

Name _____

Period _____

Ms. Foglia

Date _____

AP: CHAPTER 41: ANIMAL NUTRITION

1. How does glucose metabolism demonstrate a homeostatic mechanism?

2. What role do the various essential nutrients have in animal metabolism?

- a. Protein _____
- b. Carbohydrates _____
- c. Lipids _____
- d. Vitamins _____
- e. Minerals _____
- f. Water _____

3. Why are there only 8 essential amino acids?

4. Identify a few deficiency diseases.

5. Identify some of the modes of heterotrophic nutrition.

a. _____

b. _____

c. _____

6. What are the four main stages of food processing in heterotrophic nutrition?

7. What is the advantage of extracellular digestion over intracellular digestion?

8. What is the adaptive value of the alimentary canal?

9. What two major changes occur to food in the mouth?

a. _____

b. _____

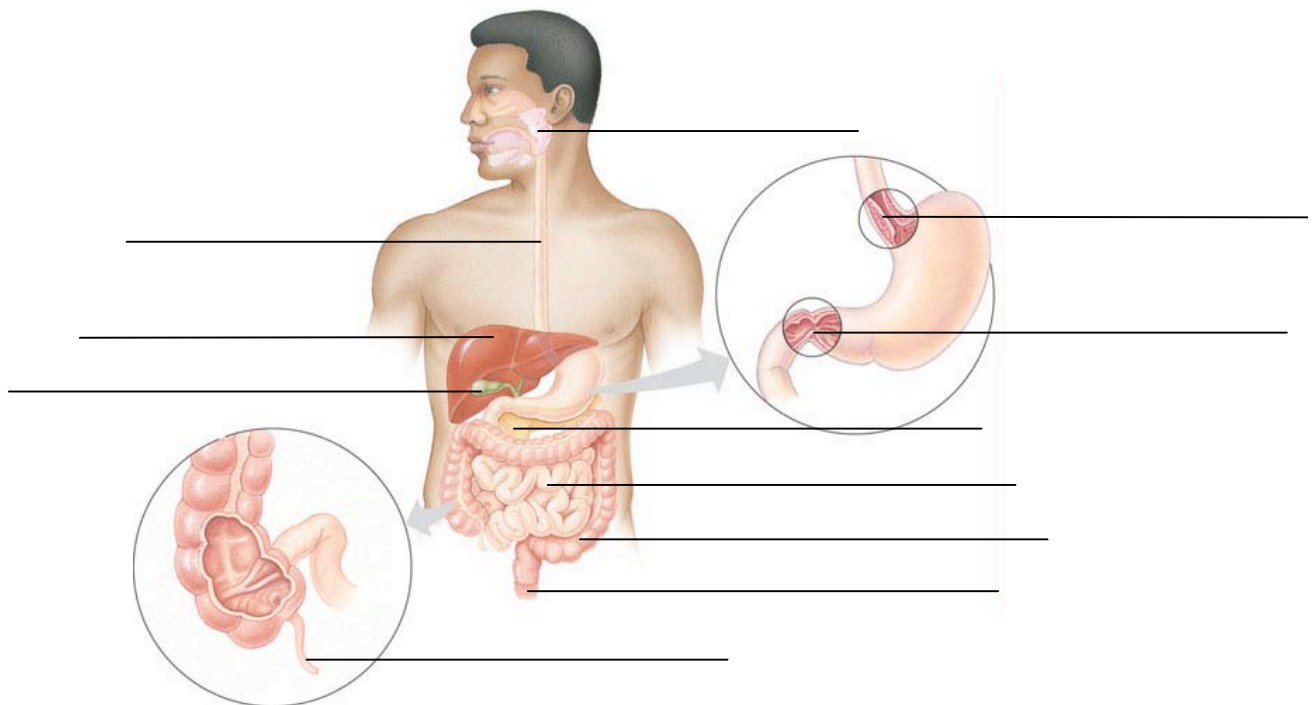
10. List a few significant aspects of the stomach's physiology.

11. How does the stomach prevent digesting itself?

12. Describe the major secretions that enter the duodenum.

13. How does the pancreas prevent digesting itself with the peptidases it produces?

14. Label the diagram of the human digestive system.



15. Where is each of the following chemically digested?

- a. Carbohydrates _____
- b. Protein _____
- c. Nucleic Acid _____
- d. Fat _____

16. List three features of the small intestine that improve its function.

- a. _____
- b. _____
- c. _____

17. Describe the role of the following hormones.

- a. Gastrin _____
- b. Secretin _____
- c. Cholecystokinin _____

18. Describe two important functions of the large intestine.

- a. _____
- b. _____

19. Identify a few ways a herbivore's alimentary canal differs from a carnivore's.
