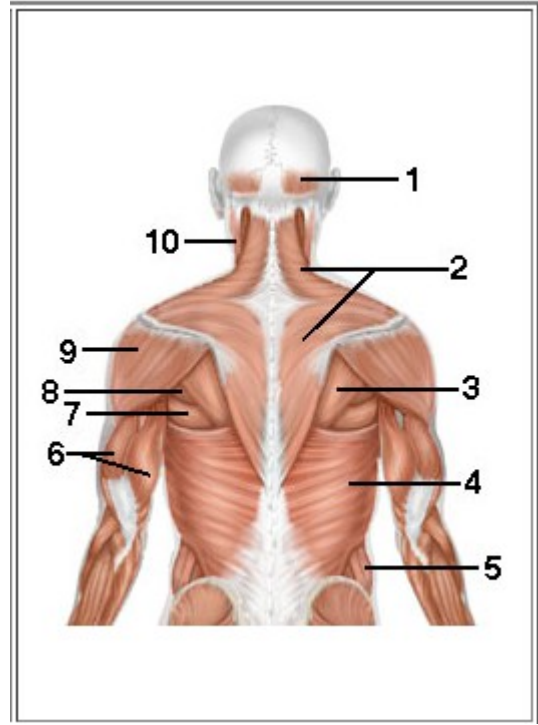
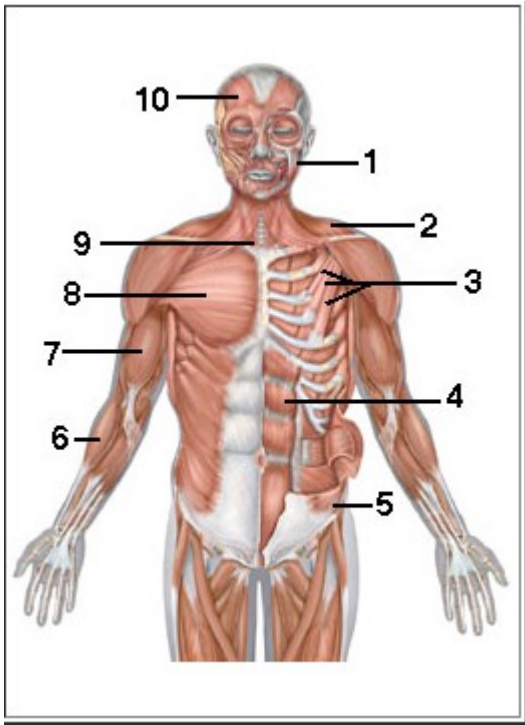


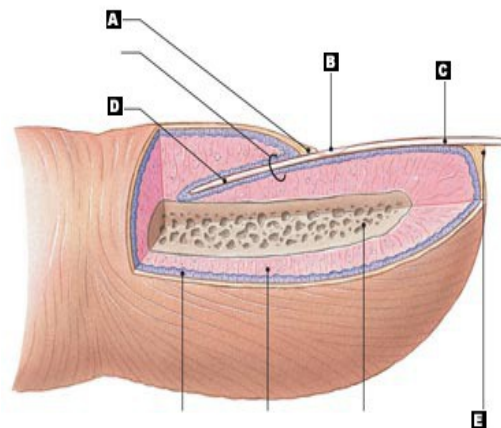
Anatomy and Physiology - Division B  
2015-2016

**Section 1:** Directions: Label the pictures below. (1 point each)

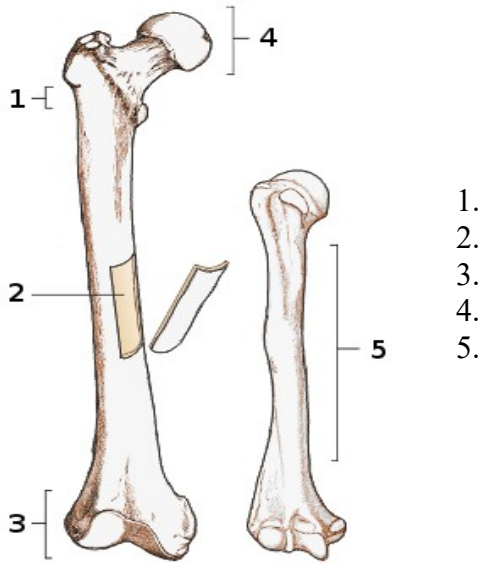


1. \_\_\_\_\_
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- A.
- B.
- C.
- D.
- E.



Reference : Clinically Oriented Anatomy - Moore

**Section 2:** Directions: Answer the following questions using complete sentences. ( 2 points each)

1. List two examples of modified sweat glands in the body.
  
2. What is the importance of the “rule of nines” in treatment of burn patients?
  
3. How can a person avoid developing skin cancer during the lifetime?
  
4. List the layers of the epidermis in thick skin from deepest to most superficial.

**Section 3:** Directions: Match the following numbers to their corresponding letter. All letters will not be used. ( 1 point each)

- |                        |   |
|------------------------|---|
| 1. Jaundice            | A. a stretching or tearing of ligaments   |
| 2. Anemia              | B. occurs when the protective cartilage on the ends of your bones wears down over time. |
| 3. Impetigo            | C. yellowish discoloration of the skin and its appendages                               |
| 4. Osteoarthritis      | D. progressive weakness and degeneration of the skeletal muscles                        |
| 5. Osteomyelitis       | E. decreased bone mineral density   |
| 6. Osteoporosis        | F. increased bone mineral density   |
| 7. Poliomyelitis       | G. a body structure is forcibly detached from its normal point of insertion             |
| 8. Sprain              | H. bacterial infection of the skin  |
| 9. Avulsion            | I. viral infection of the skin  |
| 10. Muscular Dystrophy | J. an infectious disease caused by the human enterovirus                                |
|                        | K. infection and inflammation of the bone or bone marrow                                |
|                        | L. paralysis caused by HIV  |
|                        | M. disease caused by iron deficiency  |

**Section 4:** Directions: Choose the best answer. ( 1 point each )

1. The specific layer that shapes the ridges for fingerprints and footprints is the
  - A) hypodermis.
  - B) papillary layer of the dermis.
  - C) reticular layer of the dermis.
  - D) underlying muscle layer.
  - E) superficial bony layer.
2. In which of these layers are melanocytes found?
  - A) dermis
  - B) hypodermis
  - C) stratum corneum
  - D) stratum basale
  - E) stratum lucidum
3. What is the first step in wound healing?
  - A) fibroblasts invade the wounded area
  - B) granulation tissue is formed
  - C) a scar of collagenous fibers appears
  - D) a blood clot forms
4. Which of these is not a function of the integument?
  - A) synthesis of vitamin D
  - B) thermoregulation
  - C) hydroregulation
  - D) nutrient absorption
5. What two ligaments lie within the knee joint?
  - A) anterior cruciate ligament and posterior cruciate ligament
  - B) oblique popliteal ligament and arcuate popliteal ligament
  - C) lateral and medial collateral ligaments
  - D) anterior cruciate ligament and medial collateral ligament
6. The clavicle articulates with what two bones?
  - A) scapula and vertebra
  - B) humerus and sternum
  - C) humerus and vertebra
  - D) scapula and sternum
  - E) vertebra and sternum
7. The region of the vertebral column that is most susceptible to herniated disks is the
  - A) cervical region.
  - B) coccygeal region.
  - C) lumbar region.
  - D) sacral region.
  - E) thoracic region.

8. The suture that separates the parietal bones from the occipital bone is the
- A) coronal suture.
  - B) lambdoid suture.
  - C) sagittal suture.
  - D) squamous suture.
9. What muscle has its origin on the sternum and inserts on the mastoid process of the temporal bone?
- A) sternocleidomastoid
  - B) splenius capitis
  - C) semispinalis capitis
  - D) trapezius
10. What is the deepest of the four abdominal muscles?
- A) rectus abdominis
  - B) external abdominal oblique
  - C) transversus abdominis
  - D) internal abdominal oblique
11. Lumbrical muscles are located in
- A) Tongue
  - B) Hand
  - C) Head
  - D) Eyeball
  - E) Nose
12. The bone that does not articulate with any other bone is the
- A) Scapula
  - B) Sternum
  - C) Stapes
  - D) Hyoid
  - E) Incus
13. The longest muscle in the body is the
- A) Rectus femoris
  - B) Palmaris Longus
  - C) Gastrocnemius
  - D) Sartorius
  - E) Quadriceps
14. Which of the following statements about skeletal muscle is correct?
- A) Skeletal muscle contracts slowly.
  - B) Skeletal muscle has a striated appearance under the microscope.
  - C) Skeletal muscle can maintain its contraction for long periods.
  - D) Skeletal muscle is controlled by involuntary nervous action
15. Which of the following statements about creatine phosphate is correct?
- A) Creatine phosphate is essential in muscle cells for contraction to occur.
  - B) Creatine phosphate is stored in muscle cells unlike ATP.
  - C) Like ATP, creatine phosphate cannot be stored in muscle cells.
  - D) Creatine phosphate is converted to creatinine by creatine kinase

**Section 5:** Directions: Fill in the blank with the most appropriate answer. (2 points each)

1. \_\_\_\_\_ in the stratum basale form patterns of depressions and elevations that are especially noticeable on the fingertips.
2. According to “the rule of nines”, a man burned extensively on his head and both upper limbs has burns on \_\_\_\_\_ percent of his body.
3. The \_\_\_\_\_ consists of many layers of dead squamous cells surrounded by lipids.
4. The nail is mostly made up of \_\_\_\_\_ that contains hard keratin. (layer of epidermis)
5. A burn that involves the entire epidermis and some of the dermis is a \_\_\_\_\_.
6. The field of medical practice involving the integumentary system is called \_\_\_\_\_.
7. \_\_\_\_\_ is the opaque, white, crescent shaped area at the base of the nail.
8. \_\_\_\_\_ is the smallest unit of contraction in muscle fibers.
9. The connective tissue wrapping around a muscle that is continuous with tendons is the \_\_\_\_\_.
10. A band of tough, inelastic fibrous tissue that connect a muscle with its bony attachment is called a \_\_\_\_\_.
11. \_\_\_\_\_ ions bind to troponin to move tropomyosin away from actin.
12. The medial and lateral condyles of the femur articulate with the \_\_\_\_\_ of the tibia.
13. The hollow space in the middle of bones is filled with \_\_\_\_\_.
14. Protecting the heart and lungs is the purpose of the \_\_\_\_\_.
15. \_\_\_\_\_ joints are found in the hip and shoulder.

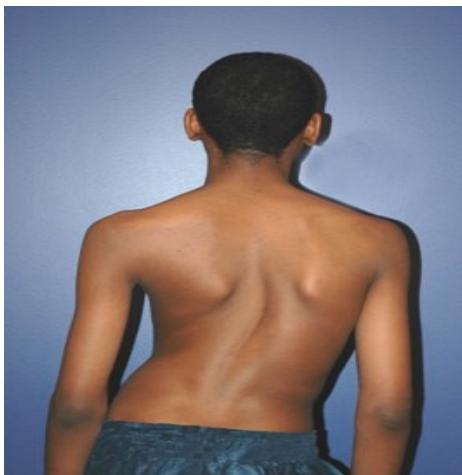
**Section 6:** Directions: Investigate the pictures to find the disease, prevention, and treatment. (2 points)



1. What degree burn does the picture show? Discuss the treatment options.



2. What is this condition? Discuss the triggering factors of this condition.



3. What musculoskeletal condition does this boy have? Define this condition.



4. What type of fracture is shown in the picture? How does it occur?