

Cameron R-1 Scope and Sequence Anatomy & Physiology

Quarter 1					Quarter 2		
Days/Weeks	3 Weeks	2 Weeks	3 Weeks	1 week	3 Weeks	3 Weeks	3 Weeks
Name of Unit	Classroom Foundations and Unit 1: Biochemistry	Unit 2: Organization of the Body (Biomolecules)	Unit 3: Cells and Tissues (Histology)	Unit 4: Medical Terminology	Unit 5: The Skeletal System	Unit 6: The Muscular System	Unit 7: Integumentary System
Priority Standards	LS1.A.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.]	LS1.C.3 Construct and revise an explanation based on evidence that organic macromolecules are primarily composed of six elements, where carbon, hydrogen, and oxygen atoms may combine with nitrogen, sulfur, and phosphorus to form large carbon-based molecules.	LS1.A.1 Systems of specialized cells within organisms help them perform the essential functions of life	LS1.A.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.	LS1.A.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.	LS1.A.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.	LS1.A.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

Supporting Standards	<p>LS1.C.3</p> <p>Construct and revise an explanation based on evidence that organic macromolecules are primarily composed of six elements, where carbon, hydrogen, and oxygen atoms may combine with nitrogen, sulfur, and phosphorus to form large carbon-based molecules.</p>	<p>LS1.A.2</p> <p>Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.</p>	<p>LS1.A.2</p> <p>Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms..</p>	<p>LS1.A.1</p> <p>Systems of specialized cells within organisms help them perform the essential functions of life.</p>	<p>LS1.A.1</p> <p>Systems of specialized cells within organisms help them perform the essential functions of life.</p>	<p>LS1.A.1</p> <p>Systems of specialized cells within organisms help them perform the essential functions of life.</p>	<p>LS1.A.1</p> <p>Systems of specialized cells within organisms help them perform the essential functions of life.</p>
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Key: **Priority Standard** **Supporting Standard**

Quarter 3					Quarter 4			
Weeks	2 Weeks	2 Weeks	2 Weeks	3 Weeks	3 Week	3 Weeks	3 weeks	
Name of Unit	<u>Unit 8</u> Nervous System and Sense Organs	<u>Unit 9</u> Endocrine System	<u>Unit 10</u> The Circulatory System	<u>Unit 11</u> The Digestive System	<u>Unit 12</u> The Respiratory System	<u>Unit 13</u> The Urinary System and Excretory Processes	<u>Unit 14</u> The Lymphatic/ Immune System	<u>Unit 15</u> Body Systems Review and the future of medicine
Priority Standards	<u>LS1.A.2</u> Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the	<u>LS1.A.2</u> Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the	<u>LS1.A.3</u> Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. [Clarification Statement: Examples of investigations could include heart rate response to	<u>LS1.C.2</u> Use a model to demonstrate that cellular respiration is a chemical process whereby the bonds of molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy. [Clarification Statement: Emphasis is on the conceptual	<u>LS1.C.2</u> Use a model to demonstrate that cellular respiration is a chemical process whereby the bonds of molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy. [Clarification Statement: Emphasis is on the conceptual understanding of the inputs and outputs of the process of cellular	<u>LS1.C.2</u> Use a model to demonstrate that cellular respiration is a chemical process whereby the bonds of molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy. [Clarification Statement: Emphasis is on the conceptual	<u>LS1.B.1</u> Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation	<u>LS4.B.1</u> Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3)

	organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.]	organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.]	exercise, stomata response to moisture and temperature, and root development in response to water levels.]	understanding of the inputs and outputs of the process of cellular respiration.]	respiration.]	understanding of the inputs and outputs of the process of cellular respiration.]	of chromosomes, and separation of cell contents.]	competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment. [Clarification Statement: Emphasis is on using evidence to explain the influence each of the four factors has on the number of organisms, behaviors, morphology, or physiology in terms of ability to compete for limited resources and subsequent survival of individuals and adaptation of species. Examples of evidence could include mathematical models such as simple distribution graphs and proportional reasoning.]
Supporting Standards	LS1.A.3 Plan and conduct an investigation to provide evidence that	LS1.A.3 Plan and conduct an investigation to provide evidence that feedback	LS1.A.3 Plan and conduct an investigation to provide evidence that	LS1.A.1 Systems of specialized cells within organisms help them perform the essential functions of life.	LS1.A.1 Systems of specialized cells within organisms help them perform the essential functions of life.	LS1.A.1 Systems of specialized cells within organisms help them perform the essential functions of life.	LS3.B.2 Develop and use a model to describe why structural changes to genes (mutations) located on	LS1.A.3 Plan and conduct an investigation to provide evidence that feedback

	<p>feedback mechanisms maintain homeostasis. [Clarification Statement: Examples of investigations could include heart rate response to exercise, stomata response to moisture and temperature, and root development in response to water levels.]</p>	<p>mechanisms maintain homeostasis. [Clarification Statement: Examples of investigations could include heart rate response to exercise, stomata response to moisture and temperature, and root development in response to water levels.].</p>	<p>feedback mechanisms maintain homeostasis. [Clarification Statement: Examples of investigations could include heart rate response to exercise, stomata response to moisture and temperature, and root development in response to water levels.]</p>		<p>LS1.C.3 Construct and revise an explanation based on evidence that organic macromolecules are primarily composed of six elements, where carbon, hydrogen, and oxygen atoms may combine with nitrogen, sulfur, and phosphorus to form large carbon-based molecules.</p>		<p>chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.</p>	<p>mechanisms maintain homeostasis. [Clarification Statement: Examples of investigations could include heart rate response to exercise, stomata response to moisture and temperature, and root development in response to water levels.]</p>
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