Anatomy & Physiology
Digestive System and Metabolism Test Review

1. Another name for digestive (GI) tract? **Alimentary canal**
2. The structures of the GI tract (in order)? Mouth, pharynx, esophagus, stomach, small intestine, large intestine, rectum, anus
3. Four layers of the GI tract? **Mucosa, submucosa, muscularis externa, serosa**
4. Rhythmic muscle contractions that move food through the digestive tract? **Peristalsis**
5. Subdivisions of the large intestine? **Cecum, ascending/transverse/descending/sigmoid colon, rectum**
6. Subdivisions of the small intestine? **Duodenum, jejunum, ileum**
7. What does amylase digest? **Starch**
   lipase? **Lipids (fats)**
   trypsin? **Proteins in SI**
   pepsin? **Proteins in stomach**
8. Fingerlike extensions in small intestine? **Villi**
9. Name of material that passes from stomach to SI? **Chyme**
10. Function of the tongue? **Mechanical breakdown of food; makes a bolus**

11. List the three salivary glands? **Parotid, submandibular, sublingual**
12. What is 1? **Mouth**
13. What is 2? **Esophagus**
14. What is between 2 and 5? **Esophageal sphincter**
15. What is between 5 and 8? **Pyloric sphincter**
16. Which organ catabolizes all food types? **Small intestine**
17. Which organ absorbs nutrients? **Small intestine**
18. Which organ absorbs excess water? **Large intestine**
19. What is the function of 4? **Excretes bile that breaks down fats**
20. What is the name of 6? **Pancreas**
21. What substances are released by 6? **Pancreatic amylase, trypsin, lipase, insulin, glucagon, sodium bicarbonate**
22. Name of material that passes from 5 to 8? chyme
23. Stomach acid is neutralized in the duodenum by what chemical? Sodium bicarbonate
24. What secretion helps food form a bolus in the mouth? saliva
25. Cell process that uses oxygen to make ATP? Cellular respiration
27. Process of building materials from smaller components? anabolism
28. Muscle contractions that move food back and forth in GI tract to aid in mixing? segmentation
29. Building blocks of proteins? Amino acids
30. Transport of digested end products from SI to blood or lymph? absorption
31. Chemical that activates pesinogen to pepsin? Hydrochloric acid (HCl)
32. Materials absorbed by the large intestine? Water, vitamin K, some B vitamins, ions
33. Number of adult permanent teeth? 32

34. Name of 1 in diagram above? enamel
35. Name of 2? dentin
36. Name of 3? Root canal
37. Name of 4? crown
38. Name of 5? Gingival (gum)
39. Three modifications of SI designed to increase surface area? Microvilli, villi, plicae circulares (circular folds)
40. Difference between jaundice and cirrhosis? (see Homeostatic Imbalances Tables)
41. Muscle that allows for voluntary control of defecation? External anal sphincter
42. Which hormone lowers blood glucose levels? insulin  Raises BG levels? glucagon
43. Describe the following conditions: (see Homeostatic Imbalances Tables)
   a. GERD
   b. Diverticula
   c. Appendicitis
   d. Lactose intolerance
   e. Gall stones