Digestive Lab - with a partner:

1. Use a mirror and tongue depressor to locate (carefully examine) each other's incisors, canines, bicupids, molars, tongue, palate, and uvula. How many total teeth do you have?

   Incisors _____ Canines _____ Bicuspids _____ Molars _____

2. Try eating some apple and/or carrot using only your incisors, then only your canines, then your bicupids, and finally your molars. Note the differences.

3. Chew an unsalted cracker for as long as possible before swallowing. How does the flavor begin to change, and to what do you attribute this change?

4. Place the stethoscope over the surface of the abdomen about ¼ the distance from the sternum to the margin of the lowest left rib. This is close to where the esophagus enters the stomach. Chew a cracker with a small quantity of water in your mouth. Swallow it. Listen for the entrance of the food into the stomach. Estimate the lapse time between swallowing the cracker and the opening of the valve into the stomach. How do you explain this?

5. Repeat the procedure, placing the stethoscope beside the larynx to hear the initial sounds of swallowing, and then rapidly moving the stethoscope to the abdomen to hear the sounds of the food entering the stomach.

6. Listen with a stethoscope as your partner swallows a gulp or two of water. Place the stethoscope approximately one inch below and slightly to the left of the xiphoid process. There should be two distinct sounds. One when the water reaches the cardio-esophageal sphincter and one when the peristaltic waves begin and the sphincter opens.

7. Swallow several mouthfuls of water in rapid succession and listen for their arrival in the stomach. Is there any difference in the time required for all of the water to reach the stomach, compared with that of the cracker or the single mouthful of water?

8. Take firm hold of your larynx and try to prevent it's moving, and yet swallow. Is it possible to swallow without this characteristic movement of the larynx?