Digestive System
Worksheet

1. The organs of the digestive system help you break down food and absorb nutrients. Use the Cutting Plane to observe the organs that make up your digestive system: the mouth, esophagus, liver, stomach, pancreas, gallbladder, small intestine, large intestine, and rectum. Record your observations and take a photo of the inside of a digestive organ.

2. Chemical digestion is the process of breaking down foods using digestive juices called enzymes. Glands in your mouth produce saliva that begins to chemically break down food. Use the Cutting Plane to observe how your mouth connects to your esophagus. Take a photo from the inside of the mouth looking down the esophagus.
3. Mechanical digestion is the process of physically breaking food into smaller pieces. This process begins in your mouth. How does your mouth mechanically digest food?

4. Food, water, and air all pass through your oral cavity to enter your body. Use the Cutting Plane to investigate the tubes leaving your mouth. What do you notice?

5. After leaving your mouth, food travels down your esophagus and into your stomach. Your stomach uses both mechanical and chemical digestion to break down food. Use the Cutting Plane to observe the inside of the stomach and take a photo. What do you observe?

6. Use the Ruler to measure and record the length of the stomach.

7. An empty human stomach is only about the size of a closed fist. A cheeseburger is approximately the same size! How can we eat more in volume than the size of an empty stomach?

8. After the stomach, food travels to small intestine for digestion and nutrient absorption. Estimate how long the small intestine would be if laid out flat. Use the Ruler to measure the small intestine and help you estimate.
9. The liver, pancreas, and gallbladder are all involved in the digestion of food through the creation of enzymes and digestive aides that help break down food. These juices help to break down food. Is this chemical or mechanical digestion?

10. After winding its way through the small intestine, the food continues on to the large intestine, where water is absorbed. How long is the large intestine?

11. Finally, what remains of the food is stored in the rectal cavity and excreted as feces.

12. Observe the digestive system as a whole. On a separate sheet of paper, draw and label the organs of the digestive system.

13. Imagine you are a carrot that just got eaten! Use the Camera to trace your path through the digestive system from beginning to end. Describe the stops along your journey. For example: First, teeth in the mouth chewed me to shreds. Then up saliva began to chemically dissolve me.

14. Using the Cutting Plane, trace that same route starting at the esophagus and ending with the large intestine. Observe where the digestive system organs touch other organs. Which other body system do you think the digestive system interacts with?