

April 7th- The Digestive System

Instructions:

Sketch and label the figure of the digestive system.

Please colour each organ a different colour so it may be easier for you to differentiate.

Your body needs fuel to live, work, play, and grow. This fuel comes from the different kinds of food you eat. But your body can't use large pieces of potato or apple or egg. It needs the digestive system to make the food useable.

Your **digestive system** is a long tube inside your body from your mouth to your anus. As food passes through this tube, it is broken down into very tiny pieces that the body can use. The pieces, or **nutrients**, move through the wall of the tube into your bloodstream. Blood carries these nutrients to the rest of your body.

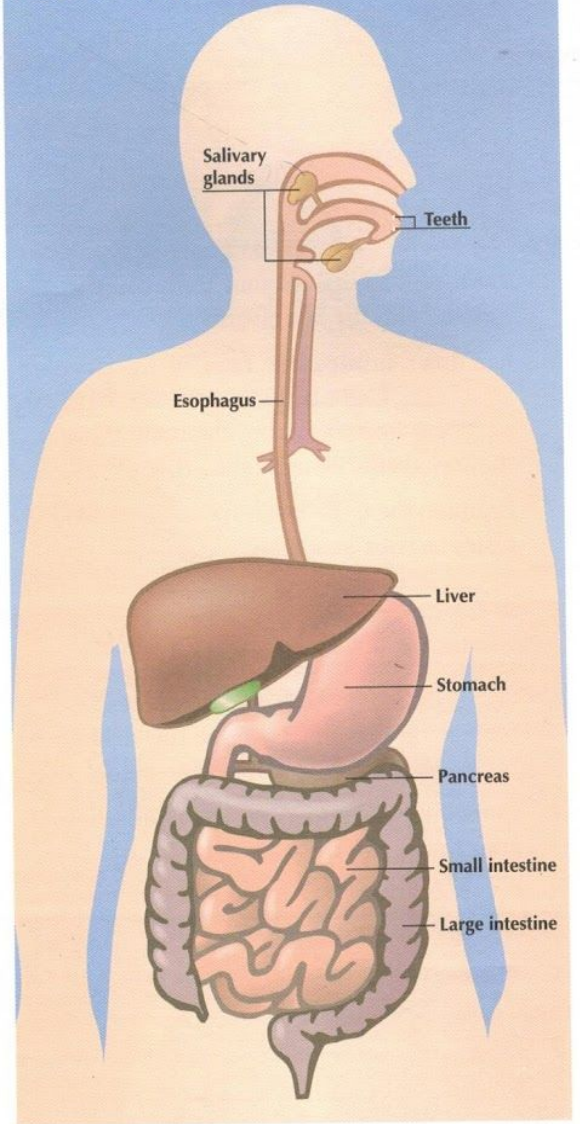
The digestive system has many special parts — called **organs** — which work together. There are many other types of organs in the human body. These organs are made of **tissues** which in turn are made up of **cells**. Cells are the building blocks of all living things.

In your mouth, your teeth bite and grind food. **Saliva** from salivary glands softens and lubricates it. Saliva also contains special chemicals called **enzymes** which break the food into nutrients. Enzymes acted on the soda cracker, breaking the starch (flour) into sugar. The tongue, a big muscle, rolls food around your mouth, turning it into a slippery ball. After you swallow the ball of food, it moves down the tube called the **esophagus** to the **stomach**.

The stomach acts like a bin where your meals are slowly processed, taking about four hours. Stomach cells squirt gastric juices into the food. Acids in the gastric juices help kill any bacteria in the food. Gastric juices also contain enzymes. Each enzyme works on only one type of nutrient. Strong muscles in the stomach mix the food and gastric juices to make a gooey mixture which then moves into the **small intestine**.

In the small intestine, enzymes from the **pancreas** and the small intestine digest (break up) different types of nutrients. The **liver** adds bile which helps blend fats. The nutrients move through the wall of the small intestine into tiny blood vessels. Blood then carries the nutrients

Digestive System



throughout the body. Food takes about eight hours to pass through the small intestine into the large intestine.

In the **large intestine**, water and minerals are absorbed into the body. Friendly bacteria live here, helping to break down any undigested food. The waste material, called feces, is eliminated from the body through the rectum and anus. Food takes about twelve hours to move through the large intestine.