

Auburn School District

Anatomy and Physiology

	Total Framework Hours: 180
CIP Code: 510800 Exploratory Preparatory	Date Last Modified: June 6, 2013
Career Cluster: Health Services	Career Pathway: Therapeutic Services

Power Standards

- PS 1: Describe the levels of organization within the human body.
- **PS 2:** Explain structure and function of the integumentary system.
- PS 3: Explain structure and function of the skeletal system.
- **PS 4:** Explain structure and function of the muscular system.
- **PS 5:** Explain structure and function of the nervous system.
- PS 6: Explain structure and function of the circulatory system.
- **PS 7:** Explain structure and function of the respiratory system.
- **PS 8:** Explain structure and function of the digestive system.
- **PS 9:** Explain structure and function of the urinary system.
- **PS 10:** Explain structure and function of the reproductive system.

Unit Outline

	<u>nours</u>
Unit 1: Introduction to and Organization of the Human Body	15
Unit 2: The Integumentary System	5
Unit 3: The Skeletal System	30
Unit 4: The Muscular System	30
Unit 5: The Nervous System	15
Unit 6: The Circulatory System	40
Unit 7: The Respiratory System	15
Unit 8: The Digestive System	12
Unit 9: The Urinary System	8
Unit 10: The Reproductive System	10
Total Hours	180

UNIT 1 Introduction to and Organization of the Human Body

Performance Assessments:

Complete a written assessment over the Introduction to the Human Body.

Embedded Leadership Activities

21st Century Skill: Creativity—1. A. 3 Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts

STANDARDS AND COMPETENCIES

Standard/Unit:

PS 1: Describe the levels of organization within the human body.

Competencies Total Learning Hours for Unit: 15 1.1 Define anatomy and physiology, learn the differences between the two fields of study and investigate the many career possibilities involved in these two fields.

- 1.2 Define the principle systems of the human body, and identify all the various organs represented within each system
- 1.3 Define anatomical positions and compare common and anatomical terms used to describe various regions of the body.
- 1.4 Define the basic chemical components of the body, and how they are used by our bodies on a daily basis.
- 1.5 Define, draw, and label each of the four basic cell types that make-up our entire body.
- 1.6 Define and explain all the special cell classifications, cell types, and function for each tissue and how it relates to each organ and/or each system.
- 1.7 Define common diseases associated with homeostatic imbalances associated with the various cells of the body.
- **1.8** Define, draw, and label each of the four tissue types that make-up our entire body.
- 1.9 Define and explain all the tissue classifications, tissue types, and function for each tissue and how it relates to each organ and/or each system.

ALIGNED WASHINGTON STATE STANDARDS	
COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Reading	RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author
COMMON CORE	makes and to any gaps or inconsistencies in the account.
	RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text
ENGLISH LANGUAGE	by paraphrasing them in simpler but still accurate terms.
ARTS & Literacy in History/Social Studies, Science, and Technical	RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
Subjects	Craft and Structure
	RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.
	RST5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
	RST6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text,

	identifying important issues that remain unresolved.
	RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video,
	multimedia) in order to address a question or solve a problem.
Science	 SYSA: Feedback is a process in which the output of a system provides information used to regulate the operation of the system. Positive feedback increases the disturbance to a system. Negative feedback reduces the disturbance to a system. LS1C: Cells contain specialized parts for determining essential functions such as regulation of cellular activities, energy capture and release, formation of proteins, waste disposal, the transfer of information, and movement. LS1D: The cell is surrounded by a membrane that separates the interior of the cell from the outside world and determines which substances may enter and which may leave the cell. LS1F: All of the functions of the cell are based on chemical reactions. Food molecules are broken down to provide the energy and the chemical constituents needed to synthesize other molecules. Breakdown and synthesis are made possible by proteins called enzymes. Some of these enzymes enable the cell to store energy in special chemicals, such as ATP, that are needed to drive the many other chemical reactions in a cell.

UNIT 2 The Integumentary System

Performance Assessments:

Complete a written assessment

Embedded Leadership Activities

21st Century interdisciplinary theme activity--health literacy: Using available information to make appropriate health-related decisions

STANDARDS AND COMPETENCIES

Standard/Unit:

PS 2: Explain structure and function of the integumentary system.

Competencies

- 2.1 Define the basic tissue types and there origins
- 2.2 Define, draw, and label each of the four tissue types that make-up our entire body.
- 2.3 Define and explain all the tissue classifications, tissue types, and function for each tissue and how it relates to each organ and/or each system.
- 2.4 Define common diseases associated with homeostatic imbalances associated with the various tissues of the body.

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COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening Standards	
	RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
	RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
Reading	RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
COMMON CORE	Craft and Structure
	RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.
	RST5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
	RST6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.
	RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

UNIT 3 The Skeletal System		
Performance Assessments:		
Written Assessment—focus on Physiology Complete a written skeletal assessment where they identify the bones of the human body on a diagram.		
Embedded Leadership Activities		
21 st Century interdisciplinary theme activity—health literacy: Obtaining, interpreting and understanding basic he information and services in ways that enhance health	ealth information and services and using such	
STANDARDS AND COMPETENCIES		
Standard/Unit:		
PS3: Explain structure and function of the Skeletal System.		
Competencies	Total Learning Hours for Unit: 30	
3.1 Define the medical terminology associated with the skeletal system		
3.2 Describe the histological features of compact and spongy bone tissue		
3.4 Be able to identify the principle types of hopes flat long sesamoid short and irregular		
3.5 Be able to identify surface markings and what each marking means in association with skeletal muscles and tissues		
3.6 Explain the articulation and differentiate between the different types.		
3.7 Define the medical terminology associated with joints		
3.8 Describe the difference between the different types of joints, be it synovial or cartilaginous		
3.9 Define the various types of lever systems found in the human body.		
3.10 Be able to identify the principle types of bones, flat, long, sesamoid, short and irregular.		
3.11 Identify common injuries, and diseases associated with the joints of the human body, especially osteoporosis and all the forms of arthritis		
ALIGNED WASHING I ON STATE STANDARDS		

COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and Fitness	2.3: Understands the concepts of prevention and control of disease.
Reading	RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
COMMON CORE	RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
	RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
	Craft and Structure

Writing COMMON CORE	WHST7 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 when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
Science	SYSD Systems can be changing or in equilibrium.
	 or ideas. RST6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved. RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
	RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.

UNIT 4 The Muscular System

Performance Assessments:

Complete a written assessment of the muscular system, identifying skeletal muscles on a diagram of the human body.

Complete a rubric-based feline dissection of the muscular system.

Complete a lab exam identifying skeletal muscles.

Embedded Leadership Activities

21st Century interdisciplinary theme—health literacy: 1.B.2 Be open and responsive to new and diverse perspectives; incorporate group input and feedback into the work

STANDARDS AND COMPETENCIES

Standard/Unit:

Competencies

PS 4: Explain structure and function of the muscular system.

Total Learning Hours for Unit: 30

- 4.1 Define the medical terminology associated with muscle tissue.
- 4.2 Describe the difference between the different types of muscles.
- 4.3 Discuss the relationship between dietary protein and muscle tissue rebuilding.
- 4.4 Be able to identify the energy sources of different muscles and how they relate to body function.
- 4.5 Identify the principal muscle of the body, by name, location, origin, insertion and function.
- 4.6 Understand the principles of hypertrophy, atrophy and hyperplasia.

ALIGNED WASHINGTON STATE STANDARDS

COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and Fitness	2.3: Understands the concepts of prevention and control of disease.
Reading COMMON CORE	 RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. Craft and Structure RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. RST5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

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Science	LS1F: All of the functions of the cell are based on chemical reactions. Food molecules are broken down to provide the energy and the chemical constituents needed to synthesize other molecules. Breakdown and synthesis are made possible by proteins called enzymes. Some of these enzymes enable the cell to store energy in special chemicals, such as ATP, that are needed to drive the many other chemical reactions in a cell.
Writing COMMON CORE	WHST7 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 when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

UNIT 5 The Nervous System

Performance Assessments:

Lab demonstrating function of cranial nerves and reflexes Written assessment

Embedded Leadership Activities

21st Century interdisciplinary theme activity--health literacy: Using available information to make appropriate health-related decisions

STANDARDS AND COMPETENCIES

Standard/Unit:

PS 5: Explain structure and function of the nervous system.

Competencies

5.1 Describe the basic structure of a neutron and how they function.

- 5.2 Describe the structure and function of the central nervous system.
- 5.3 Describe the structure and function of the peripheral nervous system.
- 5.4 Describe the various kinds of nerve injuries , along with spinal cord trauma
- 5.5 Discuss various disorders associated with the nervous system

ALIGNED WASHINGTON STATE STANDARDS	
COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and Fitness	2.3: Understands the concepts of prevention and control of disease.
Reading COMMON CORE	 RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. Craft and Structure RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. RST5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. RST6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

	RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video,
	multimedia) in order to address a question or solve a problem.
Writing	WHST7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a
COMMON CORE	problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating
	understanding of the subject under investigation.

UNIT 6 The Circulatory System	
Performance Assessments:	
Complete a Blood Typing Lab (simulated blood) and complete a written analysis	of the results.
Demonstrate how to take an accurate blood pressure reading on another individ	Jal.
Rubric-based feline dissection	
Written assessment	
Lab exam—10 major circulatory structures	
Embedded Leadership Activities	
21 st Century interdisciplinary theme activityhealth literacy: Using available infor	mation to make appropriate health-related decisions, Understanding national an
international public health and safety issues	
1.B.1 Develop, implement and communicate new ideas to others effectively	
STANDARDS ANI	D COMPETENCIES
Standard/Unit:	
PS 6: Explain structure and function of the circulatory system.	
Competencies	Total Learning Hours for Unit: 40
6.1 Define the medical terminology associated with blood, heart and vessels.	
5.2 Describe the difference between the different types of circulatory cells	
6.3 Discuss the relationship between the different types of blood elements and	there relationship to overall body functions
6.4 Be able to identify the various components involved in blood clotting.	
6.5 Explain the principles of diffusion between blood, o2 and co2.	
6.6 Describe the difference between the systolic and diastolic blood pressure a	nd what the changes might mean in overall health of the system.
6.7 Describe the hearts structures and functions.	
6.8 Explain how blood supply to the heart function's and how it relates to the c	overall output of cardiovascular system.
6.9 Explain the anatomy of the neart, both internal and external	ather with the lunge to make a worker and as 2 within the heads
6.10 Denne the meaning between athum and ventral, and now they function tog	ether with the lungs to move oxygen and co2 within the body.
6.12 List all the health factors associated with heart disease	ysiem.
6.12 Evolution the health factors associated with healt disease	250
6.14 Recognize and explain how to take a max heart rate, what is your target h	eart rate zone and how can we all benefit from a heart smart fitness program
6.15. Identify veins, arteries and lymph vessels in the body	carriero zono ana non oan no an bonone nom a noare omarenenoso program.

ALIGNED WASHINGTON STATE STANDARDS	5
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COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and	2.3: Understands the concents of prevention and control of disease
Fitness	

	RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
	RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
Reading	RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
COMMON CORE	Craft and Structure
	RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.
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	RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
Science	SYSA: Feedback is a process in which the output of a system provides information used to regulate the operation of the system. Positive feedback increases the disturbance to a system. Negative feedback reduces the disturbance to a system.
Writing COMMON CORE	WHST7 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 when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

UNIT 7 The Respiratory System

Performance Assessments:

Conduct a Lung Volume Lab and complete a written analysis of the results. Participate in a student led discussion on the conditions of the respiratory system and the environmental/physiological factors that affect them. Written assessment

Embedded Leadership Activities

21st Century Skills--2.D.1 Solve different kinds of non-familiar problems in both conventional and innovative ways

STANDARDS AND COMPETENCIES

Standard/Unit:

PS 7: Explain structure and function of the respiratory system.

Competencies

- 7.1 Define the medical terminology associated with the respiratory system
- 7.2 Describe the purpose for our respiratory system
- 7.3 Describe the specific structures involved in the respiratory system
- 7.4 Recognize the inter-relationship between our respiratory system, circulatory system, the heart and blood.
- 7.5 Explain the anatomy of the respiratory system, and other structures associated with this system.
- 7.6 Perform standard measurements and calculations used to determine and evaluate the functioning of the respiratory system.
- 7.7 Describe the pathways that oxygen takes as it enters the mouth, and nose, and is distributed throughout the entire body and is then returned to the external environment as co2.

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COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and Fitness	2.3: Understands the concepts of prevention and control of disease.
Reading COMMON CORE	 RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. Craft and Structure RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.

	RST5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information
	RS16 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.
	RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video,
	multimedia) in order to address a question or solve a problem.
Science	SYSA: Feedback is a process in which the output of a system provides information used to regulate the operation of the system. Positive
	feedback increases the disturbance to a system. Negative feedback reduces the disturbance to a system.
Writing	WHST7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a
COMMON CORE	problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating
	understanding of the subject under investigation.

UNIT 8 The Digestive System		
Performance Assessments:		
Identify the organs of the Gastrointestinal Tract by completing a rubric-based feline dissection of the digestive Written assessment Lab exam	e system.	
Embedded Leadership Activities		
21 st Century interdisciplinary themehealth literacy: Understanding preventive physical and mental health measures, including proper diet, nutrition, exercise, risk avoidance and stress reduction		
STANDARDS AND COMPETENCIES		
Standard/Unit:		
PS 8: Explain structure and function of the digestive system.		
Competencies	Total Learning Hours for Unit: 12	
8.1 Define the medical terminology associated with the digestive system		
8.2 Describe the purpose for our digestive system		
8.3 Describe the specific structures involved in the digestive system		
8.4 Recognize the inter-relationship between our digestive system, and gastrointestinal system.		
8.5 Describe the movements that take place during eating and digestion.		
8.6 Define absorption and explain how the end products of digestion are absorbed.		
8.7 Perform standard measurements and calculations used to determine and evaluate the functioning of the digestive system.		
8.8 Evaluate diet for balance of nutrients and make recommendations for a healthier lifestyle.		
8.9 Define the clinical signs and symptoms associated with diseases, disorders and illnesses		
8.10 Recognize the practical applications associated with gastric bypass, liposuction, lap band procedure, and medical based dieting, in relation to obesity and		
other related digestive problems		

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Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and	2.3: Understands the concepts of prevention and control of disease
Fitness	
Reading	RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
COMMON CORE	RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
	RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

	Craft and Structure
	RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.
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	RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
Science	SYSA: Feedback is a process in which the output of a system provides information used to regulate the operation of the system. Positive feedback increases the disturbance to a system. Negative feedback reduces the disturbance to a system.
Writing COMMON CORE	WHST7 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 when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

UNIT 9 The Urinary System

Performance Assessments:

Complete a urinalysis and written explanation of the results.

Embedded Leadership Activities

21st Century Skills--2.B.1 Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems

STANDARDS AND COMPETENCIES

Standard/Unit:

Competencies

PS 9: Explain structure and function of the urinary system.

- 9.1 Define the medical terminology associated with the urinary system
- 9.2 Describe the purpose for our urinary system
- 9.3 Describe the specific structures involved in the urinary system
- 9.4 Describe the process of urine formation through glomerular filtration, tubular reabsorption, and tubular secretions.
- 9.5 Perform standard measurements and calculations used to determine and evaluate the functioning of the urinary system.
- 9.6 Define the clinical signs and symptoms associated with urinary tract diseases, disorders and illnesses

ALIGNED WASHINGTON STATE STANDARDS	
COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and	2.3. Understands the concepts of prevention and control of disease
Fitness	
	RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author
	makes and to any gaps or inconsistencies in the account.
Reading	RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
COMMON CORE	RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
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	RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.
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	Important issues that remain unresolved.
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Science	STSA. reedback is a process in which the output of a system provides information used to regulate the operation of the system. Positive
Science	feedback increases the disturbance to a system. Negative feedback reduces the disturbance to a system.
writing	WHS17 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a
COMMON CODE	problem: parrow or broaden the inquiry when appropriate: synthesize multiple sources on the subject, demonstrating
CONNINION CORE	problem, narrow of broaden the inquiry when appropriate, synthesize indulpie sources on the subject, demonstrating
	understanding of the subject under investigation.
COMMON CORE	problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

UNIT 10 The Reproductive System **Performance Assessments:** Complete a written assessment over the structures of the reproductive system. **Embedded Leadership Activities** 21st Century interdisciplinary theme activity--health literacy: Using available information to make appropriate health-related decisions, Establishing and monitoring personal and family health goals STANDARDS AND COMPETENCIES Standard/Unit: **PS 10:** Explain structure and function of the reproductive system. **Competencies Total Learning Hours for Unit: 10** 10.1 Define the medical terminology associated with the reproductive system 10.2 Describe the purpose for our reproductive system 10.3 Describe the specific structures involved in the reproductive system 10.4 Describe the location, histology, and functions of the ovaries, uterine tubes, uterus, vagina, vulva, and mammary glands. 10.5 Describe the structures, histology, and functions of the testes, ducts, accessory sex glands, and the penis 10.6 Compare the principle events of the menstrual and ovarian cycles. 10.7 Explain the roles of the male and female as it relates to intercourse 10.8 Contrast he various types of birth control and there effectiveness 10.9 Define the clinical signs and symptoms associated with reproductive system diseases, disorders and illnesses

10.10Recognize the practical applications associated with reproductive system infection and all the specific things we can do to help prevent these disorders from occurring more often

ALIGNED WASHINGTON STATE STANDARDS	
COMMON CORE	SL5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance
Speaking and	understanding of findings, reasoning, and evidence and to add interest.
Listening	
Educational	1.1.2 Use models and simulations to explore systems, identify trends and forecast possibilities.
Technology	1.2.1 Communicate and collaborate to learn with others.
Health and	2.2: Understands stages of growth and development.
Fitness	2.3: Understands the concepts of prevention and control of disease.
:	RST1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author
Reading	makes and to any gaps or inconsistencies in the account.
COMMON CORE	RST2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text
	by paraphrasing them in simpler but still accurate terms.
	RST3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical
	tasks; analyze the specific results based on explanations in the text.
	Craft and Structure

	RST4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific		
	scientific or technical context relevant to grades 11–12 texts and topics. RST5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas		
	RST6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.		
	RST7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video,		
	multimedia) in order to address a question or solve a problem.		
	SYSD Systems can be changing or in equilibrium.		
	LS1I: Egg and sperm cells are formed by a process called meiosis in which each resulting cell contains only one representative		
Science	chromosome from each pair found in the original cell. Recombination of genetic information during meiosis scrambles the genetic		
	information, allowing for new genetic combinations and characteristics in the offspring. Fertilization restores the original number		
	of chromosome pairs and reshuffles the genetic information, allowing for variation among offspring.		
Writing	WHST7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a		
COMMON CORE	problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating		
	understanding of the subject under investigation.		

21 st CENTURY SKILLS			
Check those that students will demonstrate in this standard/unit:			
LEARNING AND INNOVATION Creativity and Innovation	INFORMATION, MEDIA AND TECHNOLOGY SKILLS Information Literacy Access and /evaluate Information Use and Manage Information Media Literacy Analyze Media Create Media Products Information, Communications and Technology (ICT Literacy) ⊠Apply Technology Effectively	LIFE AND CAREER SKILLS Flexibility and Adaptability △Adapt to Change △Be Flexible Initiative and Self-Direction △Manage Goals and Time △Work Independently △Be Self-Directed Learners Social and Cross-Cultural △Interact Effectively with Others △Work Effectively in Diverse Teams Productivity and Accountability △Manage Projects △Produce Results Leadership and Responsibility △Guide and Lead Others △Be Responsible to Others	