Unit 9 Respiratory System

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| UNIT 9 – RESPIRATORY SYSTEM  **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.01 Identify the general functions of the respiratory system. | I will be able to examine and identify the general functions of the Respiratory system. | 1  2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  Functional Anatomy of the Respiratory System (pp. 436 – 445)  Respiratory Physiology (pp. 445 – 448)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 23 Anatomy of the Respiratory System (pp. 293 – 298)  Objective 1 Definitions (p 293)  Exercise 23 Anatomy of the Respiratory System (pp. 299 – 302)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Functional Anatomy of the Respiratory System (pp. 261 – 268)  Respiratory Physiology (pp. 268 – 272)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;   Videos: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Respiratory gases  Oxygen  Carbon dioxide  Respiration  Expiration  Gas exchange  Respiratory membrane  Air–Blood Barrier  Pulmonary ventilation  External respiration  Respiratory gas transport  Internal respiration  Exhalation  Inhalation |
| **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.02 Sequence the organs of the respiratory system in the order which air will pass through them from the exterior. (nose or mouth, pharynx, larynx, trachea, bronchi, bronchioles, alveolar duct, alveoli). | I will be able to examine and describe the order of air flow throughout the Respiratory System from the nose to the alveoli. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  Functional Anatomy of the Respiratory System (pp. 436 – 445)  The Pharynx (pp. 438 – 439)  The Larynx (pp. 439 – 440)  The Trachea (p. 440)  The Main Bronchi (pp. 440 – 441)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 23 Anatomy of the Respiratory System (pp. 293 – 308)  Upper Respiratory System Structures (pp. 293 – 295)  Lower Respiratory System Structures (pp. 295 – 297)  Exercise 23 Review Sheet Anatomy of the Respiratory System (pp. 309 – 311)  Upper Respiratory System Structures (pp. 299 – 300)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Functional Anatomy of the Respiratory System (pp. 261 – 268)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Respiratory system  Nose  Mouth  Nasopharynx  Oropharynx  Pharynx  Laryngopharynx  Larynx  Trachea  Bronchi  Bronchioles  Alveolar duct  Alveoli |
| UNIT 9 – RESPIRATORY SYSTEM  **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.03 Identify the three regions of the pharynx. (Nasopharynx, oropharynx and laryngopharynx) | I will be able to visually identify the three regions of the pharynx – Nasopharynx, Oropharynx, and Laryngopharynx). | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  Functional Anatomy of the Respiratory System (pp. 436 – 445)  The Nose (pp. 437 – 438)  The Pharynx (pp. 438 – 439)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 23 Anatomy of the Respiratory System (pp. 293 – 308)  Upper Respiratory System Structures (pp. 293 – 295)  Exercise 23 Review Sheet Anatomy of the Respiratory System (pp. 309 – 311)  Upper Respiratory System Structures (p. 299)  Question 1. Label a diagram of the upper respiratory structure (p. 299)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Functional Anatomy of the Respiratory System (pp. 261 – 268)  Question 5. Figure 13 – 1 Label diagram of sagittal view of the upper respiratory structures (p. 263)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Pharynx  Nasopharynx  Oropharynx  Laryngopharynx |
| **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.04 Identify the following anatomical features of the larynx. (Epiglottis, glottis, hyoid bone, thyroid cartilage, cricoid cartilage, true and false vocal cords) | I will be able to examine and understand how to explain the anatomy of the larynx. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  Functional Anatomy of the Respiratory System (pp. 436 – 445)  The Larynx (pp. 439 – 440)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 23 Anatomy of the Respiratory System (pp. 293 – 308)  Upper Respiratory System Structures (pp. 293 – 295)  Exercise 23 Review Sheet Anatomy of the Respiratory System (pp. 309 – 311)  Question 1. Label a diagram of the upper respiratory structure (p. 299)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Question 8. Figure 13 – 2 Label and color diagram of the larynx and problems 1 to 5  (p 265)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Laryngopharynx  Larynx  Epiglottis  Glottis  Thyroid cartilage  True Vocal cord  False Vocal cord  Cricoid cartilage  Hyoid bone |
| **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.05 Identify the coverings of the lungs and the gross anatomical features of the lungs. (Apex, base, lobes, visceral pleura, parietal pleura, pleural cavity) | I will be able to visually identify the lung outer membranes and the anatomical features of the right and left lungs. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  The Lungs (pp. 441 – 445)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 23 Anatomy of the Respiratory System (pp. 293 – 308)  Lower Respiratory System Structures (pp. 295 – 297)  The Lungs and Their Pleural Coverings (pp. 297 – 298)  Exercise 23 Review Sheet Anatomy of the Respiratory System (pp. 309 – 311)  Upper and Lower Respiratory System Structures (pp. 299 – 301)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Figure 13 – 4 Illustration of the Gross Anatomy of the Lower Respiratory System  (p. 267)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Lung  Apex  Base  Lobes  Visceral or Pulmonary pleura  Parietal pleura  Pleural space  Pleural cavity  Right superior lobe  Right middle lobe  Right inferior lobe  Left superior lobe  Left inferior lobe |
| **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.06 Identify the site at which gas exchange occurs in the lungs. (Alveoli) | I will be able to examine and explain how gas exchange happens in the lung’s alveoli. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  Respiratory Zone Structures and the Respiratory Membranes (pp. 443 – 445)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 23 Anatomy of the Respiratory System (pp. 293 – 308)  Lower Respiratory System Structures (pp. 295 – 297)  Exercise 23 Review Sheet Anatomy of the Respiratory System (pp. 309 – 311)  Question 8. Label structures of the diagram (p. 300)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Question 11. Complete the items in Figure 13 – 5 (p. 268)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Terminal bronchiole  Respiratory bronchiole  Alveolar duct  Alveoli |
| **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.07 Identify the volumes and capacities of air exchanged during ventilation. (Tidal volume, vital capacity) | I will be able to examine, explain, and demonstrate the volumes and capacities of air exchange during ventilation using tidal volume and vital capacity. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  Respiratory Physiology (pp. 445 – 449)  Respiratory Volumes and Capacities (pp. 448 – 449)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 24 Respiratory Physiology (pp. 303 – 308)  Respiratory Volumes and Capacities – Spirometry (pp. 305 – 307)  Exercise 24 Review Sheet Respiratory Physiology (pp. 309 – 311)  Respiratory Volumes and Capacities – Spirometry (pp. 309 – 310)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Respiratory Physiology (pp. 269 – 272)  Question 17. Use key choices to identify the following descriptions (p. 271)  Question 18. Complete Figure 13 – 6 show respiratory volumes (p. 271)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Tidal volume  Inspiratory reserve volume (IRV)  Expiratory reserve volume (ERV)  Vital capacity  Dead space volume |
| **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.08 Differentiate between ventilation, external respiration, and internal respiration. | I will be able to examine and explain the difference between ventilation, external respiration, and internal respiration. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  External Respiration, Gas Transport, and Internal Respiration (pp. 449 – 452)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 24 Respiratory Physiology (pp. 303 – 308)  Mechanics of Respiration (pp. 303 – 304)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Question 14. Use key choices to the following descriptions (p. 270)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Ventilation  External respiration  Internal respiration |
| UNIT 9 – RESPIRATORY SYSTEM  **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.09 Describe the effects of carbon dioxide on ventilation. | I will be able to examine and describe the effects of carbon dioxide on ventilation. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  External Respiration, Gas Transport, and Internal Respiration (pp. 449 – 452)  Gas Transport in the Blood (pp. 450 – 452)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 24 Review Sheet Respiratory Physiology (pp. 309 – 311)  Factors Influencing Rate and Depth of Respiration (pp. 310 – 311)  Questions 11 and 14 (p. 311)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Question 21. Circle the term that does not belong to the following groups (p. 272)  **PowerPoint Presentations**: Respiratory System Marieb 7th Ed; Respiratory System 1; Respiratory System 2; Respiratory System 3;    **Videos**: Anatomy and physiology of the respiratory system; The Respiratory System (Bozeman Science); Respiratory System Made Easy; Respiratory System, Part 2:: Crash Course A&P #32; Respiratory System, Part 1:: Crash Course A&P #31; | Carbon dioxide  Oxyhemoglobin  Bicarbonate ion  Hypoxia |
| **STANDARD**  09 Students will describe the structures and functions associated with the respiratory system. | 09.10 Identify the following diseases or disorders of the respiratory system. (Emphysema, influenza, lung cancer, pneumonia, SIDS, tuberculosis) | I will be able to examine and identify disorders or diseases of the respiratory system, such as emphysema, influenza, lung cancer, pneumonia, SIDS, and tuberculosis. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 13 Respiratory System (pp. 436 – 452)  Homeostatic imbalance topics: 13.1 cleft palate (p. 438) ; 13.2 rhinitis (p. 438); 13.3 tonsillitis (p. 439); 13.4 Heimlich maneuver (p. 440); 13.5 smokers (p. 440); 13.6 pleurisy (p. 443); 13.7 (atelectasis and pneumothorax (p. 447); 13.8 crackle, wheezing, and rales (p. 449); 13.9 hypoxia, cyanotic, and carbon monoxide poisoning (p. 451); 13.10 overdose and death (p. 452); 13.11 (CO2 retention) (p. 454); 13.13 COPD (p. 455); 13.14 IRDS (p. 457); and 13.15 SIDS (p. 459).  Respiratory Disorders (pp. 454 – 457)  Developmental Aspects of the Respiratory System (pp. 457 – 459)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 13 The Respiratory System (pp. 261 – 278)  Respiratory Disorders - complete the crossword puzzle (p. 273)  Developmental Aspects of the Respiratory System (p. 247)  **PowerPoint Presentations**: Respiratory System Diseases; Diseases of the Respiratory System; Signs and Symptoms of Respiratory Diseases;  **Videos**: Diseases of the Respiratory System; Unit 13.2 Respiratory System Disorders. Types of Pulmonary Diseases Respiratory System Diseases; | Emphysema  Influenza  Lung cancer  Pneumonia  Sudden Infant Death Syndrome (SIDS)  Tuberculosis  Chronic obstructive pulmonary disease  Chronic bronchitis  Adenocarcinoma  Cystic fibrosis  Asthma  Sleep apnea |

Unit 10 Language of Anatomy and Human Body Organization

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| UNIT 1 – LANGUAGE OF ANATOMY AND ORGANIZATION  STANDARD  Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.05 Describe the six levels of structural organization of the human body**.** (Chemical, cellular, tissue, organ, system, organism) | I will be able to describe how the human body can be organized at six levels of structural organization: chemical, cellular, tissue, organ, system, and organism. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 1 The Human Body: An Orientation (pp. 1 – 23)  Levels of Structural Organization (pp. 2–3)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 1 The Human Body: An Orientation (pp. 1 – 16)  Levels of Structural Organization (p. 2)  PowerPoint Presentations: Organization of the Human Body | Atoms  Chemical  Cells  Tissues  Organ  Organ system  Organism |
| STANDARD  01 Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.06 Describe metabolism and its anabolic and catabolic processes. | I will be able to describe and demonstrate the anabolic and catabolic chemical processes. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 2 Basic Chemistry (pp. 24 – 61)  Concepts of Matter and Energy (pp. 24 – 26)  Patterns of Chemical Reactions (pp. 36 – 38)  Nucleic Acids (pp. 52 - )  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Metabolism (pp. 490 – 494)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Metabolic Processes (pp 296 – 297)  **PowerPoint Presentations**: Essentials of Metabolism; Catabolic and Anabolic Reactions  **Videos**: Overview of Metabolism – Anabolism and Catabolism Khan Academy; Basics of Metabolism Khan Academy | Anabolic chemical process  Catabolic chemical process  Metabolism  Adenosine triphosphate |
| STANDARD  01 Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.07 Apply directional terms used in human anatomy. (Posterior/anterior, medial/lateral, proximal/distal, superficial/deep, superior/inferior) | I will be able to learn and appropriately apply the anatomical directional terms of posterior, anterior, medial, lateral, proximal, distal, superficial, deep, superior, and inferior. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology** by Marieb (2018);  Chapter 1 The Human Body: An Orientation (pp. 1 – 23)  The Language of Anatomy (pp 12 – 16)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 1 The Language of Anatomy (pp. 1 – 6)  Anatomical Position (pp. 1 - 4)  Exercise 1 Review Sheet The Language of Anatomy (pp. 7 – 8)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 1 The Human Body: An Orientation (pp. 1 – 16)  Body Orientation and Direction - Language of Anatomy (pp. 3 – 4)  **PowerPoint Presentations**: A&P Introduction and Directional Terminology; Anatomical Position Terms;  **Videos**: Anatomical Position and Directional Terms; Anatomical Terms – Drawn and Defined; Anatomical Terms & Movement Lecture; Introduction to Anatomy – Language; Language of Anatomy – Language; | Anatomical position  Posterior (dorsal)  Anterior (Ventral)  Medial  Lateral  Proximal  Distal  Superficial (External)  Deep (internal)  Superior (Cranial)  Inferior (Caudal)  Intermediate |
| STANDARD  01 Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.08 Apply commonly used planes to divide the body. (Sagittal, midsagittal, transverse [horizontal], frontal [coronal]) | I will be able to learn and appropriately apply the anatomical body plane terms of sagittal, midsagittal, transverse, horizontal, and frontal. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 1 The Human Body: An Orientation (pp. 1 – 23)  Body Planes and Sections (pp. 15 – 16)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 1 The Language of Anatomy (pp. 1 – 6)  Planes and Sections (pp. 4 - 5)  Exercise 1 Review Sheet The Language of Anatomy (pp. 7 – 8)  Planes and Sections (pp. 4 - 5)  **PowerPoint Presentations**: Body Planes Directions and Cavities; The Human Body Anatomical Regions, Directions, A&P Introduction and Directional Terminology NPHS  **Videos**: Anatomical Planes and Spatial Relations; Language of Anatomy Video 2 Body Planes; Planes of Motion; What are the 3 Anatomical Planes of Movement? | Body planes  Sagittal  Midsagittal  Transverse (horizontal)  Frontal (Coronal) |
| STANDARD  01 Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.09 Identify the body cavities and locate the following organs within each cavity.  Dorsal Cavity  Vertebral - spinal cord  Cranial - brain  Ventral Cavity  Thoracic – heart, lungs  Mediastinum - heart, bronchi, esophagus, thymus  Pericardial - heart  Pleural - lungs  Abdominopelvic Cavity - liver, spleen, intestines, kidneys, stomach  Pelvic - intestines, urinary bladder, sex organs | I will be able to learn and appropriately apply the anatomical body cavity terms of dorsal cavity, vertebral cavity, cranial cavity, ventral cavity, thoracic cavity, mediastinum cavity, pericardial cavity, abdominopelvic cavity, and pelvic cavity. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 1 The Human Body: An Orientation (pp. 1 – 23)  Body Cavities (pp. 15 – 19)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 1 The Language of Anatomy (pp. 1 – 6)  Body Cavities (pp. 5 - 6)  Exercise 1 Review Sheet The Language of Anatomy (pp. 7 – 8)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 1 The Human Body: An Orientation (pp. 1 – 16)  The Language of Anatomy (pp. 8 – 9)  **PowerPoint Presentations**: A&P Introduction and Directional Terminology NPHS; body-planes-directions-and-cavities  **Videos**: Language of Anatomy Video 3 The Body Cavities; Anatomical toolbox 7- Body cavities | Dorsal cavity  Vertebral cavity  Cranial cavity  Ventral cavity  Thoracic cavity  Mediastinum cavity  Pericardial cavity  Abdominopelvic cavity  Pelvic cavity |
| STANDARD  01 Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.10 Identify the major organ(s) in each abdominal quadrant.  RUQ - right upper quadrant - liver, gallbladder, right kidney  RLQ - right lower quadrant – cecum, appendix, right ovary  LUQ - left upper quadrant - spleen, stomach, left kidney  LLQ - left lower quadrant - left ovary | I will be able to learn and appropriately apply the four anatomical abdominal quadrant terms of right upper quadrant (RUQ), left upper quadrant (LUQ), right lower quadrant (RLQ), left lower quadrant (LLQ), and right lower quadrant (RLQ). | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 1 The Human Body: An Orientation (pp. 1 – 23)  The abdominopelvic regions (pp. 17 – 18)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 1 The Language of Anatomy (pp. 1 – 6)  Body Cavities (pp. 5 - 6)  Exercise 1 Review Sheet The Language of Anatomy (pp. 7 – 8)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 1 The Human Body: An Orientation (pp. 1 – 16)  The Language of Anatomy (pp. 8 – 9)  **PowerPoint Presentations**: A&P Introduction and Directional Terminology NPHS; body-planes-directions-and-cavities  **Videos**: Language of Anatomy Video 3 The Body Cavities; Anatomical toolbox 7- Body cavities | Right lower quadrant (RLQ)  Right upper quadrant (RUQ)  Left lower quadrant (LLQ)  Left upper quadrant (LLQ) |
| STANDARD  01 Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.11 Examine the relationship between homeostasis and stress. | I will examine and explain the relationship of homeostasis and stress in controlling a body’s ability to sustain a stable internal environment. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 1 The Human Body: An Orientation (pp. 1 – 23)  Homeostasis (pp. 19 – 21)  Feedback Mechanisms (pp. 19 -21)  Chapter 9 The Endocrine System (pp. 308 -336)  Stimuli for Control of Hormone Release (pp. 311 – 312)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 1 The Human Body: An Orientation (pp. 1 – 16)  Maintaining Life (pp. 7 – 8)  **PowerPoint Presentations**: Homeostasis; Essentials of Metabolism  **Videos**: Basics of Metabolism; Overview of Metabolism | Homeostasis  Receptor  Control center  Effector  Negative feedback  Positive feedback  Homeostatic imbalance  Stress |
| STANDARD  01 Students will explore careers in health care and describe the body plan and organization and homeostasis. | 01.12 Differentiate between negative and positive feedback mechanisms. | I will examine and explain the relationship of homeostasis and mechanisms for negative and positive feedback in controlling a body’s ability to sustain a stable internal environment. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 1 The Human Body: An Orientation (pp. 1 – 23)  Homeostasis (pp. 19 – 21)  Feedback Mechanisms (pp. 19 -21)  Chapter 9 The Endocrine System (pp. 308 -336)  Stimuli for Control of Hormone Release (pp. 311 – 312)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 1 The Human Body: An Orientation (pp. 1 – 16)  Maintaining Life (pp. 7 – 8)  **PowerPoint Presentations**: Homeostasis; Essentials of Metabolism  **Videos**: Basics of Metabolism; Overview of Metabolism | Homeostasis  Receptor  Control center  Effector  Negative feedback  Positive feedback  Homeostatic imbalance  Stress |

Unit 11 Digestive System

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| UNIT 10 - DIGESTIVE SYSTEM  Students should be able to define the digestive system and to state the structures, regulators, and functions of its primary and accessory structures and organs. Students should be able to explain why food is essential for life. They should understand the anatomy of the splanchnic circulation and it relationship to the liver.  STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.01 Identify the general functions of the digestive system. | I will be able to examine and discuss the general function of the digestive system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Introduction (p. 463)  Part 1: Anatomy and Physiology of the Digestive System (pp. 463 – 487)  Functions of the Digestive System (pp. 476 – 480)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Introduction (p. 313)  Digestion of Foodstuff: Enzymatic Action (pp. 322 – 325)  Physical Processes: Mechanisms of Food Propulsion and Mixing (pp. 325 – 326)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Digestion of Foodstuff: Enzymatic Action (pp. 331 – 332)  Physical Processes: Mechanisms of Food Propulsion and Mixing (p. 332)  **A Complete Study Guide Anatomy & Physiology, 12th Edition Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Physiology of the Digestive System (pp. 291 – 294)  Question 14. Match description in column B to processes in column A (p. 291)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Ingestion  Propulsion  Peristalsis  Mechanical food breakdown  Digestion food breakdown  Absorption  Defecation |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.02 Contrast chemical and mechanical digestion. | I will be able to examine and explain the difference between chemical and mechanical digestion. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Functions of the Digestive System (pp. 476 – 487)  Overview of Gastrointestinal Processes and Controls (pp. 477 – 480)  Accessory Digestive Organs (pp. 474 – 476)  Part II: Nutrition and Metabolism (pp. 487 – 501)  Metabolism (pp. 490 – 494)  The Central Role of the Liver in Metabolism (pp. 494 – 496)  Pearson Laboratory Manual Essentials of Human Anatomy & Physiology (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Digestion of Foodstuff: Enzymatic Action (pp. 322 – 325)  Physical Processes: Mechanisms of Food Propulsion and Mixing (pp. 325 – 326)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Physical Processes: Mechanisms of Food Propulsion and Mixing (p. 326)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Physiology of the Digestive System  Question 14. Match description in column B with digestive processes in column A  (p. 291)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Masticate  Incisors  Canines  Premolars  Molars  Bile  Mechanical food breakdown  Digestion |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.03 Differentiate between the alimentary canal structures (mouth, pharynx, esophagus, stomach, small intestines, large intestines, rectum, and anus) and the accessory structures (salivary glands [parotid], pancreas, gallbladder, liver). | I will be able to examine and discuss the differences between the alimentary structures from the accessory structures of the digestive system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Organs of the Alimentary Canal (pp. 464 – 474)  Accessory Digestive Organs (pp. 474 – 476)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  General Histological Plan of the Alimentary Canal (pp. 3131 – 319)  Accessory Digestive Organs (pp. 319 – 322)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Organs of the Alimentary Canal (pp. 327 – 329)  Accessory Digestive Organs (p. 330)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Anatomy of the Digestive System (pp. 279 – 290)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Alimentary canal  Gastrointestinal tract  Mouth  Pharynx  Esophagus  Stomach  Small intestine  Large intestine  Accessory structures  Teeth  Salivary glands  Pancreas  Liver  Gall bladder |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.04 Describe the functions of saliva and salivary amylase in digestion. | I will be able to examine and discuss the functions of saliva and salivary amylase in digestion. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Accessory Digestive Organs (pp. 474 – 476)  Salivary Glands (p. 475)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Accessory Digestive Organs (pp. 319 – 322)  Salivary Glands (p. 321)  Activity 6 Locating the Salivary Glands (p. 321)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Question 14. Fill the chart about the various digestive system enzymes (p. 231)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Anatomy of the Digestive System (pp. 279 – 290)  Question 2. Figure 14 – 1 Identify the structures of the Digestive System (p. 280)  Question 4. Match the glands in column B to the functions described in column A  (p 281)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science): | Saliva  Salivary glands  Salivary amylase  Parotid glands  Submandibular glands |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.05 Identify the following parts of a typical tooth. (Crown, neck, root, gingiva, periodontal ligament, enamel, dentin, pulp, root canal) | I will be able to examine and identify the typical parts of the teeth. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Accessory Digestive Organs (pp. 474 – 476)  Teeth (pp. 474 – 475)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Activity 4 Identify Types of Teeth (pp. 320 – 321)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Accessory Digestive Organs Questions 6, 7, 8, and 9 (p. 330)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Anatomy of the Digestive System (pp. 279 – 290)  Question 3. Figure 14 – 2: Identify and color the structures in the mouth. (p. 281)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Incisors  Canines  Molars  Premolars  Crown  Neck  Root canal  Gingiva (gum)  Periodontal ligament  Enamel  Dentin  Pulp cavity |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.06 Define deglutition, mastication, maceration, segmentation, peristalsis and haustral churning. | I will be able to examine, identity, and describe the terms of deglutition, mastication, maceration, segmentation, peristalsis, and haustral churning. | 2 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Activities Occurring in the Mouth, Pharynx, and Esophagus  Deglutition (p. 480)  Mastication (p. 474)  Maceration ( not found)  Segmentation (p. 477)  Peristalsis (p. 477)  Haustral contractions (p. 485)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Activity 11 Observing Movements and Auscultations the Sounds of Digestion (p. 325) – Deglutition  Segmentation and Peristalsis (p. 326)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Physical Processes: Mechanisms of Food Propulsion and Mixing (p.322)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Physiology of the Digestive System (p. 291)  Question 14. Match the descriptions in column B to digestive processes in column A  (p. 291)  Question 20. Complete the following statements that describe the mechanisms of food mixing and movement (p. 20)  **PowerPoint Presentations**: Digestive System Part A Marieb  **Video**: | Deglutition  Mastication  Maceration  Segmentation  Peristalsis  Haustral churning |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.07 Identify the anatomical features of the stomach. (Fundus, body, pylorus, rugae, cardiac sphincter, and pyloric sphincter). | I will be able to inspect and identify the anatomical stomach features. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Part I: Anatomy and Physiology of the Digestive System (pp. 436 – 487)  Stomach (pp. 467 – 469)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Organs of the Alimentary Canal (pp. 316 – 319)  Stomach (p. 317)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Organs of the Alimentary Canal (pp. 327 – 332)  Question 5. Identify all structures in the diagram (p. 329)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Question 7. Figure 14 – 3. Longitudinal section of the stomach.  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Stomach  Fundus  Pylorus  Rugae  Cardiac sphincter  Pyloric sphincter  Greater curvature  Lesser curvature  Pyloric antrum  Muscularis externa |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 0.08 Identify the basic components of gastric juice. (Pepsin, hydrochloric acid, and mucus) | I will be able to examine the basic components that comprise gastric juice, such as pepsin, hydrochloric acid, and mucus. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Functions of the Digestive System (pp. 476 – 487)  Activities of the Stomach (pp. 481 – 483)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Question 7, part C. Longitudinal section of the stomach. (p.284)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Gastric juice  Pepsin  Hydrochloric acid  Mucus |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.09 Identify the location and digestive functions of the pancreas. | I will be able to examine and discuss the location and digestive functions of the pancreas. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Part I: Anatomy and Physiology of the Digestive System (p. 463 – 487)  Figure 14.1. The human digestive system: Alimentary canal and accessory organs.  (p. 464)  Figure 14.6. The duodenum of the small intestine and related organs (p. 470)  Functions of the Digestive System (pp. 476 – 487)  Figure 14.11. Schematic summary of gastrointestinal tract activities (p. 477)  Figure 14.13. Flowchart of digestion and absorption of foodstuff (p. 479)  Figure 14.16. Regulation of pancreatic juice and bile secretion and release (p. 484)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Activity 7 Locating the Liver, Pancreas, and Associated Structures (p. 322)  Digestion of Foodstuff: Enzymatic Action (pp. 322 – 324)  Figure 25.10 Flowchart of digestion and absorption of foodstuff. (p. 323)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Accessory Digestive Organs (p. 330)  Question 10. Match glands in column B with functions described in column A (p. 330)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Question 8. Figure 14 – 4. Relationship between the pancreas, liver, and small intestine. ([p. 286)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Pancreas  Pancreatic amylase  Pancreatic enzymes  Pancreatic lipase  Chime  Secretin  Hepatopancreatic sphincter  Vagal nerve stimulation |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.10 Describe the function of bile (emulsification). | I will be able to examine, discuss, and demonstrate the process of emulsification. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Part I: Anatomy and Physiology of the Digestive System (p. 463 – 487)  Liver and Gall bladder (p. 476)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  The Action of Bile on Fats (p. 325)  Activity 10. Demonstrating the Action of Bile on Fats (p. 325)  Exercise 25 Review Sheet Functional Anatomy of the Digestive System (pp. 327 – 332)  Question 11. What is the role of the gall bladder? (p. 330)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018) Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Emulsification  Emulsify  Bile  Gall bladder  Fats  Hydrophobic  Hydrophilic  Macromolecules  Polymers  Monomers |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.11 Identify the three sections of the small intestine. (Duodenum, jejunum, ileum) | I will be able to examine and visually identify the three sections of the small intestines, such as duodenum, jejunum, and ileum. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Part I: Anatomy and Physiology of the Digestive System (p. 463 – 487)  Small intestines (pp. 470 – 472)  Function of the Digestive System (pp. 476 – 487)  Activities of the Small Intestines (pp 483 – 485)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Organs of the Alimentary Canal (pp. 316 – 319)  Small Intestines (pp. 317 – 318)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Question 10. Figure 14–6. Label the three views of the small intestines (p. 288)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Small intestines  Duodenum  Jejunum  Ileum |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.12 Identify the structures and sections of the large intestine. (Cecum, colon [ascending, transverse, descending, sigmoid], rectum, anal canal) | I will be able to examine and visually identify the three sections of the large intestines, such as the cecum, ascending colon, transverse colon, descending colon, sigmoid colon, rectum, and anal canal. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Part I: Anatomy and Physiology of the Digestive System (p. 463 – 487)  Large intestines (pp. 472 – 474)  Function of the Digestive System (pp. 476 – 487)  Activities of the Large Intestines (pp 485 – 487)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 25 Functional Anatomy of the Digestive System (pp. 313 – 326)  Figure 25.1 The human digestive system: Alimentary canal and accessory organs  (p. 314)  Figure 25.7 The large intestine (p. 320)  Organs of the Alimentary Canal (pp. 316 – 319)  Large Intestines (pp. 318 – 319)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 14 The Digestive System and Body Metabolism (pp. 279 – 306)  Anatomy of the Digestive System (pp. 279 – 290)  Figure 14 – 1. Identify all structures in the frontal view of the digestive system (p. 280)  **PowerPoint Presentations**: Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Large intestine  Cecum  Ascending colon  Transverse colon  Descending colon  Sigmoid colon  Rectum  Anal canal  Appendix  Ileocecal valve |
| STANDARD  10 Students will describe the structures and functions associated with the digestive system. | 10.13 Identify the following diseases or disorders of the digestive system. (Appendicitis, cirrhosis, colorectal cancer, gallstones, hepatitis, obesity, ulcers) | I will be able to examine and discuss the diseases or disorders of the digestive system, such as appendicitis, cirrhosis, colorectal cancer, gallstones, hepatitis, obesity, and ulcers. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Part I: Anatomy and Physiology of the Digestive System (p. 463 – 487)  Homeostatic imbalances: 14.1 tongue–tied (p. 465); 14.2 peritonitis (p. 466); 14.3 impacted teeth (p. 474); 14.4. gall stones (p. 476); 14.5. heartburn (p. 482); 14.6 emesis (p. 483); 14.7 pancreatitis (p. 483); 14.8 absence of bile (p. 484); 14.9 diverticulosis and diverticulitis (p 485); and 14.10 diarrhea (p. 487).  A Closer Look, Obesity: Magical Solution Wanted (pp. 503 – 504)  **PowerPoint Presentations**: Digestive System; Human Digestive System; Digestion Marieb; Digestive System Part A Marieb  **Videos**: Digestive System, Part 1 Crash Course A&P #33; Digestive System, part 2 Crash Course A&P #34; Digestive System, part 3\_ Crash Course A&P #35; The Digestive System (Bozeman Science) | Appendicitis  Cirrhosis  Colorectal cancer  Gallstones  Hepatitis  Obesity  Ulcers  Heart burn  Pancreatitis |

Unit 12 Endocrine System

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| --- | --- | --- | --- | --- | --- |
| UNIT 7 - ENDOCRINE SYSTEM  *Students understand the structure and function of the endocrine system in relation to digestion and metabolism, homeostasis, survival, growth, development, and reproduction*  STANDARD  06 Students will describe the structures and functions associated with the endocrine system. | 07.01 Identify the general functions of the endocrine system. | I will be able to identify and discuss the general functions of the endocrine system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 9 The Endocrine System (pp. 308 – 336)  Introduction paragraph (p. 308)  The Endocrine System and Hormone Function – An Overview (pp. 309 – 312)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 18 Functional Anatomy of the Endocrine Glands (pp. 229 – 232)  Introduction paragraph (p. 229)  Exercise 18 Review Sheet Functional Anatomy of the Endocrine Glands (pp. 233–234)  Questions 1 and 2 (p. 233)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 9 The Endocrine System (pp. 183 – 194)  The Endocrine System and Hormone Function – An Overview (pp. 183 – 182)  Question 1. Complete the following statements.(p. 183)  **PowerPoint Presentations**: Endocrine System Marieb; Endocrine System Marieb 2; Endocrine System 1; Endocrine System 2; Endocrinology; Endocrine Physiology; Hormones & Glands; Endocrine System and Hormones  **Videos**: The Endocrine System (Bozeman Science); Endocrine System, part 1 - Glands & Hormones Crash Course A&P #23; Endocrine System, part 2 - Hormone Cascades Crash Course A&P #24; Great Glands - Your Endocrine System Crash Course Biology #33; Intro to the Endocrine System (Khan Academy); | Endocrine system  Hormones  Target organ  Target cells  Homeostasis |
| STANDARD  06 Students will describe the structures and functions associated with the endocrine system. | 07.02 Describe a “hormone” and how it functions in the body. | I will be able to examine, discuss, and explain the different hormones and their functions in the body. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 9 The Endocrine System (pp. 308 – 336)  The Endocrine System and Hormone Function – An Overview (pp. 309 – 312)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 18 Functional Anatomy of the Endocrine Glands (pp. 229 – 232)  Gross Anatomy and Basic Functions of the Endocrine Glands (pp. 229 – 232)  Introduction paragraph (p. 229)  Exercise 18 Review Sheet Functional Anatomy of the Endocrine Glands (pp. 233–234)  Gross Anatomy and Basic Functions of the Endocrine Glands (pp. 233 – 234)  Question 1 and 2. (p. 233)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 9 The Endocrine System (pp. 183 – 194)  Introduction paragraph (p. 183)  PowerPoint Presentations: Endocrine System Marieb; Endocrine System Marieb 2; Endocrine System 1; Endocrine System 2; Endocrinology; Endocrine Physiology; Hormones & Glands; Endocrine System and Hormones  Videos: The Endocrine System (Bozeman Science); Endocrine System, part 1 - Glands & Hormones Crash Course A&P #23; Endocrine System, part 2 - Hormone Cascades Crash Course A&P #24; Great Glands - Your Endocrine System Crash Course Biology #33; Intro to the Endocrine System (Khan Academy) | Hormone  Amino acid – based molecule  Steroid hormone  Lipid prostaglandins  Direct gen activation  Second – messenger system  Hormonal stimuli  Humoral stimuli  Neural stimuli |
| UNIT 7 - ENDOCRINE SYSTEM  STANDARD  06 Students will describe the structures and functions associated with the endocrine system. | 07.03 Describe the locations, secretions, and functions of the major endocrine glands. (Pituitary gland [GH, TSH, ACTH], thyroid gland [thyroxine], adrenals [epinephrine, norepinephrine, cortisol, pancreas [glucagon, insulin]) | will be able to visually identify the major endocrine glands and their secretions and functions. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology** by Marieb (2018);  Chapter 9 The Endocrine System (pp. 308 – 336)  The Major Endocrine Organs (pp. 312 – 327)  Pituitary Gland and Hypothalamus (pp. 313 – 317)  Pineal Gland (p. 317)  Thyroid Gland (pp. 317 -319)  Adrenal Glands (pp. 320 – 323)  Pancreatic Islets (pp. 323 – 326)  Table 9.1 Major Endocrine Glands and Some of Their Hormones (pp. 328–330)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 18 Functional Anatomy of the Endocrine Glands (pp. 229 – 232)  Gross Anatomy and Basic Function of the Endocrine Glands (pp. 229 – 332)  Pituitary Gland (pp. 229 – 230)  Adrenal Gland (p. 231)  Adrenal Glands (p. 231)  Pancreas (pp. 231 – 232)  Exercise 18 Review Sheet Functional Anatomy of the Endocrine Glands (pp. 233–234)  Gross Anatomy and Basic Function of the Endocrine Glands (pp. 233 – 234)  Question 6. Identify the hormone in Key A to the production site in Key B (p. 234)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 9 The Endocrine System (pp. 183 – 194)  The Major Endocrine Organs (pp. 185 – 190)  Question 4. Color and identify the pituitary hormones to their target organs (p. 185)  Question 5. Figure 9 – 2: Color and identify the major endocrine organs of the body  (p. 186)  Question 6. For each hormone identify the target organ (p. 187)  Question 9. Complete the crossword puzzle (p. 188)  **PowerPoint Presentations**: Endocrine System Marieb; Endocrine System Marieb 2; Endocrine System 1; Endocrine System 2; Endocrinology; Endocrine Physiology; Hormones & Glands; Endocrine System and Hormones  **Videos**: The Endocrine System (Bozeman Science); Endocrine System, part 1 - Glands & Hormones Crash Course A&P #23; Endocrine System, part 2 - Hormone Cascades Crash Course A&P #24; Great Glands - Your Endocrine System Crash Course Biology #33; Intro to the Endocrine System (Khan Academy) | Pituitary gland  Growth hormone  Thyroid stimulating hormone  Adrenocorticotropic hormone  Thyroid gland  thyroxin  Adrenal gland  Epinephrine  Norepinephrine  Cortisol  Pancreas  Glucagon  Insulin |
| UNIT 7 - ENDOCRINE SYSTEM  STANDARD  06 Students will describe the structures and functions associated with the endocrine system. | 07.04 Identify the following diseases or disorders of the endocrine system. (Acromegaly, cretinism, diabetes mellitus, dwarfism, gigantism, hyperthyroidism, hypothyroidism, myxedema) | I will be able to examine, discuss, and explain the various disorders of the endocrine system, such as acromegaly, cretinism, diabetes mellitus, dwarfism, gigantism, hyperthyroidism, hypothyroidism, myxedema, and other disorders. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology** by Marieb (2018);  Chapter 9 The Endocrine System (pp. 308 – 336)  The Major Endocrine Organs (pp. 312 – 327)  Pituitary Gland and Hypothalamus (pp. 313 – 317)  Thyroid Gland (p. 317)  Adrenal Glands (pp. 320 – 323)  Pancreatic islets (pp. 323 – 327)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 9 The Endocrine System (pp. 183 – 194)  The Major Endocrine Organs (pp. 185 – 190)  Question 8. Name the hormone produced in excessive amounts to the conditions described (p. 187)  Question 10. List the cardinal symptoms of diabetes mellitus (p. 189)  **PowerPoint Presentations**: Ch 9 endocrine diseases; Disorders of endocrine system; Disorders of endocrine system 2  **Videos**: What is diabetes mellitus Endocrine system diseases (Khan Academy); Endocrine System Facts, Functions and Diseases | Acromegaly  Cretinism  Diabetes mellitus  Pituitary dwarfism  Gigantism  Hyperthyroidism  Hypothyroidism  Myxedema  Addison’s disease  Cushing’s syndrome |

Unit 13 The Urinary System

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| UNIT 11 - URINARY SYSTEM  STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 11.01 Identify the general functions of the urinary system. | I will be able to inspect, discuss, and explain the general functions of the urinary system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 15 The Urinary System (pp. 511 – 537)  Introduction paragraph (pp. 511 – 512)  Figure 15.1: Organs of the Urinary System (p. 512)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 26 Functional Anatomy of the Urinary System (pp. 333 – 340)  Introduction paragraph (p. 333)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 15 The Urinary System (pp. 307 – 325)  Introduction paragraphs (p. 307)  Problem 1. Complete the following statements (p. 307)  **PowerPoint Presentations**: The Urinary System Marieb; The Urinary System Holes; Urinary System Holes; Urinary  **Videos**: Anatomy and Physiology of Urinary System; Urinary System, part 1\_ Crash Course A&P #38; Urinary System, part 2\_ Crash Course A&P #39; The Urinary System; Urinary System in 7 minutes; | Kidney  Ureters  Urinary bladder  Urethra  Urine |
| STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 1.02 Identify the four major organs of the urinary system. (Kidneys, ureters, bladder, urethra) | I will be able to examine and visually identify the major organs of the urinary system, such as the kidneys, ureters, bladder, and urethra. | 2 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 15 The Urinary System (pp. 511 – 537)  Figure 15.1: Organs of the Urinary System (p. 512)  Kidneys (pp. 512 – 516)  Ureters, Urinary Bladder, and Urethra (pp. 520 – 524)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 26 Functional Anatomy of the Urinary System (pp. 333 – 340)  Gross Anatomy of the Human urinary System (pp. 333 – 336)  Activity 1 Identifying Urinary System Organs (pp. 333 – 336)  Figure 26.1 Organs of the female urinary system. Anterior view (p. 334)  Exercise 26 Review Sheet Functional Anatomy of the Urinary System (pp. 341 – 344)  Gross Anatomy of the Human urinary System (p. 341)  Problem 2. Label the diagram of organs of the urinary system (p. 341)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 15 The Urinary System (pp. 307 – 325)  Kidneys, Location and Structure (p. 308)  Ureters, Urinary Bladder, and Urethra (pp. 315 – 316)  Problems 15 and 16.  **PowerPoint Presentations**: The Urinary System Marieb; The Urinary System Holes; Urinary System Holes; Urinary  **Videos**: Anatomy and Physiology of Urinary System; Urinary System, part 1\_ Crash Course A&P #38; Urinary System, part 2\_ Crash Course A&P #39; The Urinary System; Urinary System in 7 minutes; | Kidneys  Ureters  Bladder  Urethra |
| STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 11.03 Identify the gross anatomy of the kidney. (Renal cortex, renal medulla, renal pyramids, renal pelvis) | I will be able to inspect, identify, and explain the gross anatomy of the kidneys. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 15 The Urinary System (pp. 511 – 537)  Kidneys (pp. 512 – 516)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 26 Functional Anatomy of the Urinary System (pp. 333 – 340)  Gross Anatomy of the Human urinary System (pp. 333 – 336)  Gross Internal Anatomy of the Pig or Sheep Kidney (pp. 335 – 336)  Exercise 26 Review Sheet Functional Anatomy of the Urinary System (pp. 341 – 344)  Gross Internal Anatomy of the Pig or Sheep Kidney (p. 342)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 15 The Urinary System (pp. 307 – 325)  Problem 3, Figure 15 – 2. Color and identify the longitudinal section of the kidney  (p. 309)  Problem 4, section 2 Circle the term that does not belong. (p. 310)  **PowerPoint Presentations**: The Urinary System Marieb; The Urinary System Holes; Urinary System Holes; Urinary  **Videos**: Anatomy and Physiology of Urinary System; Urinary System, part 1\_ Crash Course A&P #38; Urinary System, part 2\_ Crash Course A&P #39; The Urinary System; Urinary System in 7 minutes; | Kidney  Renal cortex  Renal medulla  Renal pyramids  Renal pelvis |
| UNIT 11 - URINARY SYSTEM  STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 11.04 Identify the microscopic structures of the nephron: (renal corpuscle, glomerulus, glomerular [Bowman’s] capsule, afferent arteriole, efferent arteriole), renal tubule (proximal convoluted tubule, descending limb, nephron loop, ascending limb, distal convoluted tubule and collecting duct) and peritubular capillaries. | I will be able to examine, identify, and discuss the microscopic structures of the nephron. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 15 The Urinary System (pp. 511 – 537)  Nephrons (pp. 513 – 516)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 26 Functional Anatomy of the Urinary System (pp. 333 – 340)  Activity 2 Studying Nephron Structure (pp. 336 – 338)  Exercise 26 Review Sheet Functional Anatomy of the Urinary System  (pp. 341 – 344)  Functional Microscopic Anatomy of the Kidney (p. 342)  Problem 4. Match the internal structures of the nephron (p. 342)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 15 The Urinary System (pp. 307 – 325)  Nephrons, Urine Formation, and Control of Blood Composition  Problem 5. Figure 15 – 3. Match and color the diagram of the nephron (pp. 310–311)  Problem 6. Figure 15 – 4. Color the diagram of the nephron. (p. 312)  **PowerPoint Presentations**: The Urinary System Marieb; The Urinary System Holes; Urinary System Holes; Urinary  **Videos**: Anatomy and Physiology of Urinary System; Urinary System, part 1\_ Crash Course A&P #38; Urinary System, part 2\_ Crash Course A&P #39; The Urinary System; Urinary System in 7 minutes; | Nephron  Glomerulus  Glomerular capsule  Afferent arteriole  Efferent arteriole  Renal tubule  Descending limb  Nephron loop  Ascending limb  Distal convoluted tubule  Collecting duct  Peritubular capillaries |
| UNIT 11 - URINARY SYSTEM  STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 11.05 Describe the three basic physiological processes and the structures involved in urine formation. (Filtration, reabsorption, secretion) | I will be able to examine and describe the three physiological processes involved in urine production. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 15 The Urinary System (pp. 511 – 537)  Urine Formation and Characteristics (pp. 516 – 519)  Glomerular Filtration (pp. 516 – 517)  Tubular Reabsorption (pp. 517 – 518)  Figure 15.4. The kidney depicted schematically as a single large, uncoiled nephron.  (p. 517)  Tubular Secretion (p. 518)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 26 Review Sheet Functional Anatomy of the Urinary System (pp. 341 – 344)  Functional Microscopic Anatomy of the Kidney (pp. 342 – 343)  Problem 5. Identify the sites of filtration and reabsorption (p. 343)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 15 The Urinary System (pp. 307 – 325)  Nephrons, Urine Formation, and Control of Blood Composition  Problem 7 Complete the following statements. (p. 313)  **PowerPoint Presentations**: The Urinary System Marieb; The Urinary System Holes; Urinary System Holes; Urinary  **Videos**: Anatomy and Physiology of Urinary System; Urinary System, part 1\_ Crash Course A&P #38; Urinary System, part 2\_ Crash Course A&P #39; The Urinary System; Urinary System in 7 minutes; | Filtration  Reabsorption  Secretion  Glomerular capsule  Proximal convoluted tubule  Nephron |
| UNIT 11 - URINARY SYSTEM  STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 11.06 Identify abnormal constituents of urine. (Glucose, ketones, erythrocytes, leukocytes, bilirubin, microbes) | I will be able to examine, discuss, and identify the causes of abnormal urine constituents, such as glucose, ketones, red blood cells, white blood cells, bilirubin, and microbes. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 15 The Urinary System (pp. 511 – 537)  Urine Formation and Characteristics (pp. 516 – 519)  Characteristics of Urine (pp. 519 – 520)  Table 15.1 Abnormal Urinary Constituents (p. 520)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 26 Functional Anatomy of the Urinary System (pp. 333 – 340)  Abnormal Urinary Constituents (pp. 338 – 340)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 15 The Urinary System (pp. 307 – 325)  **PowerPoint Presentations**: The Urinary System Marieb; The Urinary System Holes; Urinary System Holes; Urinary  **Videos**: Urinary System, part 1\_ Crash Course A&P #38; Urinary System, part 2 Crash Course A&P #39; The Urinary System | Abnormal urine constituents  Blood  Erythrocytes  Leukocytes  Bilirubin  Microbes  Glucose  Ketones |
| UNIT 11 - URINARY SYSTEM  STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 11.07 Describe the methods of fluid intake (oral [liquid and solid], intravenous, metabolic) and output (micturition, voiding, sweat, feces, exhaled vapor). | I will be able to examine, discuss, and demonstrate the methods of fluid intake. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 3 Cells and Tissue (pp. 62 – 108)  A Closer Look: IV Therapy and Cellular “Tonics: (p. 79)  Sweat Glands (pp. 120 – 121)  Chapter 14 The Digestive System and Body Metabolism (pp. 463 – 510)  Functions of the Digestive System (pp. 476 – 487)  Overview of Gastrointestinal Processes and Controls (pp. 477 – 480)  Activities Occurring in the Mouth, Pharynx, and Esophagus (pp 480 – 481)  Activities of the Stomach (pp. 481 – 483)  Activities of the Small Intestine (pp. 483 – 485)  Activities of the Large Intestines (pp. 485 – 487)  Chapter 15 The Urinary System (pp. 511 – 537)  Micturition (pp. 522 – 524)  Chapter 13 Respiratory System (pp. 436 – 462)  Respiratory Physiology (pp. 445 – 448)  Table 13.1 Nonrespiratory Air (Gas) Movements (p. 449)  Chapter 15 The Urinary System (pp. 511 – 537)  Fluid, Electrolyte, and Acid – Base Balance (pp. 524 – 531)  Figure 15.10 Water intake and output. (p. 526)  Figure 15.11 The thirst mechanism for regulating water intake (p. 526)  **PowerPoint Presentations**: The Urinary System Marieb; The Urinary System Holes; Urinary System Holes; Urinary  **Videos**: Urinary System, part 1\_ Crash Course A&P #38; Urinary System, part 2 Crash Course A&P #39; The Urinary System | Oral fluid intake  Oral solid intake  Intravenous fluid intake  Metabolic fluid production  Micturition  Voiding  Sweat  Feces  Exhaled vapor |
| UNIT 11 - URINARY SYSTEM  STANDARD  11 Students will describe the structures and functions associated with the urinary system. | 11.08 Identify the following diseases or disorders associated with the urinary system. (Cystitis, diabetes insipidus, glomerulonephritis, incontinence, kidney stones, renal failure, urinary tract infections) | I will be able to identify and explain the causes of diseases or disorders of the urinary system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018)  Chapter 15 The Urinary System (pp. 511 – 537)  Homeostatic imbalance cited:  15.1 hydronephrosis (p. 513),  15.2 oliguria and anuria (p. 517),  15.3 Renal Calculi (p.520),  15.4 Urethritis (p. 522),  15.5. Incontinence (p. 524),  15.6 Diabetes insipidus (p. 527),  15.7 Addison’s Disease and polyuria (p. 529),  15.8 polycystic kidney disease (p. 533), and  15.9 glomerulonephritis (p 533)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Abnormal Urinary Constituents (p. 344)  Problem 18. Renal calculi (p. 344)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Ureters, Urinary Bladder, and Urethra (pp. 315 – 317)  Problem 18. Crossword puzzle on urinary disorders (p.317)  **PowerPoint Presentations**: Urinary System Diseases; 11.3 Urinary Diseases  **Videos**: Urinary system diseases; 11.3 Urinary Diseases | Cystitis  Diabetes insipidus  Glomerulonephritis  Incontinence  Kidney stones  Renal failure  Urinary tract infection |

Unit 14 Reproductive System

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| UNIT 12 - REPRODUCTIVE SYSTEM  **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.01 Identify the general functions of the reproductive system. | I will be able to examine and discuss the general functions of the reproductive system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Introduction paragraph (p. 538)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Introduction paragraph (p. 345)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Introduction paragraph (p. 327)  **PowerPoint Presentations**: Reproductive System Marieb; Reproductive System;  **Videos**: The Reproductive System; | Puberty  Reproduction  Sex hormones  Organ growth development  Sexual behavior  Sexual drive |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.02 Describe the anatomy of the male genitalia. | I will be able to describe and label the external and internal anatomy of the male genitalia. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Male Reproductive System (pp. 539 – 543)  Figure 16.2. Male reproductive organs, sagittal view (p. 540)  Figure 16.2 Male reproductive organs, frontal view (p. 541)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Gross Anatomy of the Human Male Reproductive System (pp. 345 – 347)  Exercise 27 Review Sheet Anatomy of the Reproductive System (pp. 353–356)  Gross Anatomy of the Human Male Reproductive System (pp.353 – 356)  Problem 2. Identify the structures of the male reproductive system. (p. 353)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Anatomy of the Male Reproductive System (pp. 327 – 330)  Problems 4. Figure 16 – 1, Sagittal view of the male reproductive structure, identify, label and color. (pp. 328 – 329)  **PowerPoint Presentations**: Reproductive System Marieb; Reproductive System;  **Videos**: The Reproductive System; Reproductive System, part 2 - Male Reproductive System\_ Crash Course A&P 41; | Testes  Epididymis  Ductus deferens  Scrotum  Seminal vesicle  Ejaculatory duct  Semen  Prostate  Bulbo–urethral gland  Penis  Glans penis  Erectile tissue  Shaft  Prepuce (foreskin)  External urethral orifice  Circumcision |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.03 Identify the function of the testes. | I will be able to identify and describe the function of the male testes. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Male Reproductive System (pp. 539 – 543)  Testes (p. 539)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Microscopic Anatomy of the Testes and Sperm (pp. 347 – 348)  Testes (p. 347)  Exercise 27 Review Sheet Anatomy of the Reproductive System (pp. 353–356)  Gross Anatomy of the Human Male Reproductive System (pp.353 – 356)  Problems 1 List two functions of the testes. (p. 353)  Problem 4 Match terms in column B to descriptions in column A. (p. 354)  Problem 5 Why are testes located in the scrotum? (p. 354)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Problem 5. Figure 16 – 2. Color and label illustration of the testes (p. 330)  **PowerPoint Presentations**: Chapter 18 Lesson 2 Male reproductive system; Reproductive System, part 2 - Male Reproductive System Crash Course A&P 41; Reproductive System Marieb;  **Videos**: The Reproductive System; Reproductive System, part 2 - Male Reproductive System Crash Course A&P 41; | Testes  Spermatic cord  Seminiferous tubules  Tunica albuginea  Rete testis  Lobule  Interstitial cells  Spermatic cord  Testosterone  Exocrine function  Endocrine function |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 2.04 Identify the functions of testosterone in the male. | I will be able to examine and discuss the function of the male testosterone. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Male Reproductive Functions (pp. 543 – 547)  Testosterone Production (pp. 545 – 547)  Figure 16.6. Hormone control of testosterone release and sperm production.(p 546)  **PowerPoint Presentations**: Chapter 18 Lesson 2 Male reproductive system; Reproductive System, part 2 - Male Reproductive System Crash Course A&P 41; Reproductive System Marieb  **Videos**: The Reproductive System; Reproductive System, part 2 - Male Reproductive System\_ Crash Course A&P 41; The Reproductive System | Endocrine (testosterone – producing) function  Interstitial cells |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.05 Describe the anatomy of the female reproductive structures. | I will be able to describe external and internal anatomy of the female reproductive structures. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Female Reproductive System (pp. 547 – 551)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Gross Anatomy of the Human Female Reproductive System (pp. 348 – 351)  Exercise 27 Review Sheet Anatomy of the Reproductive System (pp. 353–356)  Gross Anatomy of the Human Female Reproductive System (pp. 355 – 356)  Problems 9, 11, 12, and 13  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Anatomy of the Female Reproductive System (pp.333 – 335)  Problem 11 Figure 16 – 5. Color and label sagittal view of the female reproductive organs (p. 334)  Problem 12 Figure 16 – 6. Color and label ventral view of the female external genitalia (p. 335)  **PowerPoint Presentations**: Reproductive System Marieb;  **Videos**: Reproductive System, part 1 - Female Reproductive System\_ Crash Course A&P #40; | Ovaries  Uterine (fallopian) tubes  Uterus  Cervix  Vagina  Mons pubis  Clitoris  Hymen  Labia majora  Perineum |
| UNIT 12 - REPRODUCTIVE SYSTEM  **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.06 Identify the functions of the ovaries. | I will be able to examine and describe the function of the female ovaries. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Female Reproductive System (pp. 547 – 551)  Ovaries (pp. 547 – 548)  Female Reproductive Function and Cycles (pp. 551 – 557)  Oogenesis and the Ovarian Cycle (pp. 551 – 552)  Figure 16.10 Events of oogenesis (p. 552)  Hormone Production by the Ovaries (pp. 553 – 554)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Gross Anatomy of the Human Female Reproductive System (pp. 348 – 351)  Objective 7 Name the exocrine and endocrine products of the ovary (p. 350)  Activity 4 Conducting a Microscopic Study of the Ovary (p. 351)  Exercise 27 Review Sheet Anatomy of the Reproductive System (pp. 353–356)  Gross Anatomy of the Human Female Reproductive System (pp. 355 – 356)  Problem 10. Identify the female reproductive structures, 3 and 6 (p. 355)  Problem 15 Define Ovulation (p. 356)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Female Reproductive Function and Cycles (pp. 335 – 339)  Problem 13 identify the cell types in the ovaries (p. 335)  Problem 14 Figure 16–7. Color and label the sectional view of the ovary. (pp. 336–337)  **PowerPoint Presentations**: Reproductive System Marieb; Ovarian Cycle; Mestrual cycle; Notes - The Menstrual Cycle;  **Videos**: Reproductive System, part 1 - Female Reproductive System\_ Crash Course A&P #40; The Menstrual Cycle; Female Reproductive System - Menstrual Cycle, Hormones and Regulation | Ovaries  oocytes  Oogenesis  Ovarian cycle  Oogonia  Ovulation  Follicle cells  Corpus lutenum  Primary oocytes  Secondary oocytes  Polar body  Ovum  Estrogen  Progesterone |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.07 Identify the structures and functions of the uterine (Fallopian) tubes, including fimbriae and infundibulum. | I will be able to examine and discuss the anatomy and function of the uterine or fallopian tube including the fimbriae and infundibulum. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Female Reproductive System (pp. 547 – 551)  Ovaries (p. 547)  Duct System (p. 547 – 548)  Figure 15.8 The human female reproductive organs (p. 549)  Pregnancy and Embryonic Development (pp. 557 – 561)  Figure 16.17 From fertilization and cleavage to implantation (p. 560)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Gross Anatomy of the Human Female Reproductive System (pp. 348 – 351)  Activity 3 Identifying Female Reproductive Organs (pp. 348 – 351)  Objective 6 Identify the fundus, body, and cervix regions of the uterus (p. 349)  Figure 27.6 Internal reproductive organs of a female, posterior view (p. 350)  Exercise 27 Review Sheet Anatomy of the Reproductive System (pp. 353–356)  Gross Anatomy of the Human Female Reproductive System (pp. 355 – 356)  Problem 9 Identify structures of the female reproductive system (p. 355)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Female Reproductive Function and Cycles (pp. 335 – 339)  Problem 11 Figure 16 – 5. Color and label sagittal view of the female reproductive organs (p. 334)  **PowerPoint Presentations**: Reproductive System Marieb;  **Videos**: Reproductive System, part 1 - Female Reproductive System\_ Crash Course A&P #40; | Uterine or fallopian tubes  Suspensory ligaments  Broad ligament  Fimbriae |
| UNIT 12 - REPRODUCTIVE SYSTEM  **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.08 Describe the structures and function of the uterus. (Perimetrium, myometrium, endometrium, fundus, cervix) | I will be able to examine and describe the structures and function of the uterus. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Female Reproductive System (pp. 547 – 551)  Uterus (pp. 548 – 550)  Figure 16.8 The Human female reproductive organs (p. 549)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Gross Anatomy of the Human Female Reproductive System (pp. 348 – 351)  Exercise 27 Review Sheet Anatomy of the Reproductive System (pp. 353–356)  Gross Anatomy of the Human Female Reproductive System (pp. 355 – 356)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  **PowerPoint Presentations**: Reproductive System Marieb;  **Videos**: Reproductive System, part 1 - Female Reproductive System\_ Crash Course A&P #40; | Myometrium  Perimetrium  Endometrium  Fundus  Cervix |
| UNIT 12 - REPRODUCTIVE SYSTEM  **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 2.09 Define the menstrual cycle including the ovarian and uterine cycles and changes that occur during menopause. | I will be able to examine and discuss the menstrual cycle | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Female Reproductive System (pp. 547 – 551)  Uterine (Menstrual) Cycle (pp. 554)  Figure 16.12 Hormonal interaction of the female cycles (p. 555)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Problem 18 Identify the ovarian hormones responsible for events in the menstrual cycle (p. 338)  Problem 19 four questions to Figure 16 – 8 on the menstrual cycle (pp. 338 – 339)  **PowerPoint Presentations**: Ovarian Cycle; Menstrual cycle; Notes - The Menstrual Cycle.ppt Videos: Voice over PowerPoint for Menstrual Cycle and Female Hormones; The Menstrual Cycle | Menstrual or uterine cycle  Menstrual phase  Proliferative phase  Secretory phase  Estrogens  Progesterone  Endometrium  Functional endometrium layer  Ovulation  Follicle Stimulating Hormone (FSH)  Luteinizing Hormone (LH) |
| UNIT 12 - REPRODUCTIVE SYSTEM  **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.10 Describe the physiological effects of estrogens, progesterone and relaxin. | I will be able to examine and discuss the physiological effects of estrogen, progesterone, and relaxin. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 9 The Endocrine System  Table 9.1 Major Endocrine Glands and Some of Their Hormones (pp. 328–330)  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Female Reproductive System (pp. 547 – 551)  Hormone Production by the Ovaries (pp. 553 -554)  Estrogens and Progesterone (p 553)  Effects of Pregnancy on the Mother (pp. 563 – 567)  Relaxin reading (pp. 331 and 564)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 27 Anatomy of the Reproductive System (pp. 345 – 351)  Gross Anatomy of the Human Female Reproductive System (pp. 348 – 351)  Objective 7 Name the exocrine and endocrine products of the ovary (p. 350)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Problem 18 Identify the ovarian hormones responsible for events in the menstrual cycle (p. 338)  **PowerPoint Presentations**: Hormones of the Ovary 1- Estrogen; Reproductive System Marieb;  **Videos**: Estrogen vs Progesterone Hormonal Dominance\_ Control Low Hormones Symptoms; The Reproductive System; | Estrogen  Progesterone  Relaxin |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.11 Contrast the general outcomes of spermatogenesis vs. oogenesis. | I will be able to examine, review, discuss, and describe the similarities and differences between spermatogenesis and oogenesis. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Male Reproductive Functions (pp. 543 – 547)  Spermatogenesis (p. 543 – 545)  Anatomy of the Female Reproductive System (pp. 547 – 551)  Oogenesis and the Ovarian Cycle (pp. 551 – 552)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  **PowerPoint Presentations**: Reproductive Hormones; Reproductive System Marieb  **Videos**: The Reproductive System; Reproductive System, part 1 - Female Reproductive System\_ Crash Course A&P #40; Reproductive System, part 2 - Male Reproductive System\_ Crash Course A&P 41 | Spermatogenesis  Spermatogonia (stem cells)  Mitosis  Meiosis  Spermatids  Haploid  Diploid  Oogenesis  Oogonia (stem cells)  Ovarian cycle  Primary oocyte  Secondary oocyte  Ovum  Polar body |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.12 Define the following sequence of events that occur during human development. (Fertilization, zygote, implantation, embryo, fetus) | I will be able to learn and define the events of human development, such as fertilization, zygote, implantation, embryo, and fetus. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Female Reproductive System (pp. 547 – 551)  Pregnancy and Embryonic Development (pp. 557 – 563)  Accomplishing Fertilization (pp. 558 – 559)  Events of Embryonic and Fetal Development (pp. 559 – 561)  Table 16.1 Development of the Human Fetus (pp. 562 – 563)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Survey of Pregnancy and Embryonic Development (pp. 340 – 344)  Problem 21. Relative to events of sperm penetration (p. 340)  Problem 22. Figure 16 – 10. Depicts early embryonic events. ([. 341)  Problem 23. Use choice terms identified in the following descriptions (p. 342)  Problem 25.Indicate the first tissues of the embryonic body. (p. 342)  **PowerPoint Presentations**: Fetal Development; Fetal Development 2; Conception-and-Birth; Conception Fetal Development; Videos: Fetal Development Week by Week, Stages of Fetal Development; Fetal development month by month, Stages of Fetal Growth | Pregnancy  Conceptus  Gestation period  Fetus  Fertilization  Implantation  Zygote  Blastocyst  Embryo  Placenta  Umbilical cord |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.13 Identify the principle events associated with the three stages of labor. (Stage 1 - dilation and effacement, Stage 2 - delivery and birth, Stage 3 - placental expulsion) | I will be able to examine, review, and discuss the principle events associated with the three stages of labor. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology by Marieb** (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Childbirth (pp. 565 – 567)  Initiation of Labor (p. 565)  Stages of Labor (pp. 565 – 567)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 16 The Reproductive System (pp. 327 – 352)  Survey of Pregnancy and Embryonic Development (pp. 340 – 344)  Problem 29. What are Braxton Hick contractions? (p. 343)  Problem 30. Name the three stages of parturition, and briefly describe each phase  (p. 343)  Problem 31. Flowchart in Figure 16 – 11, illustrates the sequence of events during labor. (p. 344)  Problem 32. How long will the cycle in Figure 16 11 continue to occur? (p. 344)  Problem 33. Labor is an example of a positive feedback mechanism. What does that mean? (p. 344)  **PowerPoint Presentations**: Pregnancy Labor and Delivery; Labor & Delivery; The Birth Process  **Videos**: Stages Fetal Development Week by Week; Stages Fetal development month by month; Fetal Development How human formed from Sperms to a Baby. Stages of Labor Nursing OB for Nursing Students | Pregnancy  Parturition  Braxton Hicks contractions  Labor  Stage 1 labor  Dilatation stage  Stage 2 labor  Expulsion stage  Stage 3 labor  Placental stage  Dystocia  Cesarean section |
| **STANDARD**  12 Students will describe the structures and functions associated with the reproductive system. | 12.14 Identify the following diseases or disorders of the reproductive system. (Reproductive cancers [breast, testicular, cervical, ovarian, prostate], endometriosis, impotence, Sexually Transmitted Infections – STI’s [gonorrhea, syphilis, genital herpes, Chlamydia, trichomoniasis, genital warts, HPV [Human Papilloma Virus]) | I will be able to research, discuss, and report the diseases or disorders of the reproductive system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 16 The Reproductive System (pp. 538 – 576)  Anatomy of the Male Reproductive System  Homeostatic imbalance cited: 16.1 prostate hypertrophy (p. 541),  16.2 male infertility (p. 542),  16.3 environmental threats to sperm formation (p.544),  16.4 sterility (p. 547)  Anatomy of the Female Reproductive System  Homeostatic imbalance cited:  16.5. gonorrhea and pelvic inflammatory disease (p. 548),  16.6 cervical cancer (p. 550), 16.7 breast cancer (p. 556),  16.8 miscarriage and abortion (p. 533),  16.9 dystocia (p 533), and hermaphrodites (p. 567)  **PowerPoint Presentations**: ch12- Reproductive diseases; Reproductive System Disorders; Sexually Transmitted Diseases; Chapter 18 Lesson 2 Male reproductive system  **Videos**: Reproductive System Diseases; Reproductive System Diseases | Breast cancer  Testicular cancer  Cervical cancer  Prostate cancer  Endometriosis  Impotence  Gonorrhea  Syphilis  Genital herpes  Chlamydia  Trichomoniasis  Genital warts  Human Papilloma virus |