cellular respiration, metabolism, obesity</p> <p><a href="http://digestive.niddk.nih.gov/ddiseases/pubs/yrdd/">http://digestive.niddk.nih.gov/ddiseases/pubs/yrdd/</a></p> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Filtration lab</li> <li>• Simulated urine lab</li> </ul> <p><b>Word Wall activity:</b>                      Renal, nephron, glomerulus, filtration, urea, reabsorption, secretion, micturition</p> <p><a href="http://webanatomy.net/anatomy/urinary_notes.htm">http://webanatomy.net/anatomy/urinary_notes.htm</a></p>



## Anatomy & Physiology Honors

**Topic- Respiration, Digestive System, Urinary System, Reproductive System**  
**Time Frame – 4<sup>th</sup> Quarter**

Essential Questions	Essential Content & Understandings	Essential Skills & Benchmarks	Assessment
<p>What are the functions of the male and female reproductive systems?</p> <p>How do the ovarian and uterine cycles work together to make it possible for reproduction?</p> <p>What diseases are associated with this system?</p> <p>How does the anatomy of an animal (cat, pig, etc) compare to a human?</p>	<p>4) Reproduction System</p> <ul style="list-style-type: none"> <li>• Structure &amp; Function of Reproductive system</li> <li>• Pregnancy &amp; Fetal development               <ul style="list-style-type: none"> <li>◦ Basic overview</li> </ul> </li> </ul> <p>Mammalian Dissection (ex: cat, pig)</p>	<p>SC.912.L.16.13 Describe the basic anatomy and physiology of the human reproductive system. Describe the process of human development from fertilization to birth and major changes that occur in each trimester of pregnancy.</p> <p>HE.912.C.1.4 Analyze how hereditary and family history can impact personal health</p> <p>SC.912.L.14.6 Explain the significance of genetic factors, environmental factors, and pathogenic agents to health from the perspectives of both individual and public health.</p> <p>SC.912.L.14.41 Describe fetal circulation and changes that occur to the circulatory system at birth</p> <p><b>This lab will review all Standards covered above.</b></p>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Vocabulary Quiz</li> <li>• Chapter Test</li> </ul> <p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Miracle of Life video</li> </ul> <p><b>Word Wall activity:</b>            Gonads, gametes, testes, ovaries, semen, scrotum, uterus, oogenesis, spermatogenesis, embryo, fetus</p> <p><a href="http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/S/SexHormones.html">http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/S/SexHormones.html</a></p>