

Chapter Four Study Guide / Tortora & Derrickson  
Tissue Level of Organization

1. What is histology?
2. In the hierarchy of organization, what makes up tissue?
3. What are the four different tissue types?
4. What is the significance of the relationship between cells and matrix when defining different types of tissue?
5. What other terms are used to describe extra cellular material? How best may this be described?
6. What are the characteristics of epithelial tissue?
7. What is the most common structural criteria used to describe epithelial cells?
8. What are the different shapes of epithelial cells?
9. What is the difference between non-keratinized and keratinized epithelial cells? Where are these tissues found?
10. What is connective tissue?
11. In fibrous connective tissue, what are the three different types of protein fibers?
12. What is the ground substance? Where is it found? Consistency?
13. What are glycosaminoglycans (GAG)? What is the most abundant GAG? Where do we find it?
14. What are proteoglycans (PG)? Where are they located? What type of molecule is associated with proteoglycans?
15. How are fibers in connective tissue arranged?
16. What type of tissue is fat? What type of cell store fat? What is the appropriate name for fat tissue?
17. What is cartilage?
18. What are the three different types of cartilage? Examples & locations?
19. What is bone?
20. What is the difference between spongy and compact bone?
21. What is an osteon?
22. Identify the following structures of an osteon: lacunae, canalicul, lamellae, and central canal.
23. Blood is also classified as a connective tissue. Why is it classified as connective tissue?
24. What is the dominate characteristic of nervous tissue?
25. What is the dominate characteristic of muscle tissue?
26. What are the three types of muscle cells? Characteristics?
27. What are cell junctions? Five types?
28. What is a gland? Most common type of tissue forming glands?
29. What is the difference between a secretion and an excretion?
30. What is the difference between endocrine and exocrine glands?
31. 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?
32. What is the difference between a merocrine and holocrine gland?
33. Define the following terms: hyperplasia / hypertrophy / neoplasia / meaplasia
34. What is regeneration?

35. What is fibrosis?
36. What are the stages of healing a skin wound?
37. Describe the following membranes: mucous, serous, synovial, and cutaneous.

#### Hot List Questions

1-2-3-5-6-7-9-10-11-15-16-17-18-19-20-21-22-24-25-26-27-30-31-32-33-34-35-36-37