Objective

• SWBAT relate organs in the digestive system to their functions.
from Latin *digerere*: “to carry apart, separate, divide”

di•gest

dis- “apart” + gerere “to carry”
Functions of the Digestive System

- Breaks down food into nutrients that your body can use
- Prepares waste to leave the body
Check For Understanding

Which of the following is a function of the digestive system?

A. It provides oxygen to the body.
B. It produces new offspring.
C. It breaks down food so the body can use it.
D. It gives the body its shape.
Two Types of Digestion

**Mechanical Digestion**
- Breaking, crushing, mashing food into smaller pieces
- Done by teeth, stomach

**Chemical Digestion**
- Chemicals break large molecules into smaller particles
- Causes chemical changes
- Done by saliva, stomach, small intestine
Check For Understanding

Which statement about digestion is true?

A. Saliva digests food mechanically; teeth digest it chemically.

B. Mechanical digestion and chemical digestion occur in the large intestine.

C. Enzymes digest food chemically; teeth digest food mechanically.

D. Chemical digestion mashes up food; mechanical digestion breaks it up with enzymes.
Mouth

- Where **food enters** the digestive system
- **Mechanical digestion** (teeth)
- **Chemical digestion** (enzymes in saliva)
Check For Understanding

Which of the following is NOT a function of the mouth?

A. It is where food enters the digestive system.
B. It moves food to the large intestine.
C. It breaks down food mechanically.
D. It breaks down food chemically.
Esophagus

- Squeezes food from mouth to stomach with muscle contractions called *peristalsis*
Check For Understanding

Which statement about the esophagus is true?

A. It moves food using muscle contractions.
B. It moves air down to the lungs.
C. It breaks food down mechanically.
D. It moves food from the stomach to the intestines.
Stomach

- **Mechanical digestion**
  (contractions of smooth muscle tissue)
- **Chemical digestion**
  (acids from walls)
- Turns food into **chyme**: semifluid mass of partially digested food
Chyme
Check For Understanding

Which is NOT true about the stomach?

A. It breaks down food physically with muscle contractions.
B. It uses acids to break food down chemically.
C. It turns food into chyme.
D. It is where babies grow.
Small Intestine

- Finishes **chemical digestion** of food
- **Absorbs nutrients** from food and sends them into the bloodstream
- Circulatory system will carry nutrients to all your cells
Check For Understanding

What is the main function of the small intestine?

A. It is where food enters the digestive system.
B. It absorbs nutrients from food.
C. It kills bacteria.
D. It prepares food to exit the body.
Large Intestine

- **Absorbs excess liquid** from undigested food
- Compacts indigestible food into waste
Check For Understanding

Which is a function of the large intestine?

A. It absorbs nutrients from food and puts them into the bloodstream
B. It takes nutrients to all the cells of your body
C. It breaks down food chemically
D. It absorbs extra liquid from food your body could not digest
Remember: You digest MESSiLy

• Mouth
• Esophagus
• Stomach
• Small intestine
• Large intestine
Check For Understanding

Which organ is *not* functioning properly if an individual is unable to compact waste or reabsorb liquid from undigested food?

A. stomach  
B. esophagus  
C. small intestine  
D. large intestine
Check For Understanding

Which organ is *not* functioning properly if an individual is unable to absorb nutrients from food?

A. stomach
B. mouth
C. small intestine
D. large intestine