

## Module 3

## A & P

### Assignment #1

Read pages 61-74.

Write the answers on your own paper, not on this sheet.

1. Define the following terms:
  - a. Epidermis
  - b. Dermis
  - c. Hypodermis
  - d. Melanoma
  - e. Basal cell carcinoma
  - f. Squamous cell carcinoma
2. What are the two layers of skin? Which layer contains keratinized cells? Which layer contains papillae?
3. What type of tissue makes up the:
  - a. Epidermis?
  - b. Dermis?
4. How do dermal papillae help the epidermal cells?
5. Why do some cuts heal quickly with little scarring, while other cut of similar size and depth heal more slowly with more scarring?
6. What is the difference between first degree, second degree, and third degree burns?
7. How does the hair follicle help heal bad burns?
8. What kind of tissue is always present in the hypodermis? What kind of tissue is often, but not always, present in the hypodermis?
9. What is the function of sebaceous glands?
10. What is the function of sweat glands?
11. List the five layers of the epidermis – IN ORDER – starting from the top and working down to the bottom, innermost layer. List what occurs in each layer.
12. In which layers of the epidermis are the cells alive?
13. What are melanocytes, and what do they do to the skin?
14. Look at the cross-section of skin on page 94, question 12 of your textbook. Identify the structures that are lettered.
15. What are the three sections of the hair? Which sections contain cells with soft keratin? Which cells contain hard keratin?
16. What is the hair matrix?
17. Download or draw picture of a fingernail cross-section. Label the cuticle, matrix cells, lunula, nail plate, and epidermis. You may download an image that has these labels.
18. Are sweat glands apocrine, merocrine, or holocrine?
19. Are sebaceous glands apocrine, merocrine, or holocrine?
20. Honors: Cancer results from the uncontrolled mitosis of a group of cells. In what layers of the epidermis is it possible to get cancer? Why is it impossible to get cancer in the other layers of the epidermis?
21. Honors: What is Brunsting-Perry cicatricial pemphigoid? What part of the skin is affected? What is its cause?

22. Define the following terms:
  - a. Diaphysis
  - b. Epiphysis
  - c. Epiphyseal plate
  - d. Compact bone
  - e. Cancellous bone
  - f. Ossification
  - g. Periosteum
  - h. Articular cartilage
  - i. Axial skeleton
  - j. Appendicular skeleton
  - k. Suture
  - l. Process
  - m. Meatus
  - n. Foramen
  - o. Sinus
23. Classify the following bones as long, short, flat, irregular, or sesamoid:
  - a. Ribs
  - b. Carpals
  - c. Patella
  - d. Metatarsals
  - e. Coxa
  - f. Humerus
  - g. Vertebra
  - h. Mandible
24. Where is the bone marrow found in a long bone?
25. What is the difference between red marrow and yellow marrow? What type of marrow would you expect to find in the femur of an 8-year old? In the femur of an 80-year old?
26. List four functions of the skeletal system.
27. List location of and the number of each type of vertebrae:
  - a. Cervical
  - b. Thoracic
  - c. Lumbar
28. Describe the difference between true ribs, false ribs, and floating ribs. How many pairs of each does a person have?
29. Look at the skeletal diagrams on page 95 of your textbook, questions 20. Identify the structures that are lettered.
30. Look at the skeletal diagrams on page 95 of your textbook, questions 21. Identify the structures that are lettered.
31. Honors: Evenity is a new medication for the treatment of osteoporosis. How does Evenity work? Specifically, what does it do?

