

Biology 13A Problem Set 3
Chapters 5-7

Name _____

1. Draw a flow chart showing how all the **epithelial** tissues are related.

2. Draw a flow chart showing how all the **connective** tissues are related.

6. Draw a bone cross section and label: *compact bone*, *spongy bone*, *medullary cavity*. Define the general function of each part.

7. Describe the steps of how a fractured bone can repair itself.

8. Draw a simple diagram of a complete skeleton! Label: *skull, vertebral column, thoracic cage, pectoral girdle, pelvic girdle, upper limbs, and lower limbs.*

9. Draw the vertebra and label the five types of vertebral bones.

10. Draw a generic limb. On the left side, label the names of the bones found in the upper limb. On the right side, label the same bones but with the names for those found in the lower limb.

11. Describe how the structures of the three types of joints allow them to function differently.

Multiple Choice

1. These types of epithelial tissues can be ciliated or non-ciliated.
 - a. Glandular
 - b. Simple columnar
 - c. Simple cuboidal
 - d. Simple squamous
 - e. Stratified squamous

2. This tissue type can secrete materials into the blood stream.
 - a. Adipose
 - b. Endocrine glandular
 - c. Exocrine glandular
 - d. Hyaline cartilage
 - e. Neuroglial

3. This type of cartilage tissue is found in vertebral discs and is used as shock absorbers.
 - a. Areolar
 - b. Elastic
 - c. Fibrocartilage
 - d. Hyaline
 - e. Reticular

4. What cell type produces a pigment that makes skin a darker color?
 - a. Diaphysis
 - b. Melanocyte
 - c. Platelet
 - d. Sebaceous gland

5. What event would occur if your body temperature is too hot?
 - a. Goose bumps form
 - b. Hair follicles secrete
 - c. Muscles shiver
 - d. Skin blood vessels dilate
 - e. Sweat glands shut down

6. What is the function of red bone marrow?
 - a. Cushion bones
 - b. Form new blood cells
 - c. Store fat
 - d. Store minerals
 - e. Strengthen bones

7. The tailbone is the bottom bone of the vertebra. It is also called the:
 - a. Cervical
 - b. Coccyx
 - c. Lumbar
 - d. Sacrum
 - e. Thoracic

8. Which joint gives the greatest range of motion?
 - a. Cartilaginous
 - b. Fibrous
 - c. Phalanges
 - d. Synovial
 - e. Marijuana

9. Ulna is the radius as fibula is to _____.
 - a. Carpal
 - b. Femur
 - c. Phalanges
 - d. Tarsal
 - e. Tibia

10. What cell type removes excess bone after repair of a fracture?
 - a. Aerolar
 - b. Fibroblast
 - c. Hematoma
 - d. Osteoblast
 - e. Osteoclast

11. What chemical causes vessel dilation during inflammation?
 - a. Actin
 - b. Histamine
 - c. Keratin
 - d. Melanin
 - e. Myosin

12. What blood cell type induces clotting?
 - a. Dermis
 - b. Platelet
 - c. Red
 - d. Sebaceous
 - e. White

13. What protein is found in skin to make it strong and elastic?
 - a. Fibrocartilage
 - b. Keratin
 - c. Melanin
 - d. Red marrow
 - e. Yellow marrow

14. What bone is most distal?
 - a. Carpal
 - b. Metacarpal
 - c. Phalanges
 - d. Radius
 - e. Ulna