

## Digestive System

1. Follow the path of food in the alimentary canal in humans (write out in order) and be able to identify them on a diagram. Also, be able to identify the accessory organs that aid in digestion.
2. Name and explain the functions(s) of each of the following structures: mouth/oral cavity, teeth, tongue, salivary glands B. Saliva contains the enzyme salivary amylase. What does this enzyme do? C. What types of digestion occurs in the mouth (mechanical/chemical)? Explain.
3. Where is the pharynx located? B. What does the epiglottis do when you swallow? C. Describe the structure and function of the esophagus. D. What is peristalsis?
4. What are two different functions of the stomach. B. What substances are produced by gastric glands and what are their functions? C. What is the approximate pH of gastric juice? D. Why doesn't your stomach digest itself? F. What is heartburn?
5. For each structure listed, explain what part it plays in chemical digestion of food in the small intestine (where it is and what it does/makes): liver, pancreas, gall bladder.
6. What is the primary function of the small intestine? How do villi and microvilli aid with absorption? B. Draw and describe the structure of a villus. C. Show/describe where fat products are absorbed and where amino acids and sugars are absorbed.
7. What is the main function of the large intestine? C. What leads to constipation? diarrhea?

## Nutrition and Digestion

8. A. Name and explain two important reasons why you ingest food. B. Name the three macromolecules your body needs for proper nutrition. C. Why are carbohydrates important for nutrition? D. Why should you eat whole wheat bread instead of white?
9. A. Why are lipids important in your diet? B. Why are proteins important in your diet? C. What are essential amino acids? D. What is the difference between complete and incomplete proteins? Give some examples of food that contain each.
10. What are the two main categories of Micronutrients B. Why are they called micronutrients C. Why are vitamins important for proper nutrition? D. Name the 4 fat-soluble vitamins. E. Name (be able to recognize the names of) the water-soluble vitamins.
11. Why are minerals important for proper nutrition? B. Name (be able to recognize) major mineral groups learned in class.
12. What process/chemical reaction occurs within our cells that transforms glucose into energy? B. What is the usable form of energy called that results from this process? C. Review (write) the formula for this process.
13. Name three ways in which your body expends energy. B. What is basal metabolic rate and how is it calculated? Explain. What is the most important factor which determines body weight loss or gain?

