

CONSTRUCTING A DIGESTIVE SYSTEM MODEL

Supplies needed:

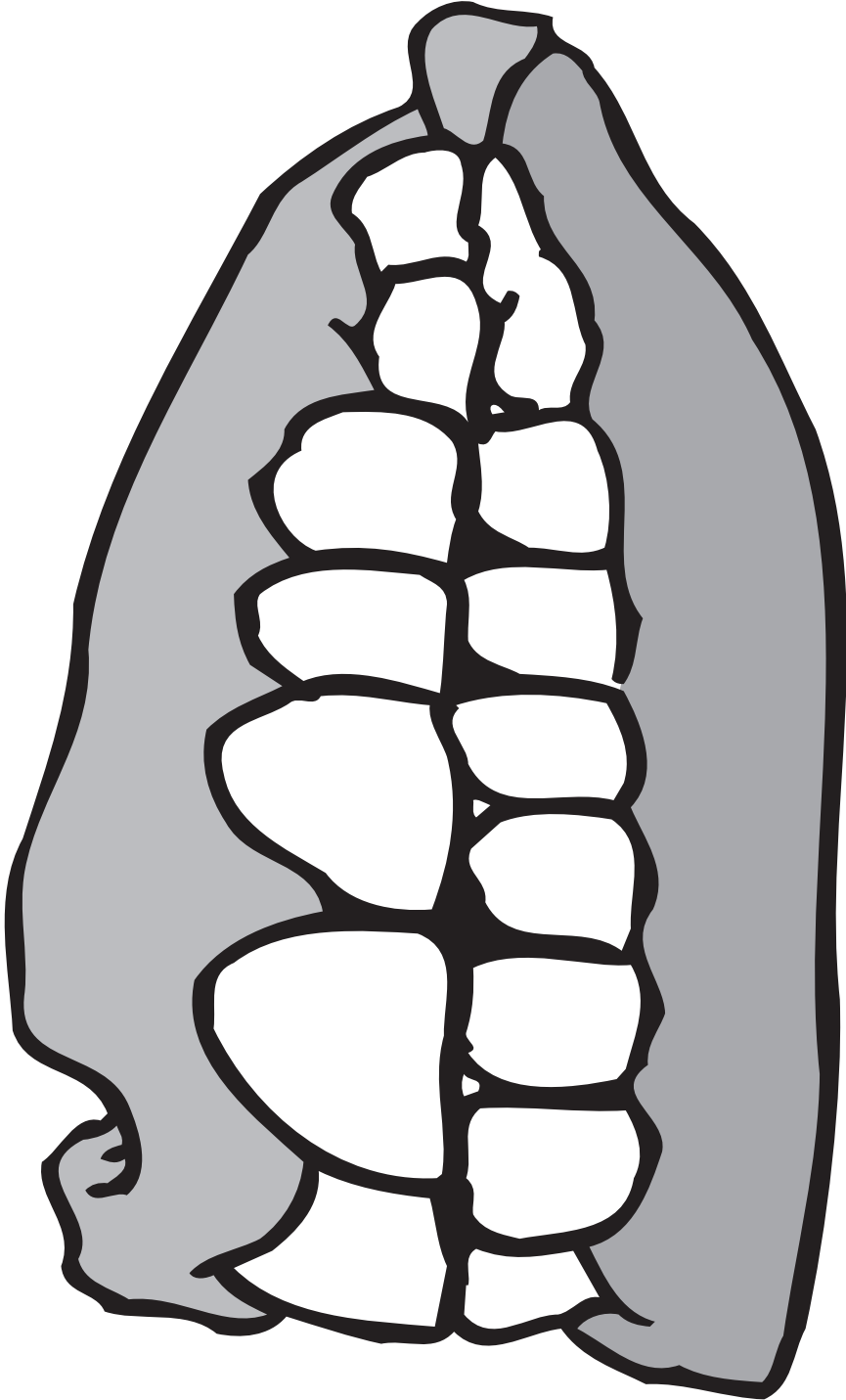
- 32 feet lightweight rope
- colored card stock or construction paper
- 1-liter soft drink bottle or 1/2-gallon milk jug
- colored tape or marker
- Stomach and Mouth images
- Information Cards describing organs and organ functions

Instructions:

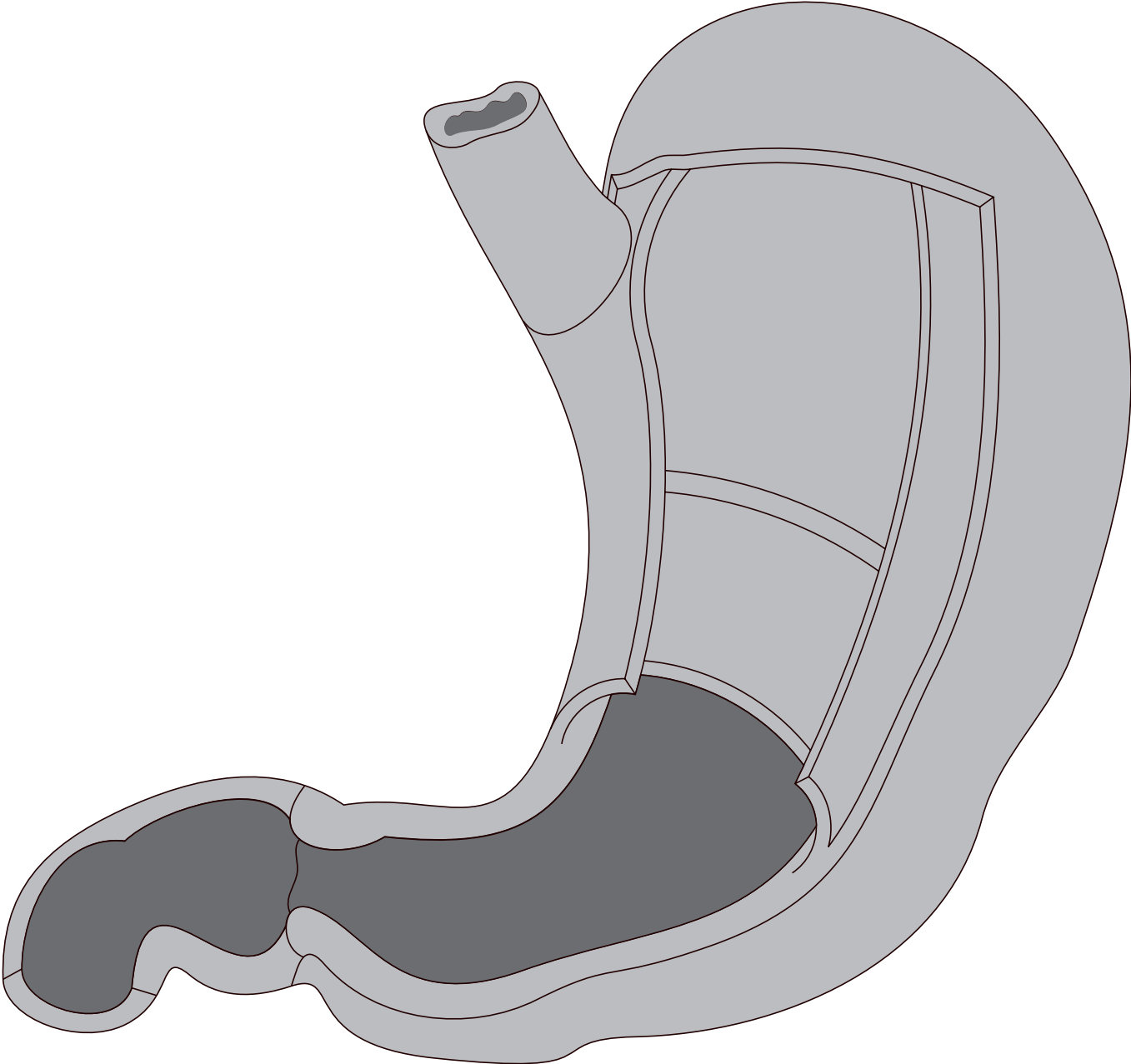
1. Make holes in the lid and bottom of the container.
2. Make copies of the Information Cards and the Stomach and Mouth images. Laminate each card and image.
3. Attach a 1-foot section of the rope to the container lid by threading the rope through the hole and tying a knot in the rope. Attach lips of mouth to the other end of the 1-foot rope section.
4. Connect remaining rope to the bottle by threading the rope through the hole in the bottom of the container. Tie a knot in the end of the rope to secure it to the bottom.
5. Measure and mark a spot 20 to 25 feet down the rope. Color the last 5 to 6 feet of the rope with tape or a marker pen.
6. Attach stomach to the bottle. Attach organ information cards to the appropriate parts of the model.
7. Copy and laminate cards describing each organ.



Mouth picture



Stomach picture



Mouth

Esophagus



Stomach

Small Intestine



Large Intestine



Information Cards

The teeth in the mouth chew the food and mix it with saliva. The tongue rolls the food to the back of the mouth to be swallowed.

The esophagus is about 10 to 12 inches long. Food takes one to seven seconds to travel from the lips through the esophagus to the stomach.



Information Cards

The stomach is about eight inches long. Food takes an average of three hours to move through the stomach, but it can take as little as one hour to as long as six hours.

The small intestine is about 20 to 25 feet long. Digested food takes two to 12 hours to travel through the length of the small intestine.



Information Cards

The large intestine is about five feet long. Digested food takes about thirteen hours to move through the large intestine, but it can take up to five days.



WHAT AM I?

- I'm the first organ used in digestion. What am I?
- I break food into pieces. What am I?
- I mix with food and help to make swallowing easier. What am I?
- I roll the food to the back of your mouth. What am I?
- I'm a tube located between the mouth and the stomach. What am I?
- Food is mixed up in me. What am I?
- When digestive juices and food are mixed, they make me. What am I?
- I am 20 to 25 feet long and work to digest your food. What am I?
- Your body uses me for energy, growth and health once food has been digested. What am I?
- The final stage of digestion takes place inside of me. What am I?
- I help maintain body temperature and aid digestion. What am I?
- Your body is not able to digest me. What am I?



ANSWER SHEET FOR WHAT AM I?

- Mouth
- Teeth
- Saliva
- Tongue
- Esophagus
- Stomach
- Chyme
- Small intestine
- Nutrients
- Large intestine
- Water
- Fiber



Fun Facts about Digestion

1. a) The esophagus is 12 inches long. Use your ruler to find something in your classroom that is 12 inches long.

What is it? _____

- b) Food travels down the esophagus in seven seconds. Watch the clock and see how many times you can write the name of your favorite food in seven seconds.

How many times? _____

2. a) The stomach holds 2 quarts of food and liquid. Two quarts are the same as 8 cups or $\frac{1}{2}$ -gallon. Can you imagine eight milk cartons inside you?

- b) The small intestine is 25 feet long. Get a string and yardstick and cut the piece of string to 25 feet. Now wrap it around your desk.

How many times can you wrap it around your desk? _____

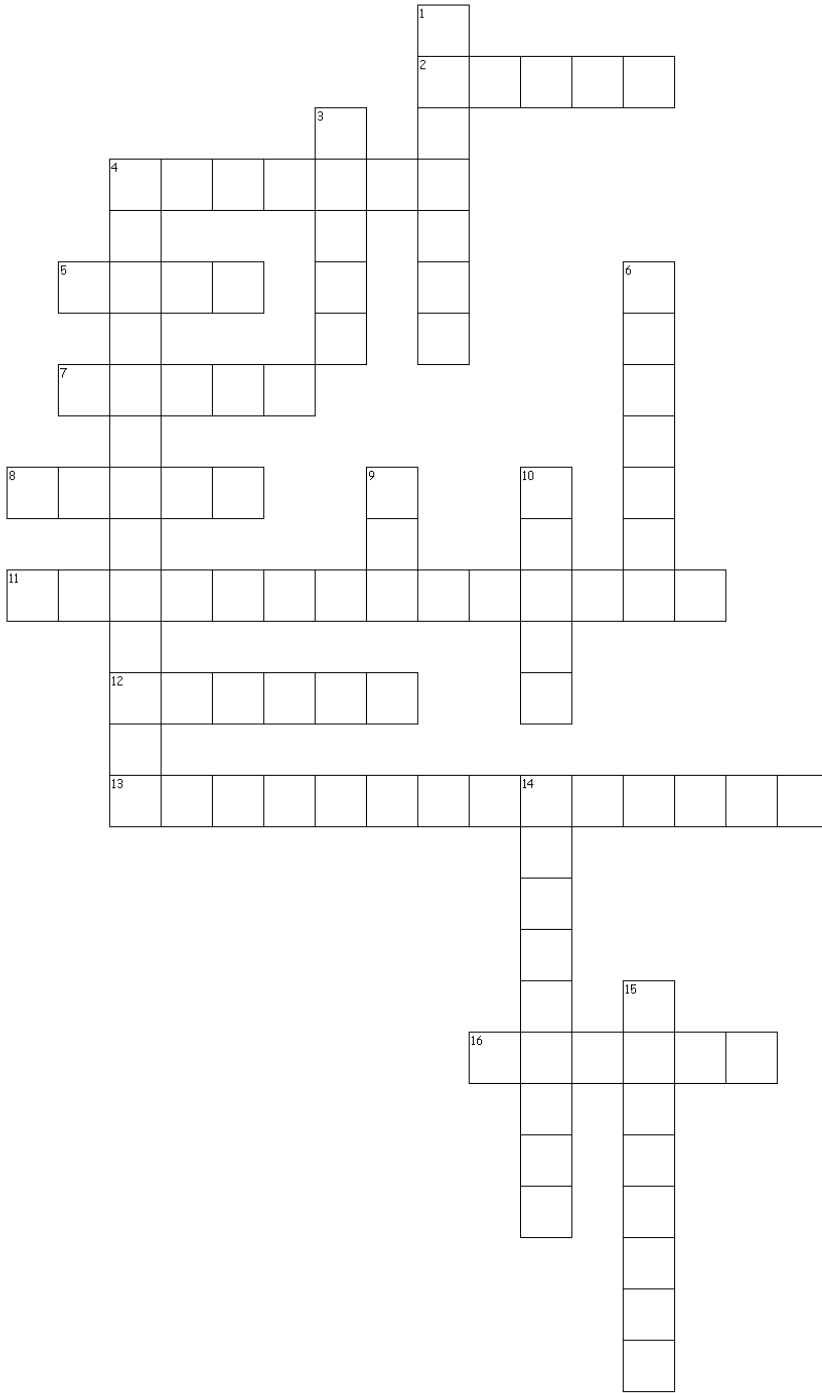
3. a) The large intestine is 5 feet long. It is shaped like an upside-down *U*. It is called the large intestine because it is wider than the small intestine.

- b) The passage of food and fluid from the stomach to the small intestine takes from 30 to 90 minutes. The passage through the large intestine may take one to seven days.

Name a physical activity you do that takes 30 to 90 minutes: _____



Digestion Facts Puzzle



Across

2. These break food into pieces
4. Mineral found in milk products
5. Mineral that carries oxygen through the blood cells
7. The first organ used in digestion
8. Digestive juices combined with food
11. Final stage of digestion takes place here
12. Body part that rolls food to the back of the mouth
13. This organ is 20 to 25 feet long
16. Food is mixed with _____, which helps make swallowing easier

Down

1. This organ is like a "stewing pot" because it mixes up food
3. Our bodies do not digest this complex carbohydrate
4. Starches and sugars found in food
6. It is needed for growth and repair of bone, muscle and skin
9. Provides a cushion to protect the body's organs
10. This regulates body temperature and aids in the digestion of food
14. The tube between the mouth and the stomach
15. Citrus fruits contain this nutrient

Word Bank

calcium	stomach
teeth	fiber
chyme	esophagus
saliva	protein
mouth	iron
tongue	fat
vitamin C	water
small intestine	
carbohydrates	
large intestine	



Digestive Tract Work Sheet

