

Histology
Chapter Five Study Guide

1. >What is histology?
2. What is tissue?
3. What are the four tissue types?
4. >What are the criteria used to define the structure and function of the four tissue types? (very important / multiple test questions here!)
5. >Compare and contrast the difference between cellular volume and matrix volume for epithelial and connective tissues? What is the significance?
6. What other terms are used to describe matrix?
7. What is the difference between non-keratinized and keratinized epithelial cells? Locations and examples?
8. >What three protein fibers are in the connective tissue matrix? Characteristics of each? What cell makes these fibers? What happens to these fibers in skin as you age?
9. >What is hyaluronic acid? What phase is used to characterize hyaluronic acid?
10. >How are collagen fibers orientated in tendons and ligaments? Around organ capsules?
11. >What type of cell stores fat?
12. >What are the three types of cartilage? Examples and locations.
13. >What is the difference between spongy and compact bone? Which one is harder?
14. >What is the function and structure of the follow items: osteon: osteocyte, osteoblast, osteoclast, lacunae, canalicul, lamellae, periosteum, endosteum, and central canal.
15. What is the function of nervous tissue? Functional cell?
16. What are the three muscle types? Characteristics of each muscle type?
17. >What is a cell junction? What are the three junctions types featured in my lecture slides?
18. What is a gland?
19. What is the difference between a secretion and an excretion?
20. >What is the difference between an endocrine and exocrine (merocrine) glands?
21. >Glands can be multicellular or unicellular structures. What is an example of a unicellular gland that looks like a “wine glass”? Where are they located?
22. >What is the difference between a merocrine gland, holocrine gland, and apocrine gland? Give examples? (Another name for merocrine?)
23. >Define the following terms: atrophy / hypertrophy/ hyperplasia / metaplasia / neoplasia / dysplasia.
24. >What term describes how the epithelial lining of the trachea changes after chronic cigarette smoking?
25. >What is regeneration? What tissue is best at regeneration?
26. >What is fibrosis? What tissue types repair by fibrosis?
27. What occur as skin repairs itself after a wound?
28. Where are these membranes located? (mucous, serous, synovial, cutaneous).
29. What is inflammation?
30. >How is tissue changed by inflammation? What is always added? Significance over time?