

MIDDLE TOWNSHIP PUBLIC SCHOOLS  
CAPE MAY COURT HOUSE, NJ 08210  
CURRICULUM GUIDE

DISCIPLINE: Science: Anatomy and Physiology GRADE LEVEL: 10-12

Grade Level Standards		Content/Cluster	Essential Questions	Time Frame Days	Activities and Differentiation	Cross Curricular Connections	Assessment/Benchmark	Resources
Domain	Standard							
5.1.12 B	B.1 B.b B.4	Organization and General Plan of the Body	How are locations within the body communicated?	9	Guided Notes  Class Discussions including studying exercises	Read and comprehend complex literary and informational texts independently and proficiently.	Student Responses  Exit Cards  Lab Reports  Lab Quiz	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12D	D.a D.1 D.b D.2	Basic Chemistry	What is the formation and purpose of ionic bonds, covalent bonds, disulfide bonds and hydrogen bonds?		Dry Erase Board Bonding  pH Lab	Generate a hypothesis, test, and analyze data.	Organ System Quiz  Location and Position Quiz  Chapter Test	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company
5.2.12A	A.a A.1 A.b A.d A.4 A.5 A.f A.6		What is the importance of water to the functioning of the human body?		Organic Compound Models  Water Lab and Graphic Organizer	Learn symbols used in scientific text.		
5.3.12A	A.a A.1 A.b A.2		What are the functions of organic compounds (carbohydrates, protein (enzymes), lipids and nucleic acids) in the human body?		Case Studies  SW Guided Reading			

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5.1.12B	B.1 B.b B.4	Cells	What are the organic molecules that make up the cell membrane and what are their functions?	10	Guided Notes	Read and comprehend complex literary and informational texts independently and proficiently.	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12D	D.a D.1 D.b D.2		What are the functions of each cell organelle?		Class Discussions including studying exercises		Exit Cards	
5.3.12A	A.a A.1 A.b A.2 A.c A.3 A.d A.4 A.e A.f A.6		What are the types of cellular transport and how do they function?		Cell Diagrams		Lab Reports	
			How is DNA transcribed and translated into protein?		Diffusion and Osmosis Lab		Lab Quiz	
5.3.12D	D.c	What happens in mitosis and meiosis?	Active and Passive Transport Foldables	Cell Organelle Quiz	Cell Cycle Quiz	Chapter Test	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company	
		What is the significance of mitosis and meiosis?		Cell Cycle Activities – Transcription and Translation				
					SW Guided Reading	ts, or performing technical tasks; analyze the specific results based on explanations in the text.		

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5.1.12D	D.a D.1 D.b D.2	Tissues and Membranes	What are the general characteristics of each of the four major categories of tissues?	6	Guided Notes	Read and comprehend complex literary and informational texts independently and proficiently.	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.3.12A	A.6		What are the functions of each tissue?		Class Discussions including studying exercises		Exit Cards	
5.3.12B	B.a B.b		What is the difference between exocrine and endocrine glands?  What are the three parts of a neuron and what are the functions of each?		Graphic Organizer  SW Guided Reading		Quiz  Chapter Test	

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5.1.12D	D.a D.1 D.b	Skeletal System	What are the functions of the skeleton?	12	Guided Notes	Read and comprehend complex literary and informational texts independently and proficiently	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.3.12A	A.f		How are bones classified?		Class Discussions including studying exercises		Exit Cards	
			How is the embryonic skeleton model replaced by bone?		Skull and Full Body Bone Diagrams		Graded Skeleton Projects	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
			What nutrients and hormones are involved in bone growth and what are their functions?		Build a skeleton Activity		3D Skull Quiz	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company
			What is bone exercise?		Simon Says-Bones		Bone Identification Quiz	
			How are joints classified and what movements do they allow?		SW Guided Reading		Joint Quiz	
							Chapter Test	

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Domain	Standard									
5.1.12A	A.c	Nervous System	What are the divisions of the nervous system, the parts, and the function of each?	10	Guided Notes	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company		
5.1.12B	B.a		What is the importance of Schwann cells?		Class Discussions including studying exercises		Exit Cards			
	B.1				How do electrical impulses work?		SW Guided Reading		Divisions of the brain quiz (function and locations on a 3d model)	
	B.2						What are the types of neurons, nerves and nerve tracts?		Brain Models/ Diagrams	Lab Report
	B.3								What is the importance of stretch reflexes and flexor reflexes?	Diseases that attack Reading
5.1.12D	D.a		What are the locations and functions of the parts of the brain?		Sheep Brain Dissection		Workbook, Philadelphia, PA: F.A. Davis Company			
	D.1				What are the locations and functions of the parts of the brain?				Brain Graphic Organizer	
	D.2								Brain Games	
	D.3		Explain the						Sheep Brain Dissection Virtual Website	
5.3.12A	A.f									

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Domain	Standard								
			importance of the sympathetic and parasympathetic divisions?						
5.1.12A	A.c	Senses	What is the purpose of the senses?	13	Guided Notes	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	Student Responses Exit Cards Lab Reports Parts of the eye quiz Vision quiz Taste and smell pathway quiz Chapter Test	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company	
5.1.12B	B.a B.1 B.b B.2 B.c B.3 B.d B.4		What are the parts of a sensory pathway and what is the function of each part?		Class Discussions including studying exercises				
5.1.12D	D.a D.1 D.b D.2 D.c D.3		What are the cutaneous senses and what is their purpose?		SW Guided Reading Graphic Organizers				
			What is referred pain?		Case Studies				
5.3.12C	A.f		What is the significance of muscle sense?		Cutaneous sense project				
			What pathways are used for the sense of taste and smell?		Taste Lab				
			How are the		Smell Lab				
					Eye Dissection				
									Produce clear and coherent writing in which the development,

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Domain	Standard							
			interrelated?  What are the parts of the eye and their functions?  How is vision possible?  What are the parts of the ear and what are their functions?  How does equilibrium work?		Ear Activity/ Diagram	organization, and style are appropriate to task, purpose, and audience.		

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Domain	Standard							
5.1.12A	A.c	Blood Heart	What is the composition of blood?	13	Guided Notes	Read and comprehend complex literary and informational texts independently and proficiently	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12B	B.a B.1 B.b B.2		What are the functions of RBC & WBC?		Class Discussions including studying exercises		Exit Cards	
5.1.12D	D.a D.1 D.b		What nutrients are needed for RBCs?		SW Guided Reading		RBC/WBC Quiz	
5.3.12A	A.4 A.e		What happens to RBCs at the end of their life, the hemoglobin?		Graphic Organizers (WBC/RBC)		Blood Inheritance Quiz	
5.3.12E	E.a E.1 E.b		How is blood type inherited?		Case Studies		Heart Quiz	
			What are the 5 types of WBC's and what are their functions?		Blood Typing Lab  Blood Type Genetics Practice		Chapter Test  Graded Heart Project  Graded	



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			What are platelets?  How is abnormal clotting prevented?  What is the significance of blood clotting?  Where is the heart located?  What chambers are included in the heart and what vessels leave and enter each?  How does the cardiac cycle work?  How are heart sounds created?  What is the significance of stroke volume, cardiac input and		Problems  Heart Project	and audience.	Graphic Organizers	

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Domain	Standard							
			<p>Starling's law of the heart?</p> <p>How does the nervous system regulate heart rate and force contraction?</p>					
5.1.12A	A.c	Body Temperature and Metabolism	What is the normal range of human body temperature?	7	Guided Notes	Read and comprehend complex literary and informational texts independently and proficiently	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12B	B.a B.1 B.b B.2		How is body heat created through cellular respiration? What factors affect heat production?		Class Discussions including studying exercises		Exit Cards	
5.1.12D	D.a D.1 D.b		How is heat lost?		SW Guided Reading		Cellular Respiration Quiz	
5.2.12D	D.e D.5		Why is the hypothalamus called the thermostat of the body?		Graphic Organizers		Chapter Test	
5.3.12A	A.a A.1 A.b A.2		What mechanisms		Case Studies		Produce clear and coherent writing in which the development, organization, and style	
					Cellular Respiration Activity			Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company

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Domain	Standard							
5.3.12B	A.c A.3  B.a B.1 B.b B.2 B.e B.f		are used to increase or conserve heat loss?  What causes a fever? Adv? Dis?  What is metabolism?		Optional Cellular Respiration Lab	are appropriate to task, purpose, and audience.		
5.1.12A 5.1.12B 5.1.12D 5.3.12A	A.c  B.a B.1 B.b B.2  D.a D.1 D.b D.2 D.c D.3  A.d A.4 A.f A.6	Integumentary System	What are the major layers of the skin? Tissues in each?  What is the function of Langerhans cells?  What is the purpose of melanocytes?  What are the functions of hair and nails?  What are the cutaneous senses?  What are the	10	Guided Notes  Class Discussions including studying exercises  SW Guided Reading  Graphic Organizers  Skin Diagrams  Skin Cancer  Skin Disorder	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.  Conduct	Student Responses  Exit Cards  Quiz – diagram quiz  Quiz – Skin Physiology Quiz  Chapter Test  Graded Skin Analysis  Graded Skin Diagrams	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company  Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company

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Domain	Standard							
			<p>functions of the secretions of sebaceous glands, ceruminous glands, and eccrine glands?</p> <p>How do arterioles in the dermis respond to heat, cold, and stress?</p>		<p>Project Case Studies</p> <p>Cat Dissection</p> <p>Microscope Analysis of Cat skin samples</p>	<p>short as well as more sustained research projects to answer a question</p>	<p>Graded Skin Disorder Project</p> <p>Graded Cat Dissection</p>	<p>Cat Dissection Manual</p>
5.1.12A	A.c	Muscular System	<p>What are the major muscles in the body and where are they located?</p>	9	<p>Guided Notes</p> <p>Class Discussions including studying exercises</p>	<p>Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</p>	<p>Student Responses</p>	<p>Scanlon, V, (2011) Essentials of Anatomy and Physiology 6<sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company</p> <p>Scanlon, V, (2011) Essentials of Anatomy and Physiology 6<sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company</p>
5.1.12B	B.a B.1 B.b B.2		<p>What organ systems are directly involved in movement and how are they involved?</p>		<p>SW Guided Reading</p>		<p>Exit Cards</p> <p>Graded diagrams</p>	
5.1.12D	D.a D.1 D.b D.2 D.c D.3		<p>How do muscle cells, tendons and bones create muscles?</p>		<p>Graphic Organizers</p>		<p>Graded Cat Dissection</p> <p>Muscle Quiz on cat</p>	
5.3.12A	A.d A.4 A.f		<p>What is the difference between</p>		<p>Case Studies</p> <p>Cat Dissection</p>		<p>Graded Exercise Project</p>	

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	A.6		antagonistic and synergistic muscles?  What is muscle tone? Muscle sense?  What is the difference between isotonic and isometric exercise?  What is the energy source for muscle contraction? What happens when there is a lack of oxygen in muscles?  What is the sliding filament mechanism?  How does the body respond to exercise?		Muscle Diagrams  Exercise Project  Simon Says - Muscles			Cat Dissection Manual

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Domain	Standard							
5.1.12A	A.c	Endocrine System	What are the names of the endocrine glands and the hormones secreted by each?	8	Guided Notes	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12B	B.a B.1 B.b B.2		How does negative feedback work?		Class Discussions including studying exercises		Exit Cards	
5.1.12D	D.a D.1 D.b D.2 D.c D.3		How is the hypothalamus involved in the secretion of hormones?		SW Guided Reading		Quiz – hormones and glands	
5.3.12A	A.d A.4		What is stimulus / function of		Hormone Graphic Organizer		Quiz – Gland Identification Quiz	
							Chapter Test	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis
							Graded Cat Dissection	F.A. Davis

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Domain	Standard							
	A.f A.6		<ol style="list-style-type: none"> <li>1. Oxytocin</li> <li>2. Antidiuretic</li> <li>3. Hormones in Ant Pit Gland</li> <li>4. Thyroxine</li> <li>5. T3</li> <li>6. Epinephrine</li> <li>7. Norepinephrine</li> <li>8. Aldosterone</li> <li>9. Cortisol</li> <li>10. Estrogen</li> <li>11. Progesterone</li> <li>12. Testosterone</li> <li>13. Inhibin</li> </ol>		Feedback Graphic organizer  Case Studies  Cat Dissection			Company  Cat Dissection Manual
5.1.12A	A.c	Vascular System	How does the structure of arteries and veins relate to their function?	8	Guided Notes	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results based on explanations	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12B	B.a B.1 B.b B.2		What is the purpose of arterial & venous anastomoses?		Class Discussions including studying exercises		Exit Cards	
5.1.12D	D.a D.1 D.b D.2 D.c D.3		What exchange processes take place in arteries?		SW Guided Reading		Quiz	
5.3.12A	A.d		Describe the pathway of pulmonary		Graphic Organizers		Chapter Test	
					Blood Pressure Lab		Graded Cat Dissection	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition
							Graded Blood Pressure Lab	Workbook, Philadelphia, PA:

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Domain	Standard							
	A.4 A.f A.6		circulation.  What are the branches of the aorta? Purpose?  What are the modifications of fetal circulation?  What is blood pressure and what are the normal ranges?		Case Studies  Cat Dissection	in the text.		F.A. Davis Company  Cat Dissection Manual
5.1.12A  5.1.12B  5.1.12D  5.3.12A	A.c  B.a B.1 B.b B.2  D.a D.1 D.b D.2 D.c D.3  A.d	Lymphatic System & Immunity	What are the functions of the lymphatic system? How is lymph formed?  How do lymph vessels work and how is lymph returned to the blood?  Where are lymph nodes located? functions?	8	Guided Notes  Class Discussions including studying exercises  SW Guided Reading  Graphic Organizers  Case Studies	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results based on	Student Responses  Exit Cards  Quiz – Lymph node location quiz  Chapter Test  Graded Cat Dissection	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company  Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook,



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	A.4 A.f A.6		<p>Where are the spleen and thymus located? Function?</p> <p>What is immunity?</p> <p>What is the dif between innate immunity and adaptive immunity?</p> <p>How do vaccines work?</p>		<p>Cat Dissection</p> <p>Immunity Project</p>	<p>explanations in the text.</p>		<p>Philadelphia, PA: F.A. Davis Company</p> <p>Cat Dissection Manual</p>
5.1.12A	A.c	Respiratory System	<p>What is the function of this system?</p>	8	<p>Guided Notes</p>	<p>Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the specific results</p>	<p>Student Responses</p>	<p>Scanlon, V, (2011) Essentials of Anatomy and Physiology 6<sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company</p>
5.1.12B	B.a B.1 B.b B.2		<p>What are the structures and functions of</p>		<p>Class Discussions including studying exercises</p>		<p>Exit Cards</p> <p>Quiz – structure and function</p>	
5.1.12D	D.a D.1 D.b D.2 D.c D.3		<p>1.nasal cavities 2. pharynx 3. larynx 4. trachea 5. bronchial tree 6. pleural membranes /</p>		<p>SW Guided Reading</p> <p>Graphic Organizers</p>		<p>Chapter Test</p> <p>Graded Cat Dissection</p>	

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5.3.12A	A.d A.4 A.f A.6		serous fluid 7. alveoli 8. pulmonary Capillaries		Case Studies  Cat Dissection  Pulmonary Activity	based on explanations in the text.	Graded Pulmonary Activity	Workbook, Philadelphia, PA: F.A. Davis Company
5.3.12B	B.a B.1 B.b B.2 B.e B.f		How are we able to speak?  What are pulmonary volumes?  How are O and CO <sub>2</sub> transported in blood? Affects pH?					Cat Dissection Manual
5.1.12A	A.c	Digestive System	What are the general functions of this system?	10	Guided Notes	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12B	B.a B.1 B.b B.2		What is the difference between mechanical and chemical digestion? End Product?		Class Discussions including studying exercises		Exit Cards	
5.1.12D	D.a D.1 D.b D.2 D.c		Location, Structure and Function of		SW Guided Reading  Graphic		Quiz- location and structure  Chapter Test  Graded Cat Dissection	

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Domain	Standard							
5.3.12A	D.3 A.d A.4 A.f A.6		1. Teeth 2. Tongue 3. Saliva 4. Pharynx 5. Esophagus 6. Alimentary Tube		Organizers Case Studies Cat Dissection	specific results based on explanations in the text.	Graded Digestive System Posters	Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company
5.3.12B	B.a B.1 B.b B.2 B.e B.f		7. Stomach 8. Gall Bladder 9. Small Intestine 10. Liver 11. Pancreas 12. Large intestine 13. Flora-Colon		Digestive System Posters Flash Cards with illustrations		Cat Dissection Manual	
5.1.12A	A.c	Urinary System	What is the location and function of each part of urinary system?	5	Guided Notes	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks; analyze the	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12B	B.a B.1 B.b B.2				Class Discussions including studying exercises		Exit Cards	
5.1.12D	D.a D.1 D.b D.2 D.c		What are the parts of a nephron and blood vessels associated with them?		SW Guided Reading Graphic		Quiz Chapter Test Graded Cat Dissection	

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Domain	Standard							
5.3.12A	D.3 D.e D.5  A.d A.4 A.f A.6		How is urine formed?  How do the kidneys maintain normal blood volume, blood pressure, and pH?  What is urination reflex and how is voluntary control possible?  What are the characteristics of normal urine?		Organizers  Case Studies  Cat Dissection  Urinary System Posters	specific results based on explanations in the text.	Graded Urinary System Posters	Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company  Cat Dissection Manual
5.1.12A 5.1.12B 5.1.12D	A.c B.a B.1 B.b B.2  D.a D.1 D.b D.2	Reproductive System	What is meiosis? What are the differences between spermatogenesis and oogenesis?  What hormones are necessary to form gametes?  Location/ Function	5	Guided Notes  Class Discussions including studying exercises  SW Guided Reading	Follow precisely a complex multistep procedure, taking measurements, or performing technical tasks;	Student Responses  Exit Cards  Quiz  Chapter Test  Graded Cat Dissection with	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company  Scanlon, V, (2011) Essentials of

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Domain	Standard							
5.3.12A	D.c D.3 A.d A.4 A.e A.f A.6		<ol style="list-style-type: none"> <li>1. Testes</li> <li>2. Epididymis</li> <li>3. Ductus deferens</li> <li>4. Ejaculatory duct</li> <li>5. Urethra</li> <li>6. Seminal vesicles</li> <li>7. Prostate gland</li> <li>8. Bulbourethral glands</li> <li>9. Sperm cell</li> <li>10. Ovaries</li> <li>11. Fallopian tubes</li> <li>12. Uterus</li> <li>13. Vagina</li> <li>14. Myometrium</li> <li>15. Endometrium</li> <li>16. Mammary glands</li> </ol> <p>What is the composition of semen? Why must its pH be alkaline?</p> <p>How does the menstrual cycle work?</p>		<p>Graphic Organizers</p> <p>Diagrams</p> <p>Case Studies</p> <p>Cat Dissection</p> <p>Pregnant Cat Dissection</p>	<p>analyze the specific results based on explanations in the text.</p>	<p>identifications</p> <p>Pregnant Cat Quiz</p>	<p>Anatomy and Physiology 6<sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company Cat Dissection Manual</p>
5.3.12D	D.a D.1 D.b D.2 D.c D.3							
5.3.12E	E.a E.1 E.b							

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Domain	Standard							
5.1.12A	A.c	Fluid Electrolyte / Acid/Base	How are water compartments described, named, and able to move between compartments?	5	Guided Notes	Read and comprehend complex literary and informational texts independently and proficiently	Student Responses	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis Company
5.1.12B	B.a B.1 B.b B.2				Class Discussions including studying exercises		Exit Cards	
5.1.12D	D.a D.1				How is the intake and outtake of		SW Guided	
					Chapter Test			

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Domain	Standard							
5.3.12A	D.b D.2 D.c D.3  A.d A.4 A.f A.6		<p>water regulated?</p> <p>What are the major electrolytes in body fluids and what are their functions? How are they regulated?</p> <p>What are the buffer systems in body fluids?</p> <p>How do the respiratory and renal mechanisms effect pH?</p> <p>What are the effects of acidosis and alkalosis?</p>		<p>Reading</p> <p>Graphic Organizers</p> <p>Case Studies</p> <p>Poster</p>			Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company
5.1.12A 5.1.12B	A.c  B.a B.1 B.b B.2	Human Development and Genetics	<p>How does fertilization result in a blastocyst?</p> <p>When, where and how does implantation occur?</p>	9	<p>Class Discussions including studying exercises</p> <p>SW Guided</p>	<p>Read and comprehend complex literary and informational texts independent</p>	<p>Student Responses</p> <p>Exit Cards</p> <p>Quiz</p>	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA: F.A. Davis

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Domain	Standard							
5.1.12D	D.a D.1 D.b D.2		What are the functions of the embryonic membranes, placenta and umbilical cord?		Reading  Graphic Organizers  Flash Cards	ly and proficiently  Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	Chapter Test  Graded Public Health Posters	Company  Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company
5.3.12A	A.d A.4 A.e A.f A.6		What is the average gestation period?  What are the stages of labor?					
5.3.12D	D.a D.1 D.b D.2 D.c D.3		What are the major changes in an infant at birth?					
5.3.12E	E.a E.1 E.b		What are the possible patterns of inheritance?					
5.1.12A	A.c	Microbiology and Human Disease	How are microorganisms classified / named?	5	Class Discussions including studying exercises	Integrate and evaluate multiple sources of information presented in	Student Responses  Exit Cards  Quiz	Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition, Philadelphia, PA:
5.1.12B	B.a B.1 B.b B.2		What are the benefits of natural					



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Domain	Standard							
5.1.12D	D.a D.1 D.b D.2		flora?  What is meant by infectious disease?		SW Guided Reading  Graphic Organizers	diverse formats and media (e.g., quantitative data, video, multimedia)	Chapter Test	F.A. Davis Company
5.3.12C	C.b C.2		What are the different types of infection? How can they spread?  How can growth of microorganisms be controlled? How does this benefit public health?  What is the general structure of bacteria, viruses, fungi and protozoa? What diseases can they cause?  What types of worm infestations are there?  What arthropods are vectors of		Microscope Use  Public Health Poster Project	in order to address a question or solve a problem.  Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry		Scanlon, V, (2011) Essentials of Anatomy and Physiology 6 <sup>th</sup> Edition Workbook, Philadelphia, PA: F.A. Davis Company

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Domain	Standard							
			disease?			when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.		