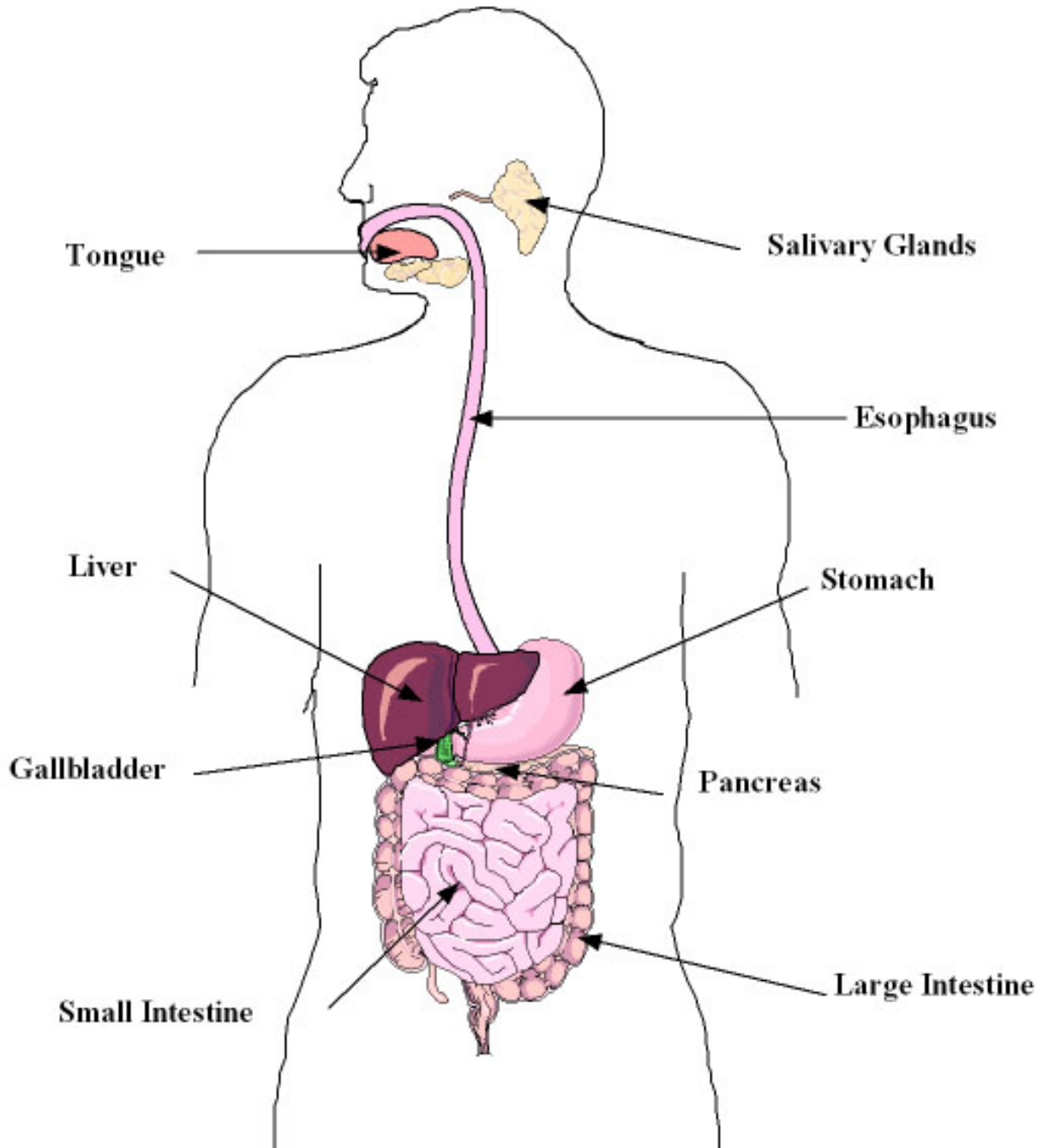


Name: _____

Class: _____

The Human Digestive System “Team Work”

1. Your digestive system is busy at work every day, whether you eat a large Cobb salad or a single stalk of celery. Label the parts of the digestive system.



Name: _____

Class: _____

2. Sometimes rumblings in your stomach will let you know that your digestive system is working, but most of the time you never even give it a second thought. What is the purpose of the digestive system?

- a system of organs
- allows your body to get the nutrients and energy it needs from the food you eat
- breaks down large food molecules into smaller molecules that can be used by cells
- converts foods to simple substances that can be absorbed and used by the cells of the body
- converts food into soluble and diffusible products that can be absorbed by the blood.

3. Food's journey. Describe the digestive process. Number the various parts of the diagram to better help you describe the "stops" your food makes on its way through your digestive system.

Remember to use scientifically accurate terms.

<p>#1 Mouth</p> <ul style="list-style-type: none">• process begins in the mouth• smell or sight of food triggers the salivary glands to secrete saliva• tasting the food increases the production of saliva• saliva moistens and lubricates food for swallowing• chewing starts the mechanical breakdown of food• saliva contains enzymes which start the chemical breakdown of the food• the tongue pushes the chewed-up food toward the back of the throat and into the opening of the esophagus (swallowing)
<p>#2 Esophagus</p> <ul style="list-style-type: none">• squeezes food from the back of the throat to the stomach• uses rhythmic waves of smooth muscle contractions
<p>#3 Stomach</p> <ul style="list-style-type: none">• sac-like organ with strong muscular walls to aid in mechanically mixing and churning food into a semi-liquid form• chemical digestion takes place• stomach secretes acid and enzymes to continue the process of breaking the food down• food takes on consistency of liquid or paste• slowly empties liquified mixture into the small intestine
<p>#4a Liver, Gallbladder, Pancreas</p> <ul style="list-style-type: none">• continue chemical digestion• secretions from the liver, gall bladder and pancreas are added as food enters the small intestine
<p>#4b Small Intestine</p> <ul style="list-style-type: none">• completes digestion of food materials• breaks down the food mixture even more• nutrients are absorbed into the blood
<p>#5 Large intestine</p> <ul style="list-style-type: none">• absorbs water• processes waste, (undigested or unabsorbed food) so that it can be removed from the body• sends waste to the rectum for elimination

4. Name one other system that must work with the digestive system to transport the food nutrients to all cells, tissues and organs throughout the body.

- Circulatory system

This resource has been created by the YES I Can! Science team to accompany an excerpt from:

The Lifestyle Journey

Ideas for People Inc., www.ideasforpeople.com