Quiz name: Skeletal System Review

1. Which areas of the skeleton are most likely to be affected by osteoporosis? Select all that apply.
   - A wrist
   - B spine
   - C ankle
   - D finger and toes
   - E hip

2. The skeletal system is largely under the physiological control of which system?
   - A cardiovascular
   - B endocrine
   - C muscular
   - D lymphatic
   - E nervous

3. Bones store energy reserves as lipids in areas filled with red marrow.
   - A True
   - B False

4. During the first step of endochondral ossification, which cells die due to the slowing of nutrient diffusion through the calcified matrix?
   - A osteoblasts
   - B osteoclasts
   - C chondrocytes
   - D osteoprogenitor cells
   - E osteocytes

5. What type of cell is responsible for osteogenesis and depositing calcium salts in the bone matrix? Enter your answer in the plural form.

6. The twisting motion of the foot, which turns the sole inward, elevating the medial edge of the sole, is called which of the following?
   - A dorsiflexion
   - B inversion
   - C plantar flexion
   - D eversion
   - E adduction
7. Hematopoiesis is the process of bone cell formation.
   A True
   B False

8. Which of the following is NOT a therapy to slow osteoporosis?
   A elevating blood calcium levels
   B stimulating osteoblast activity
   C boosting estrogen levels
   D receiving androgen injections

9. Parietal bones of the skull are examples of which classification of bones?
   A flat bones
   B long bones
   C irregular bones
   D short bones

10. The shaft of long bones is called the diaphysis.
    A True
    B False

11. Which structure articulates with the clavicles of the appendicular skeleton and with the cartilage of the first pair of ribs?
    A manubrium
    B xiphoid process
    C scapula
    D femur

12. Slightly movable joints are known as which of the following?
    A synarthroses
    B diarthroses
    C amphiarthroses
    D synovial

13. The presence of an epiphyseal line indicates that epiphyseal growth has ended.
    A True
    B False

14. What is one role of fontanels?
    A to allow for compression of the skull during childbirth
    B to serve as ossification centers for the facial bones
    C to lighten the weight of the skull bones
    D to serve as the final bony plates of the skull

15. What category of tissue does bone (osseous) tissue fall under? Enter one word for your answer.
16. What medical condition is characterized by an exaggerated lateral curve of the spine?.
   A  kyphosis
   B  scoliosis
   C  lordosis

17. The bone that makes up the lower jaw is the maxillary.
   A  True
   B  False

18. Which of the following is true of a compound fracture?.
   A  It is also called a greenstick fracture.
   B  It results in bone breaking the skin.
   C  It is a type of incomplete fracture.
   D  It occurs only in athletes.

19. What is the connective tissue outer layer of a bone called? Enter one word for your answer.

20. The appendicular skeleton consists of the bones of the arms, legs, hands, and feet.
   A  True
   B  False

21. Trabus (as in trabeculae) means....
   A  a projection or part that sticks out
   B  an addition, continuation, something attached
   C  beam
   D  beyond
   E  cuckoo bird
   F  imaginary straight line around which a body rotates
   G  joint
   H  precursor, bud, sprout
   I  shaped like the letter “U”
   J  sword-like
   K  the ancient Greek line of infantry in battle
   L  wedge-shaped
   M  to be strong
   N  to break

22. What is another word for “joint”? Enter a one-word answer.
23. Select each of the following that is a function of the skeletal system:
   A storage of calcium
   B protection of vital organs
   C producing blood cells
   D transmitting nerve impulses
   E support
   F locomotion (movement)

24. In the skeletal system, compact bone is located where bones are most heavily stressed.
   A True
   B False

25. Identify the feature labeled G in the image.
   A humerus
   B ulna
   C radius
   D metacarpal

26. Which one of the following occurs during intramembranous ossification?
   A A hyaline cartilage model forms.
   B Osteoblasts deposit bone in areas of cartilage loss.
   C Fibrous connective tissue is converted to bone tissue.
   D None of the above; all are part of endochondral ossification

27. How many bones are in a normal adult human body? Enter your answer numerically.

28. The atlas is classified as what type of vertebra?
   A thoracic
   B lumbar
   C cervical

29. The child in the photo has a cleft palate. This malformation affects what bone?
30. Which of the following is most likely to be damaged during CPR?  
   A. styloid process  
   B. xiphoid process  
   C. mastoid process  
   D. transverse process

31. How many pairs of ribs do humans have? Enter your answer numerically.

32. What is the point of attachment for muscles that extend and rotate the head?  
   A. styloid process  
   B. mastoid process  
   C. xiphoid process  
   D. transverse process

33. Which bones form the palm of the hand?  
   A. carpals  
   B. metacarpals  
   C. tarsals  
   D. metatarsals  
   E. phalanges

34. Which of the following joints is located on the skull?  
   A. pivot  
   B. ball-and-socket  
   C. hinge  
   D. suture  
   E. gliding

35. What is the end of a long bone called? Enter a one-word answer.

36. What type of joint allows free movement?  
   A. synovial joint
37. Ribs that have no direct connection to the sternum are called true ribs.
   A True
   B False

38. Select all of the following that are included in the skeletal system.
   A cartilage
   B bones
   C ligaments
   D joints

39. What is the bone mineral density (BMD) value that indicates osteoporosis?
   A Between 1 and 2.5
   B Between 0 and 1
   C Between 0 and -1
   D Between -1 and -2.5
   E Less than -2.5

40. Which TWO of the following are NOT true of intramembranous ossification?
   A It takes place in fibrous connective tissue.
   B Most bones are formed by this process.
   C It produces the bones of the skull, mandible, and clavicle.
   D Ossification begins at the ossification center.
   E It is responsible for forming fontanels in a fetus.
   F Cartilage serves as a model for bone formation.

41. The feature labeled C in the image is an osteon.
   A True
   B False

42. Where would you most likely find an osteoprogenitor cell?
   A In the bone marrow
   B In the endosteum
   C In the articular cartilage
   D In compact bone

43. At approximately what age does bone growth cease? Enter your answer numerically.
44. Which bone was named after the parts of a Greek dagger?
   A sterna
   B clavicle
   C femur
   D ribs

45. What is the term for a bone embedded in a tendon?
   A long bone
   B irregular bone
   C lumbar bone
   D sesamoid bone

46. How many milligrams of calcium per day is needed by people between the ages of 14 and 18?
   Enter your answer numerically, with no comma or units..

47. Which one of the following is NOT true of the repair of a bone fracture?
   A Remodeling occurs for between 4 months and 1 year.
   B The cast can be removed after cartilage forms.
   C Cartilage forms before spongy bone.
   D Osteoblasts replace cartilage.
   E Healed bone may be thicker.

48. Identify the feature labeled F in the image.
   A epiphysis
   B articular cartilage
   C marrow cavity
   D diaphysis
   E spongy bone