

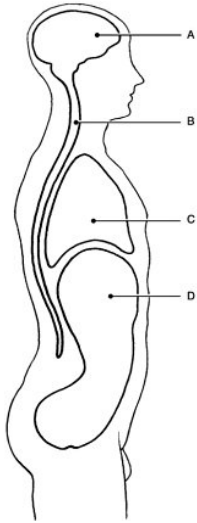


1st Semester Final Exam

The Review: Chapters 1-16

1. Describe the events that occur at a neuromuscular junction.
2. List the four main types of tissues found in humans. For each tissue type, list the tissue's major characteristics.
3. Name and describe four types of passive transport.
4. Name and describe the major methods of active transport.
5. List and describe the layers of the skin, including the hypodermis.
6. Name and describe the major types of epithelial membranes.
7. Explain the difference between eccrine and sebaceous glands.
8. Distinguish between negative and positive feedback mechanisms.
9. Sketch and label the major parts of a long bone. Additionally, describe compact bone microstructure.
10. Sketch and label a neuron. Explain the difference between multipolar, bipolar, and unipolar neurons.
11. Sketch and label the major structures of the human eye.
12. Sketch and label the major components of the human ear.
13. Distinguish between the axial and appendicular skeletal.
14. Explain the major steps that occur during an action potential and the propagation of a nerve impulse.
15. Explain the major components that make up a monosynaptic reflex arc.
16. Describe atomic structure and formation of chemical bonds, including ionic, covalent, and hydrogen bonds.
17. Explain the levels of organization found within a muscle. Start at the organ level and move to the smallest.
18. Describe osmosis and explain the terms hypertonic, hypotonic, and isotonic.
19. Differentiate between the central and peripheral nervous system.
20. Explain how the Na/K pump generates membrane potential.
21. List the four major types of macroorganic molecules and provide examples and functions for each.
22. Sketch a person in anatomical position. Label the major anatomic directional terms on your sketch.
23. On a stick-man diagram, identify the major endocrine glands along with the hormones produced.
24. Sketch and label the major portions of the human brain. Include the dura, pia, and arachnoid mater.
25. Explain the major cells types found within the nervous system.

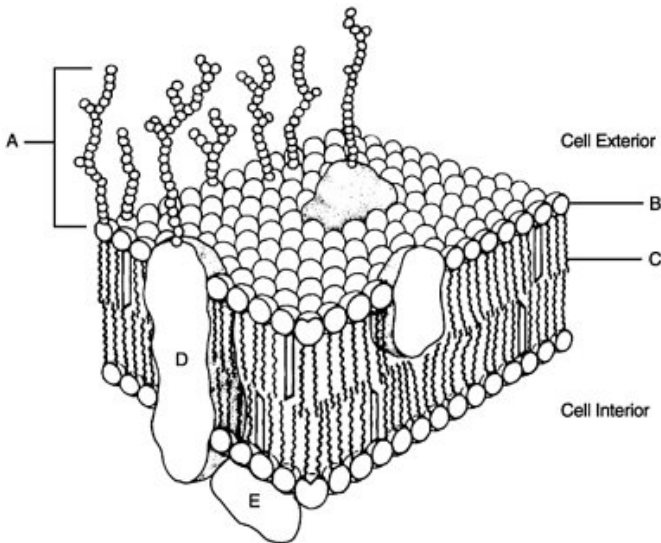
26.



Identify the following cavities and name an organ found in each.

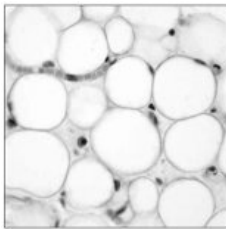
- A.
- B.
- C.
- D.
- E.

27. Identify the major structures of the plasma (cell) membrane. Star the hydrophilic structures and circle the hydrophobic ones.

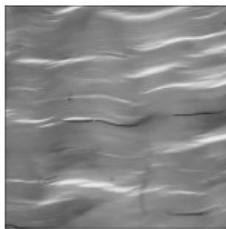


- A.
- B.
- C.
- D.
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28. Identify the following connective tissues. Name a cell type found within each tissue.



A

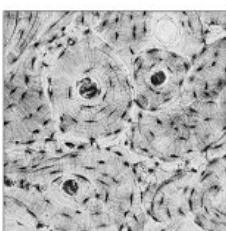


B

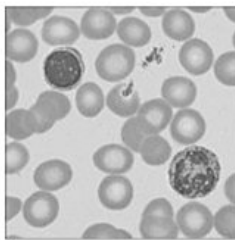


C

- A.
- B.
- C.
- D.
- E.

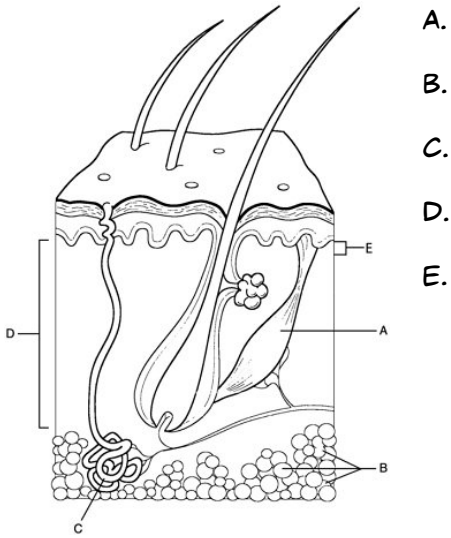


D

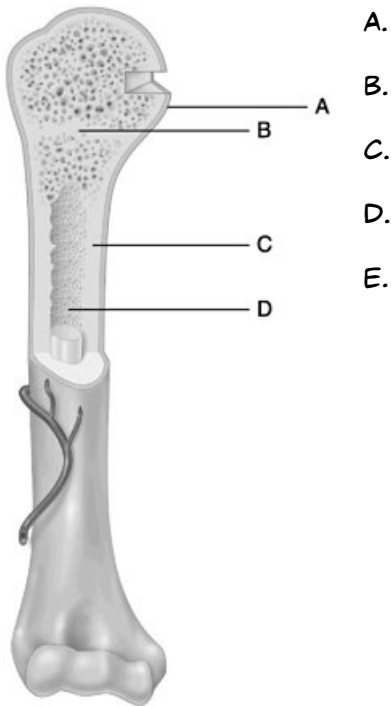


E

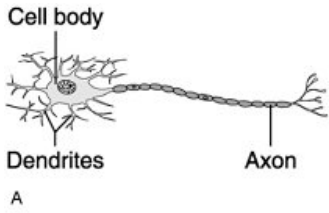
29. Identify the following skin structures. Name a function for each structure



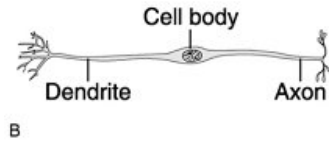
30. Identify the following long bone structures. Circle the structure where osteons would be found.



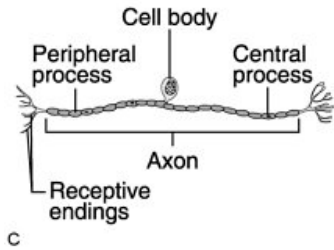
31. Identify the three major types of neurons as shown in the picture below. For each type, state the location one would likely find each neuron type.



A.

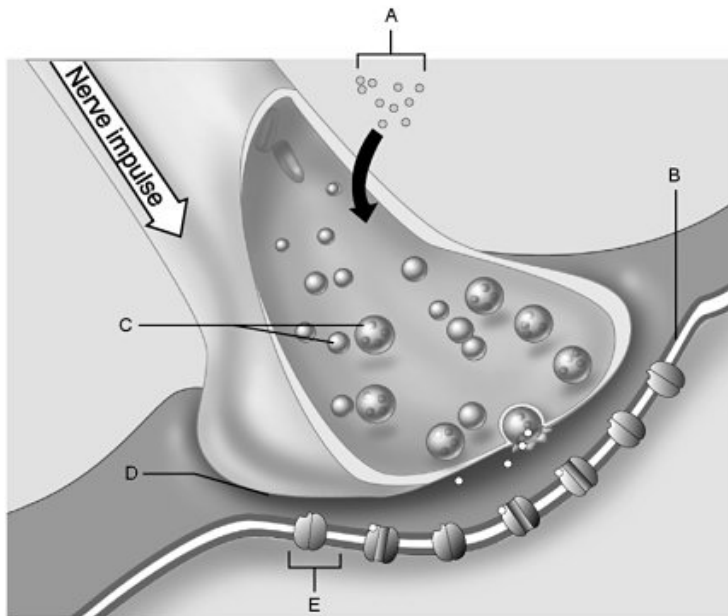


B.



C.

32. Label each lettered item.



A.

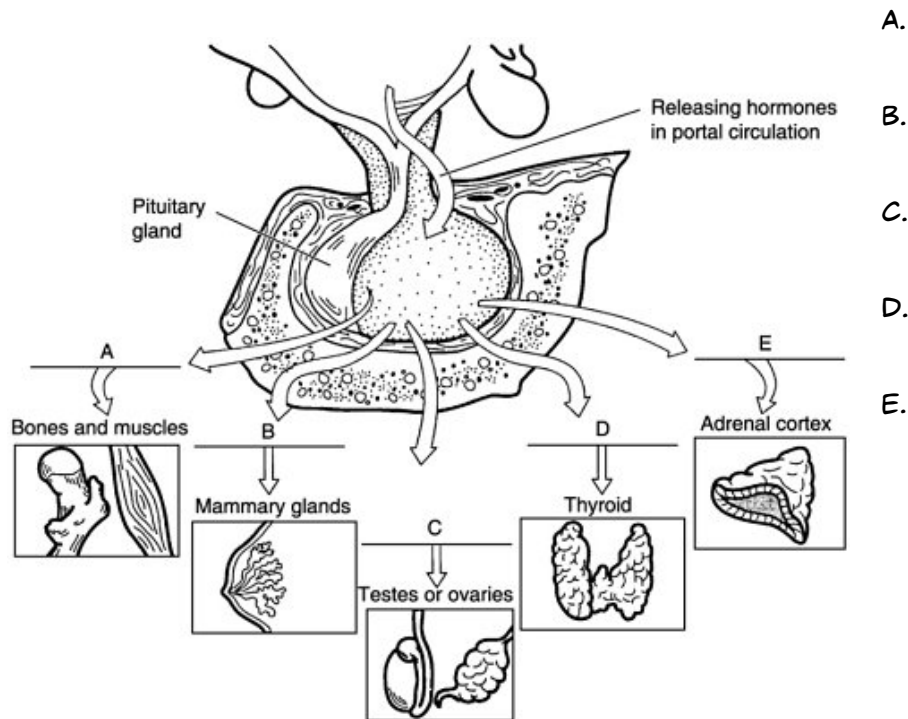
B.

C.

D.

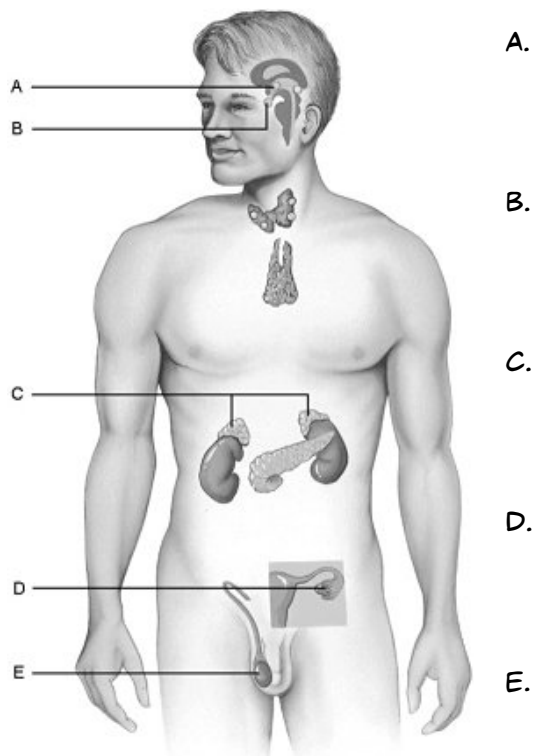
E.

33. Identify each hormone.



- A.
- B.
- C.
- D.
- E.

34. Identify each gland in the diagram below. For each gland, provide a hormone and its function.



- A.
- B.
- C.
- D.
- E.