

Anatomy & Physiology 2019-2020

Dulles High School

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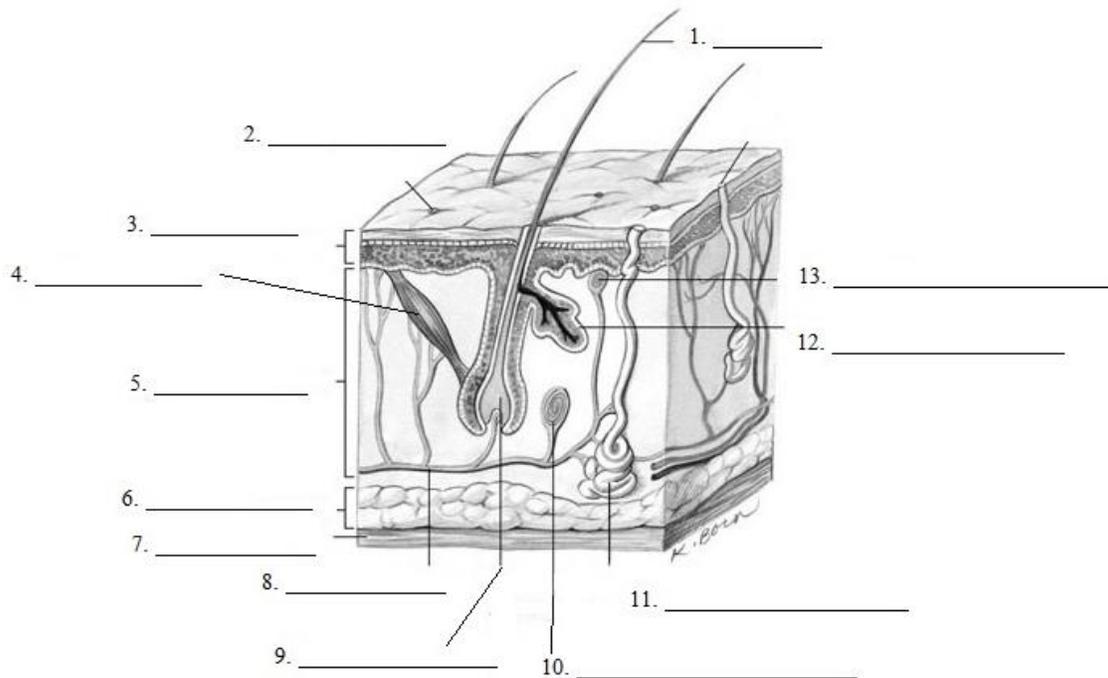


Name:-----

Score: -----/100

INTEGUMENTARY SYSTEM

Label the parts of the skin diagram. (13 pts)



14. What is intrinsic aging of the skin and what factors contribute to it? (3 pts)

15. What is extrinsic aging of the skin and what factors contribute to it? (3 pts)

16. Identify the three phases of the hair growth cycle and give a brief description of each. (6 pts)

1.

2.

3.

17. A patient is brought to the emergency room with both second and third-degree burns on the left arm, left anterior leg, and anterior trunk. Using the Rule of Nines, what is the total body surface area that has been burned? (1 pt)

- a. 18% b. 27% c. 30% d. 36%

18.



What disease does this child have?
Discuss common symptoms and
treatment options. (3 pts)

19.



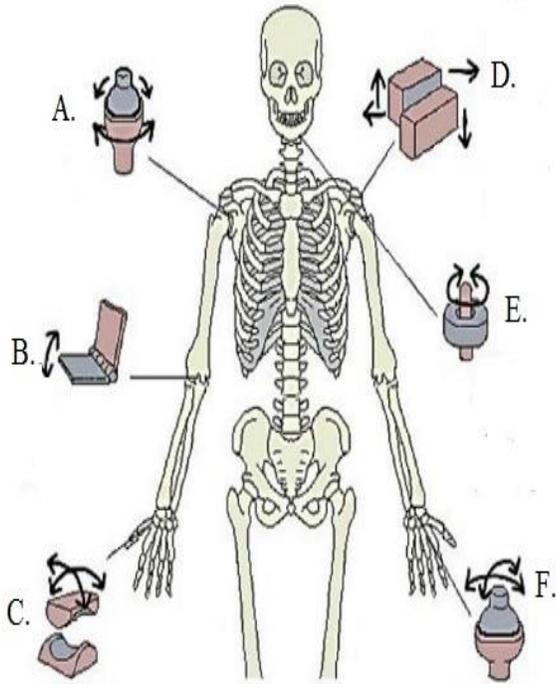
What degree burn is depicted in the
picture? What layers of the skin are
affected? How can it be treated? (3 pts)

20.



Identify the disease including the specific
type. What types of symptoms are caused
as a result of this disease? (3 pts)

SKELETAL SYSTEM



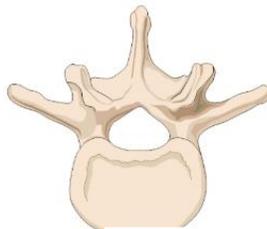
21. For each letter identify the type of joint and its range of motion. (2 pts each)

- A.
- B.
- C.
- D.
- E.
- F.

Use the diagrams to answer the following questions (total 8 pts)



A.



B.



C.

- 22. a. Classify the type of vertebrae depicted in photo A
 - b. This vertebrae composes what region of the vertebral column?
- 23. a. Classify the type of vertebrae depicted in photo B
 - b. How many of this type are there in the human skeleton?
 - c. Where are they located?
- 24. a. Classify the type of vertebrae depicted in photo C
 - b. Where are these vertebrae located?
 - c. What is the name of vertebrae located at C1 in the vertebral column?

Multiple Choice (1 pt each)

25. Bones are covered by a protective tissue called _____. This primarily consists of _____.

a. Collagen; osteocyte b. Periosteum; osteoclast c. Periosteum; osteoblast d. Dura mater; osteoblast

26. In which type of ossification is bone formed by replacing hyaline cartilage?

a. intramembranous b. intermembranous c. endochondral d. exochondral

27. What type of skeletal disorder is shown in Figure 5.1?

a. Osteoporosis b. Osteoarthritis c. Disc herniation
d. Scoliosis e. Bone neoplasm



Figure 5.1

28. The bones located in your hand are located in which region of the human skeleton?

a. Axial region b. Appendicular region c. Carpal region

29. Which is a list of ossicles?

a. Tibia, Fibula, Femur b. Stapes, Incus, Malleus c. Cervical, Thoracic, Lumbar

30. Which of the following is incorrect?

a. The adult medullary cavity contains yellow marrow. b. The infant medullary cavity contains yellow marrow. c. The infant medullary cavity contains red marrow. d. The adult medullary cavity contains adipose tissue.

31. Which of the following is not a bone found in the human spine?

a. Sacrum b. Coccyx c. T-13 d. C-7 e. L-4

32. The xiphoid process is part of this bone.

a. Femur b. Sternum c. Hyoid bone d. Occipital bone e. Temporal bone

33. Which of the following bones contain the foramen magnum?

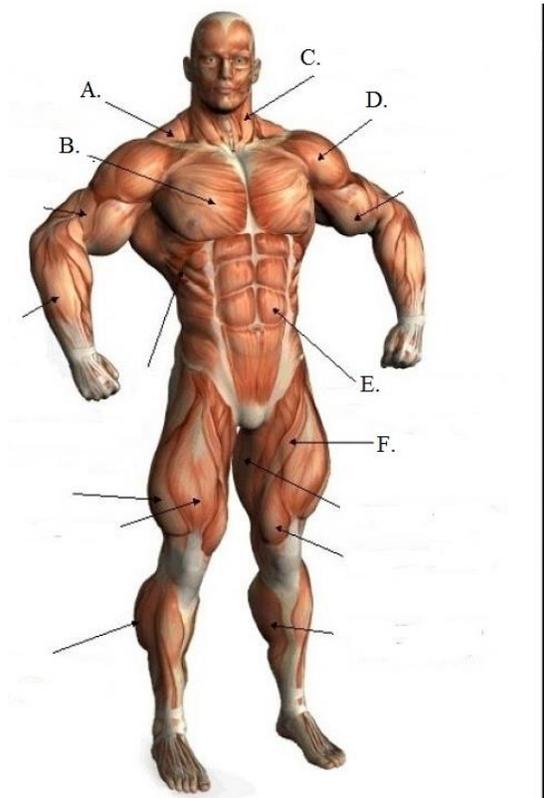
a. Temporal bone b. Occipital bone c. The skull d. Parietal bone e. Zygomatic bone

34. For women, estrogen is a protective factor against this disease.

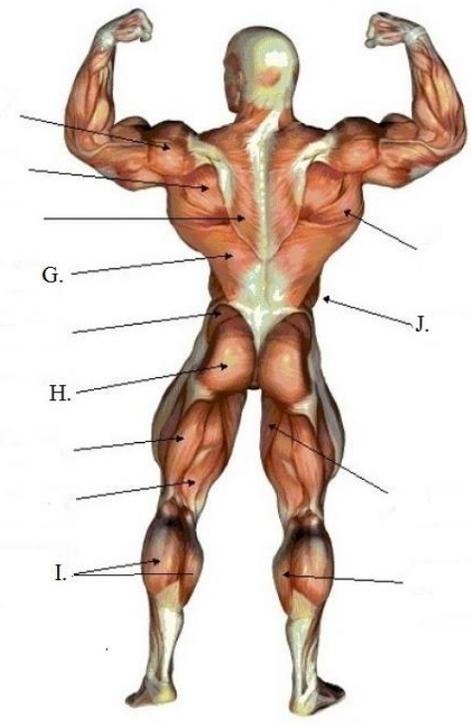
a. Bone cancer b. Osteoarthritis c. Osteoporosis d. Scoliosis e. Disc herniation

MUSCULAR SYSTEM

35. Label the indicted muscles. (A-J) (10 pts total)

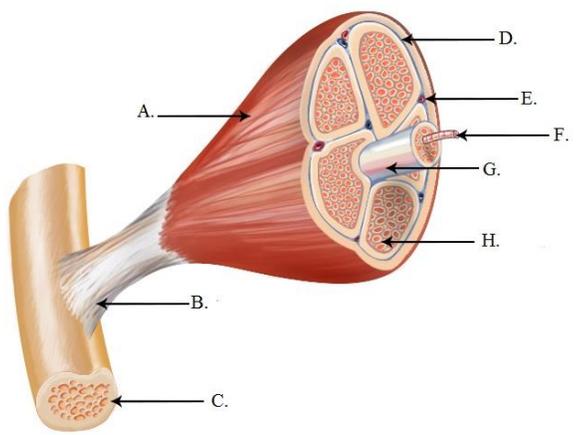


- A.
- B.
- C.
- D.
- E.



- F.
- G.
- H.
- I.
- J.

36. Label the parts of the Skeletal Muscle (8 pts)

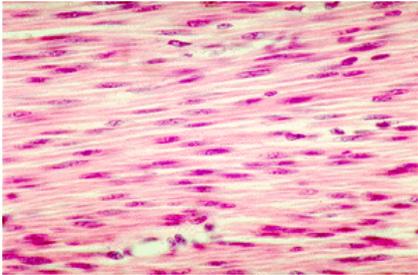


- A.
- B.
- C.
- D.
- E.
- F.
- G.
- H.

37. Muscle cells contain contractible units called: (1 pt)

- a. Fascicles b. Epymysium c. Sarcomeres d. Sarcoplasmic reticulum e. None of the above

38. What type of muscle cell is this a picture of? (1 pt)



- a. Cardiac muscle
b. Smooth muscle
c. Skeletal muscle

39. Which of the following is the longest muscle in the human body? (1 pt)

- a. Trapezius b. Gastrocnemius c. Sartorius d. Rectus femoris

40. Which of the following statements about creatine phosphate is correct? (1 pt)

- 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

41. Myasthenia gravis occurs when antibodies attack the _____ receptors at the neuromuscular junction leading to _____. (1 pt)

- a. metabotropic; muscle weakness b. nicotinic acetylcholine; muscle weakness
c. dopamine adrenergic; muscle contraction d. nicotinic adrenergic; muscle contraction

42. What type of disease is poliomyelitis? (1 pt)

- a. Bacterial b. Viral c. Autoimmune d. Genetic

43. Muscles relax when Acetylcholine is broken down by what enzyme? (1 pt)

44. Differentiate between muscle atrophy and muscle hypertrophy. When does each one occur and how is muscle hypertrophy different from muscle hyperplasia? (5 pt)

45. Explain the difference between Abduction and Adduction. (5 pt)