Unit 6 The Skeletal System

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| UNIT 4 - SKELETAL SYSTEM  Movement and Support in Humans  STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.01 Identify the general functions of the skeletal system. | I will be able to identify and explain the five general functions of the skeletal system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Functions of the Bones (pp.134–135)  **PowerPoint Presentations**: Skeletal System-1; Skeletal System-2;  **Videos**: The Skeletal System\_ Crash Course A&P #19; Five Functions of the Skeletal System; Skeletal System Structure and Function | Skeletal system  Storage  Hematopoiesis  Support  Movement  Protection |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.02 Identify the roles of the osteoblasts, osteocytes, and osteoclasts in bone growth and ossification. | I will be able to visually identify and learn the functions of the bone cells osteoblasts, osteocytes, and osteoclasts. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Bones Formation, Growth, and Remodeling (pp. 141 – 144)  Structure of Bone, Microscopic Anatomy (pp. 137 – 138)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018);  Chapter 5 The Skeletal System (pp. 75 – 104)  Question 4. Complete the statement (p. 76)  Question 5. Five description of bone structure (p. 27)  **PowerPoint Presentations**: Functions of Bones; Bone Tissue  **Videos**: Bone Cells; Bone Remodeling and Modeling; What Is the Connection between Osteoblasts and Osteocytes; Anatomy and Physiology of Skeletal System; | Osteoblasts  Osteoclasts  Osteocytes  Modeling  Remodeling |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.03 Describe the features of a long bone. (Periosteum, diaphysis, epiphysis, medullary cavity, red marrow, yellow marrow, articular cartilage, endosteum, compact bone, spongy bone) | I will be able to visually identify and explain the descriptive features of the long bone, such as periosteum, diaphysis, epiphysis, medullary cavity, red marrow, yellow marrow, articular cartilage, endosteum, compact bone, and spongy bone. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Structure of Bone (pp. 137 – 141)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 7 Activity 1: Gross Anatomy of the Typical Long Bone (pp. 69 – 72)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 5 The Skeletal System (pp. 75 – 104)  Figure 5 – 2B Longitudinal section of the femur (p. 78)  **PowerPoint Presentations**: Bone Tissue; Functions of Bone  **Videos**: The Skeletal System\_ Crash Course A&P #19; Long Bones, Short Bones, Flat Bones, Irregular Bones, Sesamoid Bones; Anatomy and Physiology of Skeletal System. | Long bone  Periosteum  Diaphysis  Epiphysis  Epiphyseal line  Medullary cavity  Red marrow  Yellow marrow  Bone markings  Articular cartilage  Endosteum  Compact bone  Spongy bone |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.04 Identify the four shapes of bones with characteristics and examples of each. (Long, short, flat, irregular) | I will be able to visually identify and explain the descriptive features of the long, short, flat, and irregular bone. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Classification of Bones (pp. 135 – 136)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 7 Overview of the Skeleton (pp. 67 – 76)  Classification of Bones (pp. 68 – 69)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 5 The Skeletal System (pp. 75 – 104)  Bones – An Overview (p. 75)  **PowerPoint Presentations**: Bone Tissue; Functions of Bone  **Videos**: The Skeletal System\_ Crash Course A&P #19; Long Bones, Short Bones, Flat Bones, Irregular Bones, Sesamoid Bones; Anatomy and Physiology of Skeletal System. | Long bone  Short bone  Flat bone  Irregular bone |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.05 Describe and locate the following bone markings. (foramen, meatus, sinus, fossa, condyle, tuberosity, trochanter, tubercle, process) | I will be able to visually identify and explain the descriptive features of bone marking, such as foramen, meatus, sinus, fossa, condyle, tuberosity, trochanter, tubercle, and process. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 7 Overview of the Skeleton (pp. 67 – 76)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 5 The Skeletal System (pp. 75 – 104)  Bones – An Overview (p. 75)  Question 12. Anterior view of the Skull (p. 82)  Question 16. Superior Views of Vertebrae (p. 84  Question 21. Identify bones in diagram (p. 88)  Question 27. Bone names and markings (pp.92 – 93)  Question 29. Bones of the thigh and leg (p. 94)  **PowerPoint Presentations**: Bone Tissue; Functions of Bone  **Videos**: The Skeletal System\_ Crash Course A&P #19; Long Bones, Short Bones, Flat Bones, Irregular Bones, Sesamoid Bones; Anatomy and Physiology of Skeletal System. | Foramen  Meatus  Sinus  Fossa  Condyle  Tuberosity  Trochanter  Tubercle  Process |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.06 Describe the terms “suture” and “fontanel” | I will be able to visually identify and explain the descriptive features of skull markings of suture and fontanel. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Axial Skeleton – Skull (pp. 146 – 150)  Developmental Aspects of the Skeleton (pp. 173 – 174)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 8 The Axial Skeleton (pp. 77 – 93)  The Skull (pp. 77 – 83)  Examining the Fetal Skull (pp. 82 – 83)  **PowerPoint Presentations**: Anatomy of the Skeletal System; Skeletal System-2  **Videos**: Long Bones, Short Bones, Flat Bones, Irregular Bones, Sesamoid Bones; Anatomy and Physiology of Skeletal System. | Suture  Lamboidoid suture  Coronal suture  Squamous suture  Anterior fontanelle  Posterior fontanelle |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.07 Contrast the axial and appendicular skeletons. | I will closely examine and visually identify the differences and similarities of the axial and appendicular skeletons. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Axial Skeleton (pp. 146 – 158)  Appendicular Skeleton (pp. 158 – 1165)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 8 The Axial Skeleton (pp. 77 – 86)  Exercise 8 Review Sheet The Axial Skeleton (pp. 87 – 93)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 5 The Skeletal System (pp. 75 – 104)  Axial Skeleton (pp. 79 – 86)  Appendicular Skeleton (pp. 87 – 97)  **PowerPoint Presentations**: Anatomy of the Skeletal System; Appendicular-Skeleton; Skeletal System-2  **Videos**: The Skeletal System\_ Crash Course A&P #19; Axial and Appendicular Skeleton - The Law of the 1s and 2s; Axial and Appendicular Skeletal System | Axial skeleton  Skull  Vertebral column  Pelvis  Appendicular skeleton  Humerus  Radius  Ulna  Femur  Tibia  Fibula |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.08 Locate the following skull bones. (Mandible, maxilla, zygomatic, frontal, parietal, occipital, sphenoid, ethmoid, hyoid, temporal, mastoid process) | I will be able to visually identify and name the different bones of the skull. | 1  2 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Axial Skeleton (pp. 79 – 86)  Skull (pp. 146 – 150)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 8 The Axial Skeleton (pp. 79 – 86)  Activity 1 Identifying the Bones of the Adult Skull (pp. 71 – 81)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Axial Skeleton (pp. 79 – 86)  Skull (pp. 79 – 82)  **PowerPoint Presentations**: Anatomy of the Skeletal System; Skeletal System-2  **Videos**: The Skeletal System\_ Crash Course A&P #19; Axial and Appendicular Skeleton - The Law of the 1s and 2s; Axial and Appendicular Skeletal System | Skull  Mandible  Maxilla  Zygomatic  Frontal  Parietal  Occipital  Sphenoid  Ethmoid  Hyoid  Temperal  Mastoid process |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.09 Contrast the average number, location and function of each of the five groups of vertebrae. | I will be able to examine and identify the names, location, and function of the five types of vertebral bones of the axial skeleton. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Axial Skeleton (pp. 79 – 86)  The Vertebral Column (Spine) (pp. 152 – 156)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 8 The Axial Skeleton (pp. 79 – 86)  The Vertebral Column (pp. 90 – 92)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  The Skeletal System (pp. 75 – 104)  Axial Skeleton (pp. 79 – 86)  Vertebral Column (pp. 83 – 85)  **PowerPoint Presentations**: Anatomy of the Skeletal System; Skeletal System-2  **Videos**: The Skeletal System\_ Crash Course A&P #19; Axial and Appendicular Skeleton - The Law of the 1s and 2s; Axial and Appendicular Skeletal System | Vertebral column  Cervical curvature  Thoracic curvature  Lumbar curvature  Sacral curvature  Atlas  Axis  Cervical vertebrae  Thoracic vertebrae  Lumbar vertebrae  Body  Transverse process  Spinous process  Vertebrae foramen  Transverse foramen |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.10 Explain the structural classifications of articulations. (Fibrous, synovial & cartilaginous) | I will be able to examine, visually identify, and explain the fibrous, synovial and cartilaginous articulation classification of bones. | 1  2 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Joints (pp. 156 – 172)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 10 Joints and Body Movements (pp. 111 – 116)  Fibrous joints (pp. 11 – 113)  Cartilaginous joints (p. 113)  Synovial joints (pp. 113 – 114)  Exercise 10 Review Sheet Joints and Body Movements (pp. 117 – 119)  Types of Joints (pp. 117 – 118)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  The Skeletal System (pp. 75 – 104)  Joints (pp. 97 – 98)  **PowerPoint Presentations**: Skeletal System-2; What Are the Different Types of Joints; Joints of the Human Body Videos: Types of joints in the human body - Anatomy & Examples; Joints Crash Course A&P #20; | Fibrous joint  Synovial joint  Cartilaginous joint |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.11 Differentiate between ligaments and tendons. | I will be able to visually identify, examine, and explain the differences between ligaments and tendons. | 1  2 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 3 Cells and Tissues (pp. 62 – 108)  Types of Connective Tissues (pp. 94 – 98)  Dense Connective Tissue (p. 95 – 97)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 5 Classification of Tissues (pp. 27 – 48)  Connective Tissue (p. 42)  **PowerPoint Presentations**: Tendon and Ligament; Joints Tendons and Ligaments  **Videos**: Tendons vs Ligaments; The Muscular System Explained In 6 Minutes | Dense Connective Tissue  Ligaments  Tendons |
| STANDARD  04 Students will describe the structures and functions of the skeletal system and its components. | 04.12 Identify the following diseases or disorders of the skeletal system. (Herniated disk, osteoarthritis, osteoporosis, scoliosis, spina bifida) | I will be able to examine, identify, and discuss the following diseases and disorders of the skeletal system,, such as herniated disk, osteoarthritis, osteoporosis, scoliosis, and spinal bifida. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 5 The Skeletal System (pp. 134 – 180)  Homeostatic Imbalance (pp. 170 – 173)  Developmental Aspects of the Skeletal System (pp. 173 – 177)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  The Skeletal System (pp. 75 – 104)  Homeostatic Imbalance of Bones and Joints (p. 99)  **PowerPoint Presentations**: Common Bone Disorders; Skeletal System Disorders.  **Videos**: Disorders and Diseases of the Skeletal System; Musculoskeletal Disorders | Skeletal System disease  Herniated disk  Osteoarthritis  Osteoporosis  Scoliosis  Spinal bifida |

Unit 7 Muscular System

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| UNIT 5 - MUSCULAR SYSTEM  Movement and Support in Humans  STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.01 Identify the general functions of the muscular system. | I will be able to examine, visually identify, and describe the general functions of the muscular system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Muscle Functions (pp. 185)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  No resource in lab manual  **PowerPoint Presentations**: Muscular System-3 ; Muscular System-2;  **Videos**: Muscular System Explained In 6 Minutes; Three types of muscle Khan Academy | Movement  Posture  Body position  Heat  Stability |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.02 Describe the four characteristics of muscle tissue. (Elasticity, excitability [irritability], extensibility, flexibility) | I will be able to explain the four characteristics of muscle tissue: elasticity, excitability, extensibility, and flexibility. | 2  3 | No resources were found in the Pearson text, Laboratory manual and coloring workbook.  **PowerPoint Presentations**: Muscular System-3;  **Videos**: The Muscular System Explained In 6 Minutes; | Muscle tissue  Elasticity  Excitability  Irritability  Flexibility |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.03 Contrast the general location, microscopic appearance, control, and functions of the three specific types of muscle tissue. (Skeletal, smooth, cardiac) | I will be able to examine, describe and discuss the microscopic appearance and where the three muscles types are generally found. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Muscle types (pp. 181 – 185)  Microscopic Anatomy of Skeletal Muscle (pp. 185 – 187)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 11 Microscopic Anatomy and Organization of Skeletal Muscle (pp. 121–126)  Activity 1 Examining Skeletal Muscle Cell Anatomy (p.123)  Exercise 20 Anatomy of the Heart (pp. 24 7 – 254)  Microscopic Anatomy of Cardiac Muscle (p. 251)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 6 The Muscular System (pp.105 – 132)  Question 2. Identifying muscle cells (p. 106)  Microscopic Anatomy of Skeletal Muscle (pp. 10 7 -108)  **PowerPoint Presentations**: Muscular System-3 ; Muscular System-2;  **Videos**: The Muscular System; The Muscular System Explained In 6 Minutes; Three types of muscle Khan Academy ; Muscles, part 1 - Muscle Cells Crash Course A&P #21 | Skeletal muscle cell  Cardiac muscle cell  Smooth muscle cell  Nucleus  Striation |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.04 Contrast thick and thin myofilaments. | I will be able to examine and explain why the microscopic anatomy of thick and thin myofilaments in skeletal and cardiac muscle gives them the striped macroscopic appearance. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Table 6.1 Comparison of Skeletal, Cardiac, and Smooth Muscle (p. 182)  Microscopic Anatomy of Skeletal Muscle (pp. 185 – 187)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 11 Microscopic Anatomy and Organization of Skeletal Muscle (pp. 121–126)  The Cells of Skeletal Muscle (pp. 121 – 123)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Microscopic Anatomy of Cardiac Muscle (p. 251)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 6 The Muscular System (pp.105 – 132)  Microscopic Anatomy of Skeletal Muscle (pp. 10 7 -108)  **PowerPoint Presentations**: Muscular System-3 ; Muscular System-2;  **Videos**: The Muscular System; The Muscular System Explained In 6 Minutes; Three types of muscle Khan Academy:; Muscles, part 1 - Muscle Cells Crash Course A&P #21 : | Sarcolemma  Myofibrils  Tropomyosin  Light (l) bands  Dark (A) bands  Myofilaments  Thick myofilaments  Myosin  Cross bridge  Thin filaments  Sarcoplasmic reticulum  Z disc  M line |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.05 Describe the sliding-filament theory of muscle contraction. | I will be able to examine, discuss, and demonstrate why the thick and thin myofilaments of the sarcomere describes the muscle shortening action of the sliding – filament theory. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Table 6.1 Comparison of Skeletal, Cardiac, and Smooth Muscle (p. 182)  Microscopic Anatomy of Skeletal Muscle (pp. 185 – 187)  Mechanism of Muscle Contraction: The Sliding Filament Theory (pp. 190 – 191)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 11 Microscopic Anatomy and Organization of Skeletal Muscle (pp. 121–126)  The Cells of Skeletal Muscle (pp. 121 – 123)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Microscopic Anatomy of Cardiac Muscle (p. 251)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 6 The Muscular System (pp.105 – 132)  Microscopic Anatomy of Skeletal Muscle (pp. 10 7 -108)  Skeletal Muscle Activity (pp. 109 – 10)  **PowerPoint Presentations**: Muscular System-2 ; Muscular System-3; Muscular System-4; Muscles The Steps of Muscle Contraction  **Videos**: The Muscular System; The Muscular System Explained In 6 Minutes; Muscles, part 1 - Muscle Cells Crash Course A&P #21  : | Sarcolemma  Myofibrils  Light (l) bands  Dark (A) bands  Myofilaments  Thick myofilaments  Myosin  Cross bridge  Thin filaments  Sarcoplasmic reticulum  Z disc  M line |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.06 Describe what occurs at the neuromuscular junction. | I will be able to describe and demonstrate the physical appearance and functions of the microscopic structures comprising the neuromuscular junction. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Skeletal Muscle Activity (pp. 187 – 196)  Stimulation and Contraction of Single Skeletal Muscle Fibers (pp. 187 – 190)  The Nerve Stimulus and the Action Potential (pp. 187 – 189)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 11 Microscopic Anatomy and Organization of Skeletal Muscle (pp. 121–126)  The Neuromuscular Junction (pp. 123 – 124)  Activity 3 Studying the Structure of a Neuromuscular Junction (p. 125)  Exercise 11 Review Sheet Microscopic Anatomy and Organization of Skeletal Muscle (pp. 127 – 130)  The Neuromuscular Junction (pp. 128 – 129)  Exercise 12 Gross Anatomy of the Muscular System (pp. 131 – 143)  Exercise 12 Review Sheet Gross Anatomy of the Muscular System (pp. 145 – 149)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 6 The Muscular System (pp.105 – 132)  Microscopic Anatomy of Skeletal Muscle (pp. 10 7 -108)  Skeletal Muscle Activity (pp. 109 – 10)  **PowerPoint Presentations**: Muscular System-3 ; Muscular System-3;  **Videos**: The Muscular System Explained In 6 Minutes; Motor unit Khan Academy | Neuromuscular junction  Motor unit  Synaptic cleft  Axon  Axon terminal  Neurotransmitter  Acetylcholine  Calcium ion  Sarcolemma  Synaptic vesicle |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.07 Define the terms “origin” and “insertion.” | I will be able to explain and demonstrate the meaning of “origin” and “insertion” ends of skeletal muscle. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Muscle Movements, Roles, and Names (pp. 196 – 200)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 11 Microscopic Anatomy and Organization of Skeletal Muscle (pp. 121–126)  Classification of Skeletal Muscles (p. 125)  Exercise 12 Gross Anatomy of the Muscular System (pp. 131 – 143)  Table 12.1 Major Muscles of Human Head and Neck (p.135)  Table 12.2 Major Muscles of Trunk and Upper Limbs (p.136)  Table 12.3 Posterior Muscles of Human Neck, Trunk, and Upper Limbs (p. 138)  Table 12.4 Anteromedial Muscles of the Hip and Lower Limbs (p. 139)  Table 12.4 Anteromedial Muscles of the Hip and Lower Limb (p. 140)  Table 12.5 Muscles of the Hip and Lower Limb (p. 140)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018) Chapter 6 The Muscular System (pp.105 – 132)  **PowerPoint Presentations**: Muscular System-3  **Videos**: Arm muscles - Origin, Insertion & Innervation Kenhub; Quadriceps Femoris Muscle - Origin, Insertion and Function Kenhub | Muscle origin  Muscle insertion |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.08 Explain the role of prime movers (agonists), antagonists, synergists, and fixators. | I will be able to describe and demonstrate the skeletal muscle motion function or role as “agonist”, “antagonist”, “synergists”, and “fixators”. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Muscle Movements, Roles, and Names (pp. 196 – 203)  Interactions of Skeletal Muscles in the Body (pp. 200 – 202)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 11 Microscopic Anatomy and Organization of Skeletal Muscle (pp. 121–126)  Classification of Skeletal Muscles (p. 125)  Exercise 11 Review Sheet Microscopic Anatomy and Organization of Skeletal Muscle (pp. 127 – 130)  Classification of Skeletal Muscles (p.130)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 6 The Muscular System (pp.105 – 132)  Muscle Movements, Types, and Names (pp. 102 – 113)  **PowerPoint Presentations**: Prime mover, Synergist, Antagonistic Muscles; Functional Roles of Muscles; Muscular System-3  **Videos**: Prime mover, Synergist, Antagonistic Muscles; What Exercises Use Agonist antagonist paired Muscles? | Prime movers  Antagonists  Synergists  Fixators |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.09 Describe the locations and functions of the following skeletal muscles: (biceps brachii, triceps brachii, sternocleidomastoid, trapezius, deltoid, diaphragm, pectoralis major, latissimus dorsi, gastrocnemius, hamstrings, quadriceps, gluteus maximus) | I will be able to recite the names of the most commonly known skeletal muscle and describe their function. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Naming Skeletal Muscles (pp. 202 – 203)  Gross Anatomy of Skeletal Muscles (pp. 203 – 217)  Table 6.3 Superficial Anterior Muscles of the Body (pp. 216 – 217)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 12 Gross Anatomy of the Muscular System (pp. 131 – 143)  Exercise 12 Review Sheet Gross Anatomy of the Muscular System (pp. 145–149)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 6 The Muscular System (pp.105 – 132)  Gross Anatomy of the Skeletal Muscles (pp. 114 – 127)  **PowerPoint Presentations**: Muscular System-1; Muscular System-2; Functional Roles of Muscles;  **Videos**: Arm muscles - Origin, Insertion & Innervation - Human Anatomy Kenhub; Muscles of the Head Neck and Thorax Regions; Muscles of the Hip and Thigh Kenhub; Quadriceps Femoris Muscle - Origin, Insertion and Function Kenhub | Biceps brachii Triceps brachii Sternocleidomastoid Trapezius  Deltoid  Diaphragm Pectoralis major Latissimus dorsi Gastrocnemius Hamstrings  Quadriceps  Gluteus maximus |
| STANDARD  05 Students will describe the structures and functions of the muscular system and its components. | 05.10 Identify the following diseases and disorders of the muscular system. (Fibromyalgia, muscular dystrophy, shin splints) | I will understand the normal function of the skeletal muscle in order to be able to research and explain the physiology of certain disorders of the muscular system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 6 The Muscular System (pp. 181 – 224)  Developmental Aspects of the Muscular System (pp. 218 – 21)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 6 The Muscular System (pp.105 – 132)  Developmental Aspects of the Muscular System (p. 128)  **PowerPoint Presentations**: Muscle Diseases; Muscle System and Disorders; Muscular Dystrophy | Muscle disease  Muscle disorder  Fibromyalgia  Muscular dystrophy  Shin splints |

Unit 8 Cardiovascular System

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| UNIT 8 – CARDIOVASCULAR SYSTEMS  STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.14 List the general functions of the cardiovascular system. | I will be able to describe the general function of the cardiovascular system to move or transport blood, oxygen, nutrients, cell waste products, hormones, and other vital substances to and from the vast different cells, tissues, and organs of the body, in order to maintain homeostasis. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 10 Blood (pp. 337 – 355)  Composition and Functions of Blood (pp. 337 – 345)  Physical Characteristics and Volume  Figure 10.1 The Composition of blood. (p. 33 9)  Chapter 11 The Cardiovascular System (pp. 356 – 397)  Major functions of the cardiovascular system (p. 356)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Opening paragraph of chapter (p. 207)  **PowerPoint Presentations**: Circulatory System; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; What Does C-V System do; Cardiovascular System Heart  **Videos**: Cardiovascular System Under 10 minutes; Anatomy and Physiology of the Circulatory System; Layers of the Heart | Homeostasis  Oxygen  Carbon dioxide  Blood transport  Hormones  Waste products  Nutrients |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.15 Describe the layers of the heart. (Epicardium, myocardium, endocardium) | I will be able to describe and demonstrate the layers of the heart: epicardium, myocardium, and endocardium. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  The Heart (pp. 357 – 370)  Anatomy of the Heart (pp. 357 – 358)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Gross Anatomy of the Human Heart (pp. 247 -248)  Exercise 20 Review Sheet Anatomy of the Heart (pp. 255 – 258)  Exercise 20 Review Sheet Gross Anatomy of the Heart (pp. 255 – 256)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  The Heart – Anatomy of the Heart (p. 207)  **PowerPoint Presentations**: Circulatory System; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; What Does C-V System do; Cardiovascular System Heart  **Videos**: Cardiovascular System Under 10 minutes; Anatomy and Physiology of the Circulatory System; Layers of the Heart | Mediastinum  Apex of heart  Base of heart  Pericardium  Fibrous pericardium  Serous pericardium  Parietal pericardium  Visceral pericardium  Epicardium  Myocardium  Endocardium  Pericarditis |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.16 Identify the chambers of the heart. | I will be able to visually identify and physically demonstrate the physical positions of the four chambers of the heart. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Chambers and Associated Great Vessels (pp. 359 – 363)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Heart Chambers (pk. 249)  Exercise 20 Review Sheet Anatomy of the Heart (pp. 255 – 258)  Gross Anatomy of the Human Heart  Question 3. Matching terms (p. 256)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Question 2. Figure 11.1 Label diagram (p. 208)  **PowerPoint Presentations**: Circulatory System; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; What Does C-V System do; Cardiovascular System Heart  **Videos**: Cardiovascular System Under 10 minutes; Anatomy and Physiology of the Circulatory System; Layers of the Heart  : | Atria  Right atrium  Left atrium  Ventricles  Right ventricle  Left ventricle  Interatrial septum  Interventricular septum |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.17 Locate the great blood vessels of the heart. (Superior vena cava, inferior vena cava, pulmonary trunk, pulmonary arteries, pulmonary veins, aorta, branches of the aorta) | I will be able to visually identify and physically demonstrate the location and direction of blood flow from the great blood vessels of the heart. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Chambers and Associated Great Vessels (pp. 259 – 363)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Pulmonary, Systemic, and Cardiac Circulations (pp. 250 – 251)  Exercise 20 Review Sheet Anatomy of the Heart (pp. 255 – 258)  Pulmonary, Systemic, and Cardiac Circulations (pp. 256 – 257)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  The Heart – Anatomy of the Heart  Question 3. Figure 11 – 2 Identify and color diagram (p. 209)  **PowerPoint Presentations**: Circulatory System; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; What Does C-V System do; Cardiovascular System Heart  **Videos**: Cardiovascular System Under 10 minutes; Anatomy and Physiology of the Circulatory System; Layers of the Heart | Superior vena cava  Inferior vena cava  Pulmonary trunk  Pulmonary arteries  Pulmonary veins  Aorta  Branches of the aorta  Pulmonary circulation  Systemic circulation |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.18 Identify the valves of the heart. (Tricuspid, pulmonary semilunar, bicuspid (mitral), aortic  semilunar) | I will be able to visually identify and physically demonstrate the flow of blood through the four heart valves. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Heart Valves (pp. 361 – 363)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Heart Valves (pp. 249 – 260)  Exercise 20 Review Sheet Anatomy of the Heart (pp. 255 – 258)  Gross Anatomy of the Human Heart (pp. 255 – 258)  Questions 4 and 5 Hear Valve questions (p. 258)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Figure 11 – 5 Diagram of the frontal section of the heart (pp. 211 – 2112)  **PowerPoint Presentations**: Circulatory System; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; What Does C-V System do; Cardiovascular System Heart  **Videos**: Cardiovascular System Under 10 minutes; Anatomy and Physiology of the Circulatory System; Layers of the Heart | Tricuspid valve  Pulmonary semilunar valve  Mitral (bicuspid) valve  Aortic semilunar valve |
| SYSTEMS  STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.19 Trace blood flow through the heart. | I will be able to examine and demonstrate the flow of blood through the heart chambers, heart valves, lungs, and out of the heart. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Chambers and Associated Great Vessels (pp. 358 – 361)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Pulmonary, Systemic, and Cardiac Circulations (pp. 250 – 251)  Exercise 20 Review Sheet Anatomy of the Heart (pp. 255 – 258)  Pulmonary, Systemic, and Cardiac Circulations (pp. 256 – 257)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Question 6. Figure 11 – 4 Diagram of the frontal section of the heart. Draw arrow of blood flow (pp. 210 -211)  **PowerPoint Presentations**: Circulatory System; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; What Does C-V System do; Cardiovascular System Heart  **Videos**: Cardiovascular System Under 10 minutes; Anatomy and Physiology of the Circulatory System; Layers of the Heart | Left ventricle  Right ventricle  Left atrium  Right ventricle  Tricuspid valve  Pulmonary semilunar valve  Mitral (bicuspid) valve  Aortic semilunar valve  Aorta  Pulmonary artery  Pulmonary veins  Superior vena cava  Inferior vena cava  Capillary beds  Pulmonary circulation  Systemic circulation  Cardiac circulation  Oxygen–rich  Oxygen–poor  Carbon dioxide–rich  Carbon dioxide–poor |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.20 Identify the components of the conduction system of the heart and trace the pathway. (SA node, AV node, AV bundle, bundle branches, Purkinje fibers [conduction], fibers) | will be able to visually identify and physically demonstrate the electrical components of the heart’s pacemaker system: | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Physiology of the Heart (pp. 264 -265)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Figure 11 – 5 Diagram of the frontal section of the heart. Identify the pace maker and intrinsic conduction system (pp. 211 – 212)  Physiology of the Heart (pp. 212 – 213)  **PowerPoint Presentations**: Cardiovascular Physiology; Cardiovascular System Heart; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System  **Videos**: Relationship of conduction system, ventricular contraction and ECG; How to Memorize the PQRST EKG Rhythm Strip Wave; EKG or ECG Interpretation (Basic) \_ Easy and Simple!; | Sinoatrial (SA) node  Atrioventricular (AV) node  Atrioventricular (AV) bundle (bundle of His)  Bundle branches Purkinje fibers [conduction],  Fibers  Intrinsic conduction system (nodal system)  Pace maker  Interventricular septum |
| UNIT 8 – CARDIOVASCULAR SYSTEMS  STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.21 Sequence the principle events of the cardiac cycle in terms of systole and diastole. | will be able to examine and demonstrate the sequence of events that occur during systole and diastole of the cardiac cycle. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Physiology of the Heart (pp. 364 – 370)  Cardiac cycle and Heart Sounds (pp. 365 – 366)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 22 Human Cardiovascular Physiology – Blood Pressure and Pulse Determinations (pp. 281 – 288)  Cardiac Cycle (pp. 281 – 283)  Exercise 22 Review Sheet Human Cardiovascular Physiology – Blood Pressure and Pulse Determinations (pp. 289 – 292)  Cardiac Cycle (pp. 289 – 290)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Physiology of the Heart (pp. 212 – 213)  **PowerPoint Presentations**: Cardiovascular Physiology; Ch 11 Cardiovascular System  Videos: The Cardiac Cycle Made Ridiculously Easy!!!; The Cardiac Cycle, Animation; | Cardiac cycle  Atrial diastole  (ventricular filling)  Atrial systole  Isovolumetric contraction  Ventricular systole (ejection phase)  Isovolumetric relaxation |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.22 Define cardiac output and identify factors that influence it. (heart rate and stroke volume) | I will be able to define and calculate the amount of cardiac output knowing that it is equal to the product of heart rate and stroke volume. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Physiology of the Heart (pp. 364 – 370)  Cardiac Output (pp. 367 – 370)  Regulation of Stroke Volume (p. 368)  Factors Modifying Basic Heart Rate (p. 368)  **PowerPoint Presentations**: Cardiovascular Physiology; Ch 11 Cardiovascular System  **Videos**: The Cardiac Cycle Made Ridiculously Easy!!!; The Cardiac Cycle, Animation; | Cardia output  Heart rate  Stroke volume  Vagus nerve stimulation  Epinephrine stimulation  Exercise stimulation |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.23 Contrast the structures and functions of arteries, capillaries, and veins. | I will be able to examine, visually identify, and discuss the microscopic and macroscopic structures of arteries, veins, and capillaries. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Blood Vessels (pp. 370 – 381)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 21 Anatomy of Blood Vessels (pp. 259 -272)  Exercise 21 Review Sheet Anatomy of Blood Vessels (pp. 273 -279)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Blood Vessels (pp. 214 – 225)  **PowerPoint Presentations**: Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; Circulatory System; What Does C-V System do  **Videos**: Anatomy and Physiology of Blood Vessels; Arteries, arterioles, venules, and veins \_ Health & Medicine \_ Khan Academy; Blood Vessels, part 1 - Form and Function\_ Crash Course A&P #27; Capillaries and their functions; Veins of the body - PART 1 - Anatomy Tutorial; Veins of the body - PART 2 - Anatomy Tutorial | Vascular system  Arteries  Arterioles  Veins  Venules  Capillaries  Tunica intima  Tunica media  Tunica externa  Venous valves  Microcirculation  Vascular shunt  Terminal arteriole  Postcapillary venule  Precapillary sphincter |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.24 Define pulse and identify the general location of arteries where pulse may be felt. | I will be able to visually identify and discuss the common places where general pulses of known arteries could be found. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Physiology of Circulation (pp. 380 – 389)  Arterial pulse (pp. 380 – 381)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 22 Human Cardiovascular Physiology – Blood Pressure and Pulse Determinations (pp. 281 – 288)  The Pulse (pp. 283 – 284)  Exercise 22 Review Sheet Human Cardiovascular Physiology – Blood Pressure and Pulse Determinations (pp. 289 – 292)  The Pulse (p. 291)  **PowerPoint Presentations**: Cardiovascular System-Marieb 7thEd;  **Videos**: Peripheral arterial examination; Locating Pulses of the Body How to Find Them; | Vital sign  Pulse  Pressure points  Superficial temporal artery  Facial artery  Common carotid artery  Brachial artery  Radial artery  Femoral artery  Popliteal artery  Posterior tibial artery  Dorsalis pedis artery |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.25 Describe blood pressure and how to measure it. | I will be able to describe and the cause and function of blood pressure and ways to measure it. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Physiology of Circulation (pp. 380 – 389)  Blood Pressure (pp. 381 – 386)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 22 Human Cardiovascular Physiology – Blood Pressure and Pulse Determinations (pp. 281 – 288)  Blood Pressure Determinations (pp. 284 – 287)  Exercise 22 Review Sheet Human Cardiovascular  Blood Pressure Determinations (pp. 291 – 292)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Physiology of Circulation (pp. 225 – 229)  Question 30. Concerning blood pressure and pulse (p. 226)  **PowerPoint Presentations**: Blood Pressure; Blood pressure 2011  **Videos**: Understanding Blood Pressure Animation; Don’t Understand Blood Pressure? You Will After This!; Hypertension, High Blood Pressure Animation; Anatomy and Physiology of Blood Vessels | Blood pressure  Blood pressure gradient  Systolic blood pressure  Diastolic blood pressure  Peripheral resistance  Vasoconstriction |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.26 Contrast pulmonary and systemic circulation. | I will be able to visually identify and describe the direction of blood flow through the lungs (pulmonary circulation) and through the body (systemic circulation. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Chambers and Associated Great Vessels (pp. 358 – 361)  Figure 11.4 The Systemic and Pulmonary Circulations (p. 361)  **Pearson Laboratory Manual Essentials of Human Anatomy & Physiology** (2018)  Exercise 20 Anatomy of the Heart (pp. 247 – 254)  Pulmonary, Systemic, and Cardiac Circulations (pp. 250 – 251)  Exercise 20 Review Sheet Anatomy of the Heart (pp. 255 – 258)  Pulmonary, Systemic, and Cardiac Circulations (pp. 256 – 257)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Question 6. Figure 11 – 4 Diagram of the frontal section of the heart. Draw arrow of blood flow (pp. 210 -211)  **PowerPoint Presentations**: Circulatory System; Cardiovascular System-Marieb 7thEd; Ch 11 Cardiovascular System; What Does C-V System do; Cardiovascular System Heart  **Videos**: Cardiovascular System Under 10 minutes; Anatomy and Physiology of the Circulatory System; Layers of the Heart | Pulmonary circulation  Systemic circulation  Cardiac circulation  Oxygen–rich  Oxygen–poor  Carbon dioxide–rich  Carbon dioxide–poor |
| STANDARD  08 Students will describe the components and functions associated with blood, and the structures and functions of the lymphatic and cardiovascular systems. | 08.27 Identify the following diseases or disorders of the cardiovascular system. (Aneurysm, arteriosclerosis, atherosclerosis, cerebrovascular accident/stroke, coronary artery disease, hypertension, murmur, myocardial infarction) | I will be able to describe normal cardiovascular anatomy and physiology, in order to comprehend and explain the common diseases or disorders of the cardiovascular system. | 2  3 | **Pearson Essentials of Human Anatomy & Physiology Text** by Marieb (2018);  Chapter 11 Cardiovascular System (pp. 356 – 397)  Heart Valves Homeostatic Imbalance (p. 363)  Cardiac circulation Homeostatic Imbalance (pp. 363 – 364)  Intrinsic Conduction System of the Heart Homeostatic Imbalance (p. 365)  Cardiac Cycle and Heart Sounds Homeostatic Imbalance (p. 366)  Cardiac Output Homeostatic Imbalance (pp. 369 – 370)  Microscopic Anatomy of Blood Vessels Homeostatic Imbalance 373)  Blood Pressure Homeostatic Imbalance (p. 385)  Developmental Aspect of the Cardiovascular System (pp. 389 – 392)  **A Complete Study Guide Anatomy & Physiology Coloring Workbook** (2018)  Chapter 11 The Cardiovascular System (pp. 207 – 236)  Developmental Aspects of the Cardiovascular System (pp. 229 – 230)  **PowerPoint Presentations**: Major Forms of Cardiovascular Disease; CAD and other CV Diseases;  **Videos**: Cardiovascular Disease Overview; Anatomy and Physiology of Blood Vessels; Blood Vessels, part 2\_ Crash Course A&P #28; Heart Sounds and Heart Murmurs, Animation; Systolic murmurs, diastolic murmurs, and extra heart sounds - Part 2 KA; Introduction to Cardiovascular Disorders | Aneurysm Arteriosclerosis  Atherosclerosis Cerebrovascular accident or stroke  Transient Ischemic Attacks (TIA)  Coronary artery disease (CAD)  Hypertension  Murmur  Myocardial infarction  Myocardial ischemia |