

2020 SSSS  
A & P Test  
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The Bay Academy



"I ain't got no body, ain't got no..body..."

1. A \_\_\_\_\_ is a collection of blood that has seeped under the outer covering membrane of one of the skull bones. This is usually caused during birth by the pressure of the head against the mother's pelvic bones.
  - a. hematophilia
  - b. caudohematoma
  - c. cephalocytoma
  - d. cephalohematoma
2. Fine, soft hair, especially that which covers the body and limbs of a human fetus/newborn is known as
  - a. lanugo
  - b. embryonic fur
  - c. latent follicles
  - d. peach fuzz
3. The same hair growth (from question #2) when seen in adults, is usually a sequela arising from
  - a. puberty
  - b. menopause
  - c. Anorexia nervosa
  - d. high protein diets
4. The outermost layer of the skin is composed of which type of tissues?
  - a. Simple columnar epithelium
  - b. Stratified squamous epithelium
  - c. Areolar tissue
  - d. Dense fibrous tissue
5. Excessive sun exposure is now showing to depress the
  - a. digestive system
  - b. integumentary system
  - c. circulatory system
  - d. immune system
  - e. musculatory system
6. The formal, or technical, name for our skin is
  - a. epidermis
  - b. cutaneous
  - c. subcutis
  - d. dermis
7. The integumentary system is made up of \_\_\_\_\_ square feet of skin.
  - a. 16
  - b. 22
  - c. 26
  - d. 30

8. The epidermal layer of our skin is formed in 5 layers with the deepest being the stratum \_\_\_\_\_.
- a. lucidum
  - b. basale
  - c. granulosum
  - d. corneum
  - e. spinosum

**Matching (match the layer of skin on the left with its characteristic on the right)**

- |                        |   |  |
|------------------------|---|--|
| 9. stratum lucidum     | b | a. These cells are found in the dust throughout your home.     |
| 10. stratum basale     | c | b. Found only on palms of hands, fingertips and soles of feet. |
| 11. stratum granulosum | e | c. The site of keratinocyte formation.                         |
| 12. stratum corneum    | a | d. This layer gives skin both strength and flexibility.        |
| 13. stratum spinosum   | d | e. The layer of keratin production.                            |

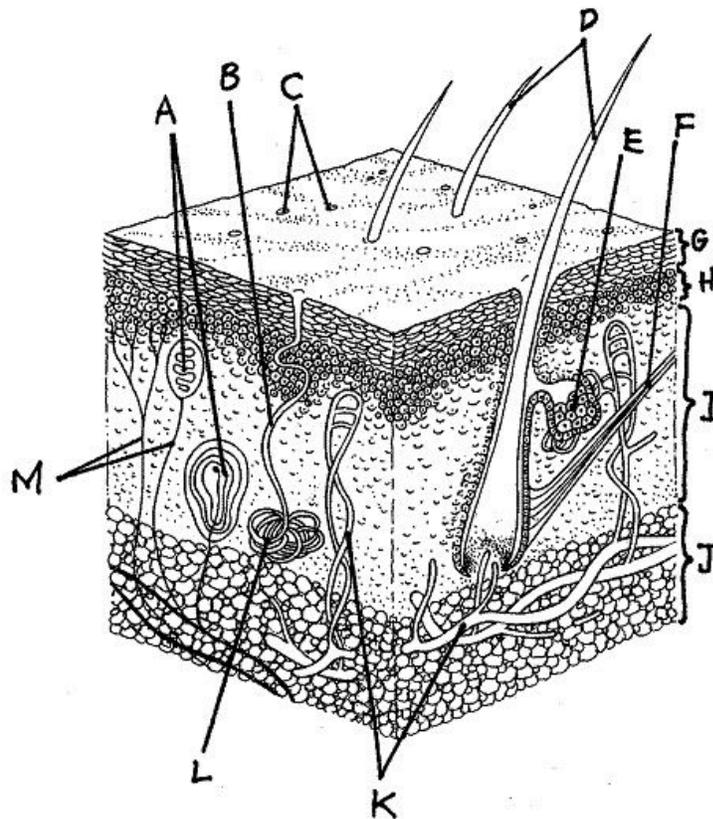
14. The \_\_\_\_\_ layer is also known as the “clear” layer due to its translucent appearance under microscope examination.

- a. lucidum
- b. basale
- c. granulosum
- d. corneum
- e. Spinosum

**True/False**

15. Regardless of background, every person has the same number of melanocytes. **T**
16. Melanin is what gives us a tan. **T**
17. The skin is capable of developing less than 100 ailments or pathologies. **F**
18. Skin cancer is the least common cancer in humans. Lung cancer is #1. **F**
19. The ABCD rule for recognizing melanoma stands for: **A**lways, **B**eware, **C**olor, of **D**ermis. **F**
20. Darker skinned people have a much lower incidence of skin cancer. **F**
21. General or local skin color is determined by all of the following except
- a. # of melanocytes
  - b. # of keratinocytes
  - c. the amount of carotene in the stratum corneum and the hypodermis.
  - d. bruising resulting from the escape of blood into surrounding tissues.
  - e. amount of oxygen-saturated hemoglobin found in the blood vessels of the middle layer of our skin, the dermis.
  - f. None of the above
22. \_\_\_\_\_ is a skin disorder that causes loss of skin color in blotches.
- a. xerosis
  - b. pruritus
  - c. eczematous dermatitis
  - d. vitiligo
  - e. purpura

Label the diagram below



- 23. A \_\_\_\_\_ pacinian corpuscle
- 24. B \_\_\_\_\_ sweat gland duct
- 25. C \_\_\_\_\_ pore
- 26. D \_\_\_\_\_ hair shaft
- 27. E \_\_\_\_\_ sebaceous gland
- 28. F \_\_\_\_\_ arrector pili muscle
- 29. G \_\_\_\_\_ stratum germinativum (spinosum/basale)
- 30. H \_\_\_\_\_ stratum basale
- 31. I \_\_\_\_\_ dermis
- 32. J \_\_\_\_\_ subcutaneous
- 33. K \_\_\_\_\_ blood vessels (veins/arteries)
- 34. L \_\_\_\_\_ (eccrine) sweat gland
- 35. M \_\_\_\_\_ nerve

36. The skin is composed of two main layers,

- a. the epidermis and dermis.
- b. the epidermis and hypodermis.
- c. the cutaneous and subcutaneous.
- d. the epidermis and cutaneous.

37. A common skin pathology that appears as a patchwork of bright red skin on a baby's bottom is commonly known as

- a. eczema
- b. chicken pox
- c. dermatitis
- d. acne

38. Which of the following statements best describes how parathyroid hormone (PTH) affects the serum concentration of calcium,  $[Ca^{2+}]$ ?

- a. PTH stimulates osteoblasts, decreasing serum  $[Ca^{2+}]$ .
- b. PTH stimulates osteoblasts, increasing serum  $[Ca^{2+}]$
- c. PTH stimulates osteoclasts, increasing serum  $[Ca^{2+}]$

39. The fracture shown is a

- a. greenstick fracture
- b. transverse fracture
- c. comminuted fracture
- d. spiral fracture



40. The etiology of an aneurysmal bone cyst (shown below, which is often abbreviated ABC) is most likely

- a. injury
- b. cancerous growth
- c. non-cancerous growth
- d. a & b
- e. a & c

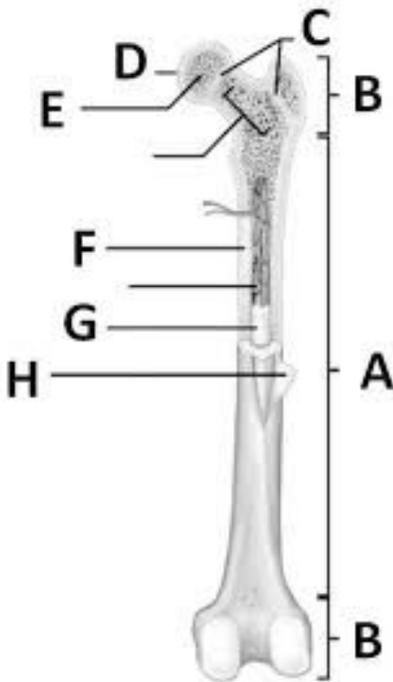


41. Necrotizing fasciitis treatment consists mainly of debridement of the infected tissue.

- a. True
- b. False

42. There are \_\_\_\_\_ phalanges in the human body.
- 24
  - 26
  - 28
  - 30
43. The shaft of long bones is the \_\_\_\_\_.
- diaphysis
  - endosteum
  - epiphysis
  - medullary canal
44. This is the only organ of the human body to be completely encased by bone.
- True
  - False
45. Red marrow is mainly in fat cells.
- True
  - False
46. Red blood cells, platelets and most white blood cells arise in red marrow.
- True
  - False

Label the diagram below.



- A \_\_\_\_\_ diaphysis
- B \_\_\_\_\_ (proximal) epiphysis
- C \_\_\_\_\_ physis (growth plate)
- D \_\_\_\_\_ trochanter head or articular cartilage
- E \_\_\_\_\_ spongy bone
- F \_\_\_\_\_ compact bone
- G \_\_\_\_\_ yellow bone marrow
- H \_\_\_\_\_ periosteum

55. The human rib cage is made up of \_\_\_\_\_ rib bones
- 7
  - 12
  - 14
  - 24

56. A bone is supplied with nutrients by
- yellow bone marrow
  - red bone marrow
  - calcification
  - blood vessels
57. The appendicular skeletal system consists of what parts?
- head, sternum, ribs and vertebrae
  - hands, feet, legs, hips and arms
  - feet, head, legs, hips and arms
  - hips, head, toes and fingers
58. The fibrous bands that connect two bones in a joint are
- cartilage
  - tendons
  - ligaments
  - sinew fibers
59. The three types of muscle fibers are
- muscular, heart and rough
  - smooth, cardiac, skeletal
  - heart, quadriceps, sternocleidomastoid
  - smooth, rough, tumor

Complete the following chart:

TYPE	EXAMPLE	DESCRIPTION
60. Ball and socket	Shoulder & Hip	61. multi-axial
Pivot Joint	62. C1/C2; radius & ulna	Moves up & down & side to side.
Hinge	63. Elbow & knee	Moves in only one direction
64. Gliding	65. Wrist and ankle	Move against each other in a single plane

R.I.C.E. stands for

- \_\_\_\_\_ Rest
- \_\_\_\_\_ Ice
- \_\_\_\_\_ Compression
- \_\_\_\_\_ Elevation

True/False

70. Foramina are openings in a bone that allow nerves and blood vessels to enter or leave the bone.
- True
  - False
71. The last two pairs of ribs are called floating ribs because they have no attachment to the thoracic vertebrae.
- True
  - False

72. The clavicles provide for the attachment of the upper arm bones to the body.
- True
  - False
73. Hemopoiesis, or hematopoiesis, is the production of blood cells.
- True
  - False
74. The clavicle is palpable due to the paucity of fat in this region.
- True
  - False
75. The left clavicle is usually longer and not as strong as the right clavicle.
- True
  - False
76. In males the clavicle is larger, longer, heavier and generally more massive than that of females.
- True
  - False
77. A bone break that pierces or ruptures through the skin is a \_\_\_\_ fracture.
- depressed
  - greenstick
  - simple
  - compound

**What 4 muscles are responsible for hip flexion?**

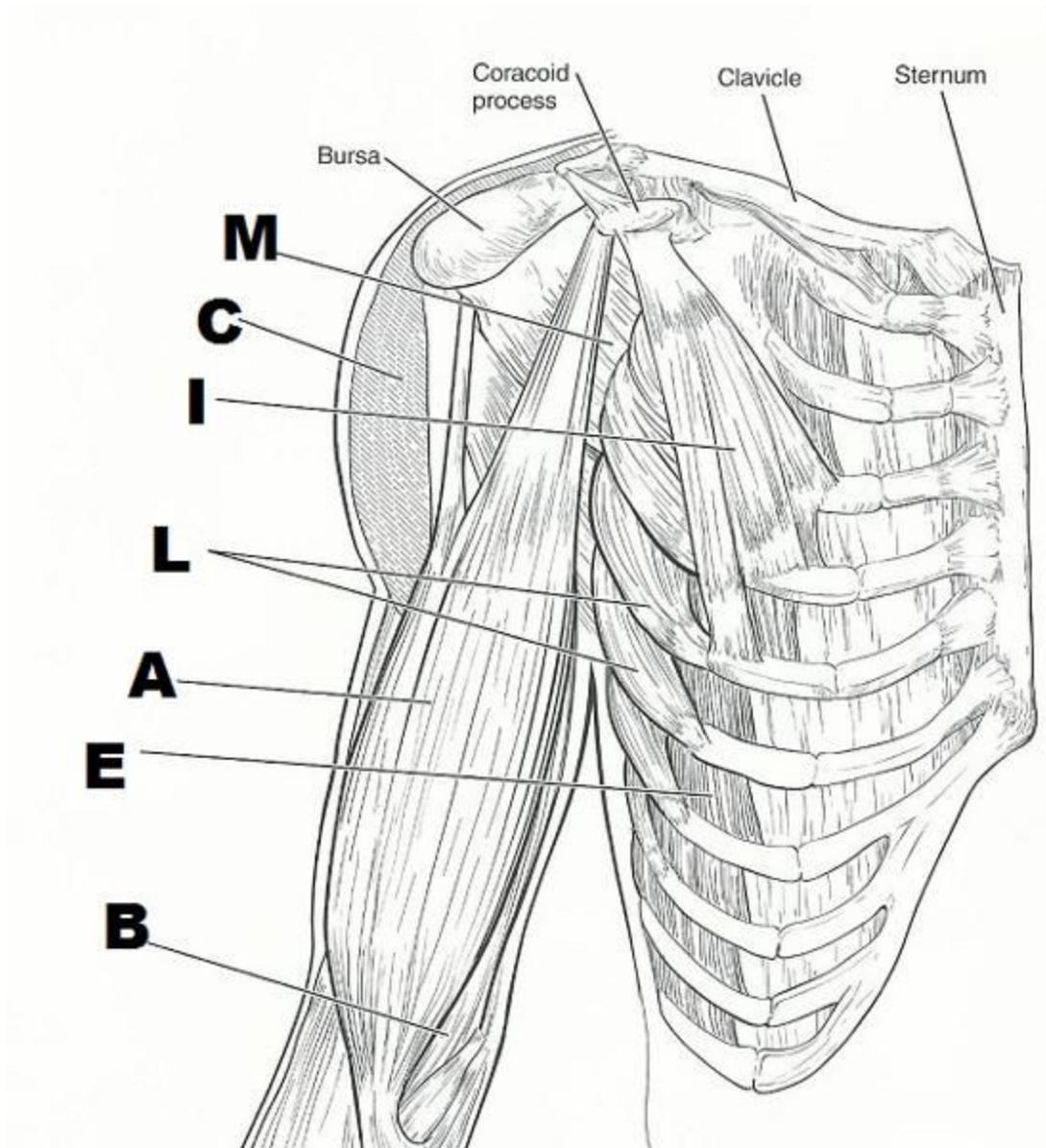
- \_\_\_\_\_ psoas major
  - \_\_\_\_\_ psoas minor
  - \_\_\_\_\_ adductor leg muscles (longus, brevis, magnus)
  - \_\_\_\_\_ tensor fascia latae
82. Foot drop is a common contracture.
- True
  - False
83. Overstretching of, or injury to, a muscle is called
- myalgia
  - sprain
  - strain
  - rupture
84. Wasting away of a muscle is also called
- fibromyalgia
  - atrophy
  - myofascitis
  - excision
85. Jim was cleaning out his koi pond when his foot slipped on the bluestone slate surrounding the pond. He felt immediate excruciating pain in his anterior thigh muscle, fell into the pond and could not stand up. While sitting with the Koi (who were not happy to have him in there) he could feel a large bulge the size of a baseball under the skin on the front of his thigh. Once at the hospital he was diagnosed with
- a ruptured aneurysmal bone cyst
  - a massive hematoma
  - a severe avulsion of the quadriceps muscle
  - a severe avulsion of the hamstring muscle

86. Mary was an avid runner. She liked to jump up first thing every morning, have no food or water, and just start running. She noticed recently that the front of her leg was beginning to bother her. The pain became worse and worse until she could no longer run. She went to see Jim's doctor and told him her symptoms were: dull ache in the front part of the lower leg on either side of her shin bone; the pain was exacerbated by activity, especially running; pain was accompanied by tenderness and swelling. The doctor diagnosed her condition as:
- myofascitis
  - medial tibial stress syndrome
  - an avuncular fracture
  - plantar fasciitis
87. Ahmed was in a grunge band. Although he was 65 and a little old for this type of thing, he still loved Stone Temple Pilots, Nirvana and Alice in Chains. When rehearsing, he would violently throw his head forward and backward. His wife, who required a neck brace due to a recent car accident, told him, "Hey Ahmed, you'd better watch out or you'll end up with the same thing I got!" Ahmed would just laugh and continue, until on day... Bam! He flung his head back, felt a sharp pain, and was unable to move his neck/head. He was whisked away to the local hospital where they diagnosed the old man with
- idiopathic acute torticollis
  - iatrogenic sprain/strain of the cervical muscles
  - CAD (cervical acceleration-deceleration)
  - chronic cervicgia
88. Ahmed (question 87) was advised to immediately
- RICE
  - immobilize the area.
  - "mildly" begin stretching the area to reduce the pain and increase mobility.
  - listen to his wife from now on.
  - quit the band.

Name four neck muscles affected in Ahmed's condition

- \_\_\_\_\_ sternocleidomastoid
- \_\_\_\_\_ semispinalis
- \_\_\_\_\_ splenius capitis
- \_\_\_\_\_ upper trapezius

Label the following diagram.



93. M \_\_\_\_\_ latissimus dorsi

94. C \_\_\_\_\_ deltoid

95. I \_\_\_\_\_ pectoralis minor

96. L \_\_\_\_\_ serratus anterior

97. A \_\_\_\_\_ biceps brachii

98. E \_\_\_\_\_ external intercostals

99. B \_\_\_\_\_ triceps brachii

100. If the lower leg is straightened away from the upper leg, the movement is \_\_\_\_\_.

- a. abduction
- b. adduction
- c. flexion
- d. extension