

## Anatomy Fall Semester Set 2: Skin and Skeletal Systems

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### Skin and Its Appendages

- Which of the following vitamins is/are absorbed through the skin?
  - vitamin A
  - vitamin D
  - vitamin K
  - all of the above
- Which of the following is not a function of the skin?
  - defense against disease organisms
  - synthesis of vitamin E
  - regulation of body temperature
  - excretion of water and salts
- The superficial outer layer of the epidermis is the:
  - stratum basale.
  - stratum lucidum.
  - stratum corneum.
  - stratum granulosum.
  - stratum spinosum.
- Of the five epidermal cell layers, the only one that can undergo mitosis is the:
  - stratum basale.
  - stratum lucidum.
  - stratum corneum.
  - stratum granulosum.
  - stratum spinosum.
- The area referred to as true skin is the:
  - stratum corneum.
  - subcutaneous layer.
  - dermis.
  - hypodermis.
- In what area of the body would you expect to find an especially thick stratum corneum?
  - back of the hand
  - thigh
  - abdomen
  - sole of the foot
- The papillary layer of the dermis:
  - is responsible for cleavage or tension lines in the skin.
  - does not contain blood vessels.
  - is responsible for fingerprints.
  - contains large deposits of fat.

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8. Smooth muscles that produce goose pimples when they contract are the:
- A. papillary muscles.
  - B. cuticle muscles.
  - C. medullary muscles.
  - D. arrector pili muscles.
9. The most common type of skin cancer is:
- A. squamous cell carcinoma.
  - B. basal cell carcinoma.
  - C. Kaposi's sarcoma.
  - D. malignant melanoma.
10. The type of cancer associated with changes in a mole is:
- A. squamous cell carcinoma.
  - B. malignant melanoma.
  - C. basal cell carcinoma.
  - D. columnar cell carcinoma.
11. Prolonged exposure to the sun causes melanocytes to:
- A. increase in number.
  - B. rupture and release their contents.
  - C. increase melanin production.
  - D. decrease melanin production.
12. Growth of fingernails is due to the mitosis of the cells in the:
- A. stratum germinativum.
  - B. stratum granulosum.
  - C. stratum corneum.
  - D. stratum lucidum.
13. Apocrine sweat glands can be found in all of the following areas except the:
- A. soles of the feet.
  - B. armpit.
  - C. areola of the breast.
  - D. pigmented skin areas around the anus.
14. The type of gland associated with blackheads is:
- A. eccrine.
  - B. apocrine.
  - C. sebaceous.
  - D. ceruminous.
15. Hair:
- A. alternates between periods of growth and rest.
  - B. consists of keratinized cells.
  - C. is formed from cells of the germinal matrix.
  - D. all of the above.

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16. The hair follicle consists of:  
A. epidermal tissue.  
B. dermal tissue.  
C. hypodermal tissue.  
D. fibrous connective tissue.
17. Sebum:  
A. lubricates hair and skin.  
B. is produced by sweat glands.  
C. consists of dead cells from hair follicles.  
D. is responsible for body odor.
18. The type of gland that produces the waxy secretion in the external ear canal is:  
A. eccrine.  
B. apocrine.  
C. sebaceous.  
D. ceruminous.
19. The surface film found on the skin has a variety of functions, including:  
A. lubrication.  
B. buffering of caustic irritants.  
C. antibacterial and antifungal activity.  
D. all of the above.
20. Although body temperature normally changes very little during the course of a day, it is generally the lowest during:  
A. the early morning.  
B. mid-afternoon.  
C. late afternoon.  
D. the evening.
21. The body compensates for the increase in the core body temperature due to exercise by:  
A. decreasing the blood flow to the skin.  
B. increasing the blood flow to the core.  
C. increasing the blood flow to the skin.  
D. vasoconstriction of the blood vessels in the skin.
22. The reason that the same degree of environmental temperature seems hotter in humid climates than in dry ones is because:  
A. the process of evaporation increases.  
B. the process of evaporation is retarded.  
C. the process of radiation is increased in humid climates.  
D. humid climates alter the temperature receptors in the hypothalamus by mechanisms unknown.
23. A second-degree burn is characterized by:  
A. destruction of both the epidermis and the dermis.  
B. severe pain, generalized swelling, and edema.  
C. minor discomfort and some redness.  
D. involvement of muscles, fasciae, or bones.

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24. A major distinction between second- and third-degree burns is that:
- A. only third-degree burns involve injury to the deep epidermal layers.
  - B. only third-degree burns involve damage to hair follicles.
  - C. only third-degree burns involve damage to the sweat glands.
  - D. third-degree burns are characterized by insensitivity to pain immediately after injury.
25. In the skin, the dermis:
- A. and epidermis are both epithelial tissue.
  - B. and epidermis are both connective tissue.
  - C. is connective tissue and the epidermis is epithelial tissue.
  - D. is epithelial tissue and the epidermis is connective tissue.
26. The layer beneath the dermis is called the:
- A. hypodermis.
  - B. subcutaneous layer.
  - C. superficial fascia.
  - D. all of the above.
27. Which skin layer has cells that look prickly because of the desmosomes that join the cells together?
- A. stratum basale
  - B. stratum spinosum
  - C. stratum granulosum
  - D. stratum corneum
28. Which skin layer contains closely packed, clear cells that contain a gel-like substance called *eleidin*?
- A. stratum lucidum
  - B. stratum basale
  - C. stratum granulosum
  - D. stratum corneum
29. Normally, which percentage of the cells in the stratum basale enter mitosis each day?
- A. 20–25%
  - B. 10–12%
  - C. 18–20%
  - D. 35–40%
30. Which of the following is not true of the dermis?
- A. It contains a papillary layer.
  - B. It contains a reticular layer.
  - C. In general, the dermis is thinner on the dorsal side of the body than it is on the ventral side.
  - D. It plays an important role in body temperature regulation.
31. “Burns” can be caused by:
- A. ultraviolet light.
  - B. corrosive chemicals.
  - C. electrical current.
  - D. all of the above.

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### Skeletal Tissues

32. A fracture in the shaft of a bone would be a break in the:
- A. epiphysis.
  - B. periosteum.
  - C. diaphysis.
  - D. articular cartilage.
33. Which of the following is not one of the primary functions performed by bones?
- A. mineral storage
  - B. protection
  - C. hormonal production
  - D. hematopoiesis
34. Hematopoiesis is carried out in the:
- A. osteoclasts.
  - B. osteocytes.
  - C. yellow bone marrow.
  - D. red bone marrow.
35. The first step to heal a fracture is:
- A. the formation of specialized callus.
  - B. the formation of a fracture hematoma.
  - C. proper alignment of the fracture.
  - D. the formation of a collar of normal bone covering the broken ends.
36. Normally, bone loss will begin to exceed bone gain between the ages of:
- A. 20 and 25 years.
  - B. 25 and 30 years.
  - C. 30 and 35 years.
  - D. 35 and 40 years.
37. The form of the external ear is due to:
- A. fibrocartilage.
  - B. elastic cartilage.
  - C. osseous tissue.
  - D. hyaline cartilage.
38. In young children, vitamin A deficiency will:
- A. cause an increase in the thickness of epiphyseal plates in the growing long bones.
  - B. cause a decrease in the thickness of epiphyseal plates in the growing long bones.
  - C. produce the same alterations of the epiphyseal plate as vitamin D deficiency does.
  - D. have no effect on the epiphyseal plate, but will cause an increase in bone marrow production.

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### Skeletal System

39. Which is not a part of the axial skeleton?
- A. rib
  - B. vertebral column
  - C. mandible
  - D. clavicle
40. The axial skeleton consists of:
- A. 60 bones.
  - B. 68 bones.
  - C. 74 bones.
  - D. 80 bones.
41. The appendicular skeleton consists of:
- A. 102 bones.
  - B. 118 bones.
  - C. 126 bones.
  - D. 137 bones.
42. The term *sinus*, as it relates to bone markings, may be defined as a:
- A. raised area or projection.
  - B. cavity within a bone.
  - C. tubelike opening or channel.
  - D. groove or elongated depression.
43. Which suture is between the occipital and parietal bones?
- A. squamous
  - B. lambdoidal
  - C. sagittal
  - D. coronal
44. The upper parts of the nasal septum and the side walls of the nasal cavity are formed by the \_\_\_\_\_ bone(s).
- A. nasal
  - B. sphenoid
  - C. ethmoid
  - D. maxillae
45. Which of the following is a true statement?
- A. The ethmoid is a flat bone that lies anterior to the sphenoid.
  - B. The ethmoid is an irregular bone that lies posterior to the sphenoid, but anterior to the nasal bones.
  - C. The ethmoid is an irregular bone that lies anterior to the sphenoid, but posterior to the nasal bones.
  - D. The ethmoid is a short bone that lies anterior to the nasal bones.

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46. If the cribriform plate is damaged, there is a chance of:
- A. infectious materials passing from the ear to the brain.
  - B. food passing from the mouth into the nose.
  - C. difficulty chewing.
  - D. infectious materials passing from the nose to the brain.
47. A fontanel can best be described as a(n):
- A. bone in the skull.
  - B. unossified area in the infant's skull.
  - C. articulation between two skull bones.
  - D. small opening.
48. The upper part of the sternum is called the:
- A. costal cartilage.
  - B. xiphoid process.
  - C. body.
  - D. manubrium.
49. All vertebrae, except the sacrum and coccyx, have a central opening called the:
- A. spinous process.
  - B. vertebral foramen.
  - C. dens.
  - D. transverse process.
50. The layman's name for the clavicle is the:
- A. collar bone.
  - B. kneecap.
  - C. shinbone.
  - D. elbow.
51. Metacarpal bones form the framework of the:
- A. wrist.
  - B. hand.
  - C. ankle.
  - D. foot.
52. The pisiform bone can be found in the:
- A. wrist.
  - B. ankle.
  - C. neck.
  - D. skull.

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53. The structure above the pelvic inlet, which is bordered by muscle in the front and bone along the sides and back, is called the:
- A. pelvic brim.
  - B. false pelvis.
  - C. pelvic girdle.
  - D. true pelvis.
54. The anterior of the pelvic girdle is formed by the:
- A. sacrum.
  - B. ilium.
  - C. ischium.
  - D. pubis.
55. During childbirth, a baby passes through an imaginary plane called the:
- A. pelvic outlet.
  - B. symphysis pubis.
  - C. pelvic brim.
  - D. ilium.
56. The longest and heaviest bone in the body is the:
- A. tibia.
  - B. fibula.
  - C. coxal.
  - D. femur.
57. A person with a fractured patella would expect discomfort in the:
- A. elbow.
  - B. knee.
  - C. head.
  - D. ankle.
58. Which of the following is not a tarsal bone?
- A. cuneiform
  - B. navicular
  - C. scaphoid
  - D. talus
59. Which of the following is not true?
- A. The pubic arch in the male is less than a 90-degree angle.
  - B. The female facial area is more pronounced than that of the male.
  - C. The iliac crest is more flared in the female than in the male.
  - D. The male pelvic cavity is more narrow than that of the female.

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60. A hunchback appearance of the thoracic region is probably due to:
- A. lordosis.
  - B. scoliosis.
  - C. kyphosis.
  - D. slipped disks.
61. Lateral curvature of the spine is called:
- A. scoliosis.
  - B. lordosis.
  - C. kyphosis.
  - D. convexity.
62. All of the following are clinical signs and symptoms of a fracture except:
- A. soft tissue edema.
  - B. realignment of the bone.
  - C. false motion.
  - D. pain.
63. Which of the following bones is not a part of the face?
- A. frontal
  - B. zygomatic
  - C. lacrimal
  - D. maxilla