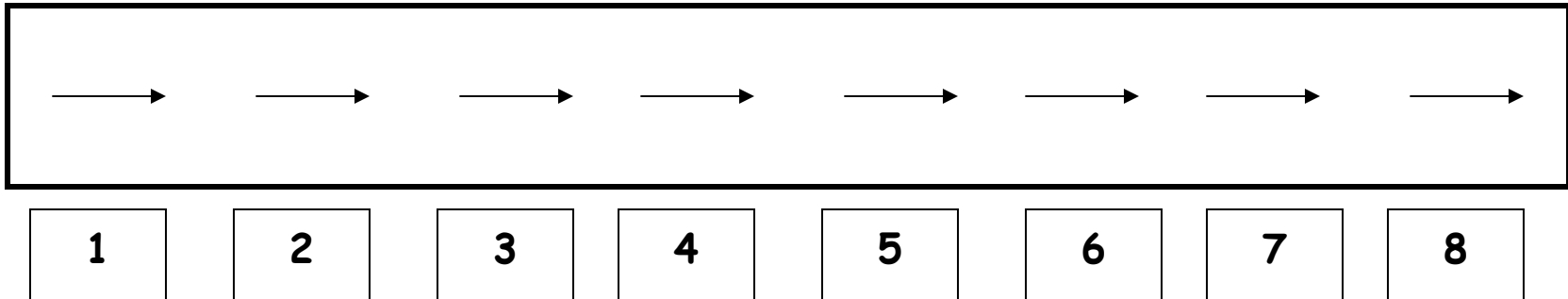


## DO NOW:

Below you will see a diagram that represents an assembly line. Answer the following questions.

- Describe one type of assembly line.
- What is the overall goal of the assembly line?
- What role does each individual play in reaching this goal?



# The Human Digestive System

## Structure and Function: Organs of The Human Digestive System

### Directions:

1. You will be organized into cooperative teams.
2. Each team will receive a packet of 8 cards that contain both a diagram of an organ(s) and its functions. Distribute two cards to each member of the team.
3. Each member is to read the functions out loud and show the diagram of the organ(s) to the other members of the team. After each reading place the cards on the table.
4. When the readings are completed, discuss and determine the order of the organs and place the cards in a linear sequence in a vertical column (top to bottom).
5. Complete the chart. Place the organs in the order that you have determined. For each organ, state the reasons why you placed it in this order.
6. On a blank sheet of paper, sketch a labeled diagram of the organs in the order that you have determined.
7. Answer the questions that follow.
8. After the class discussion, make any necessary adjustments.

**Directions:** After determining the order of the organs, complete the chart below.

<u>Number</u>	<u>Name of Organ(s)</u>	<u>State reasons for organ(s) placement</u>

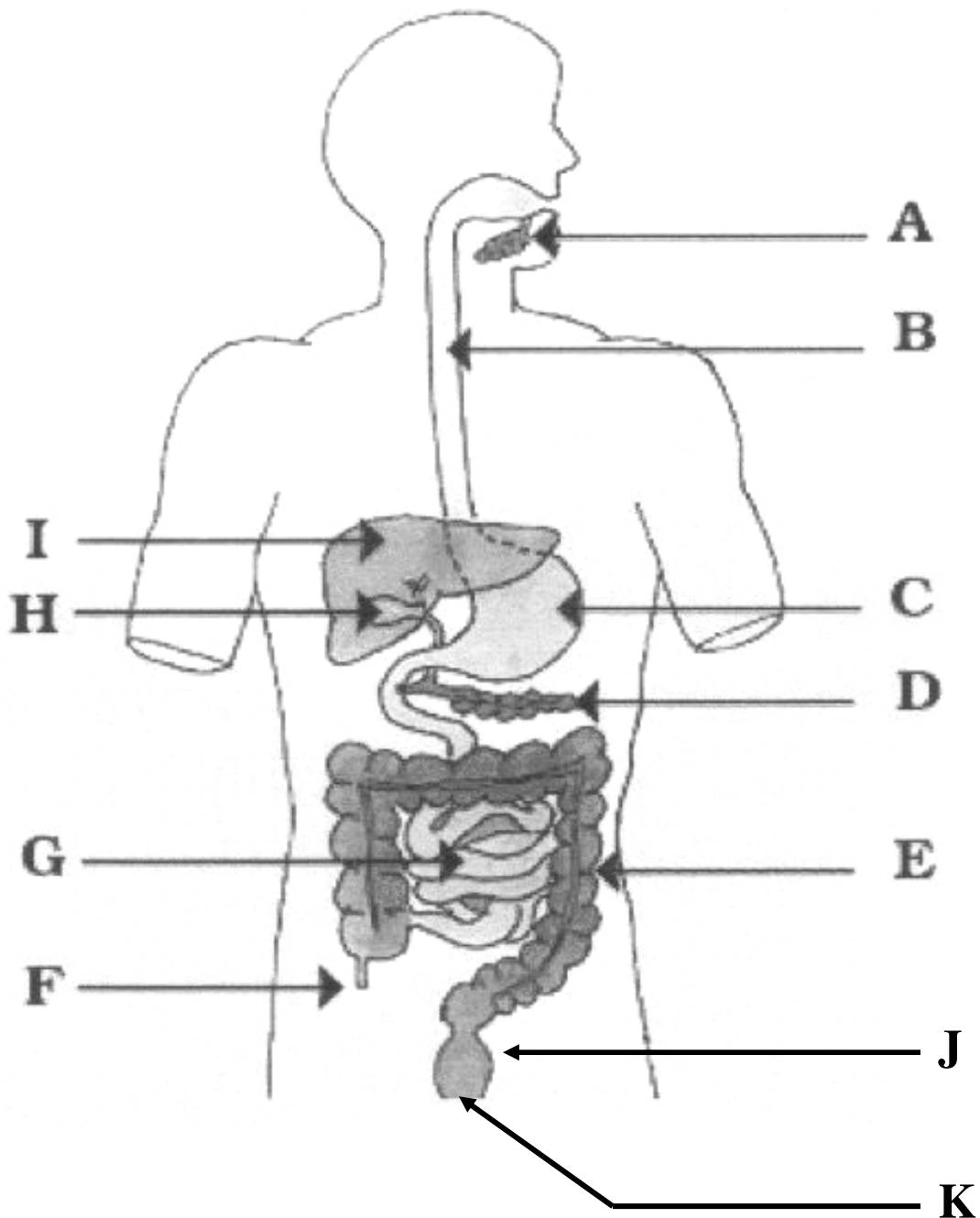
**Directions:** Your cards must be arranged in a vertical column in the center of your table. Look at the cards and sketch and label a diagram of the human digestive system below.

**Directions:** Answer the following questions in complete sentences based on what you learned about the human digestive system.

- 1. Name the digestive organ(s) that a human could live without. Explain why you believe a human could live without these organs.**
- 2. Name the digestive organ(s) that a human could not live without. Explain your answer by supporting it with evidence from today's lesson.**
- 3. Describe the advantage of a one-way digestive system in terms of an assembly line.**
- 4. Terri Schiavo is a woman from Florida that has been in a vegetative state for 13 years. She has been kept alive on a feeding tube. That means she receives all her nutrients directly into her bloodstream intravenously. If you could compare the feeding tube to a digestive organ, what organ would it represent? Why? Describe what type of nutrients would pass through the feeding tube.**

## The Human Digestive System

Directions: Identify the parts of the human digestive system in the diagram below. Complete the chart on the back of this page by explaining the function of each part.

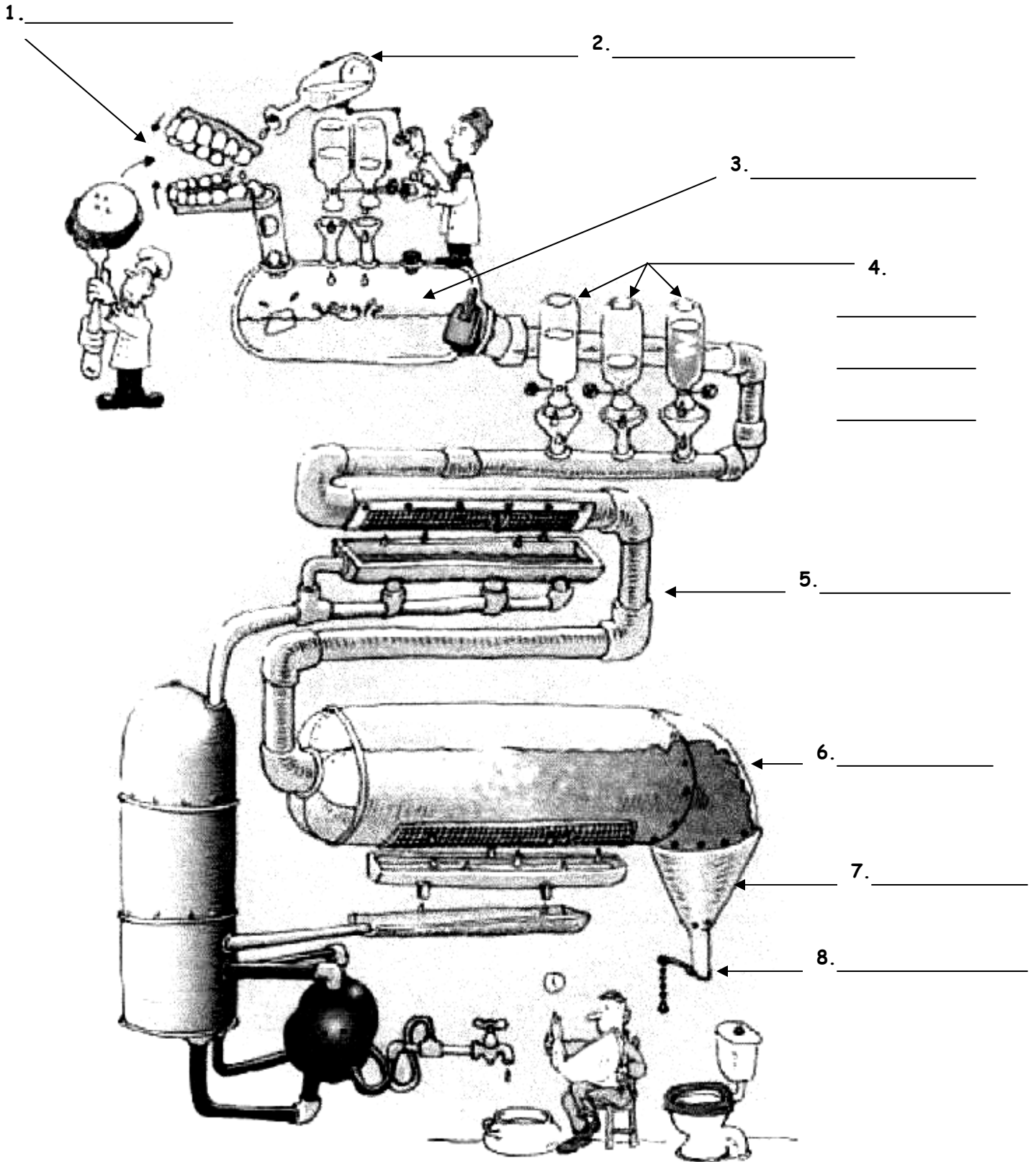


**Directions:** Complete the chart below to identify the organs of the human digestive system and to state the functions.

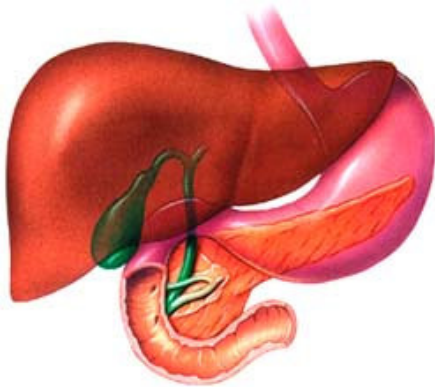
<u>Letter</u>	<u>Name of Organ</u>	<u>Function</u>
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		

# The Human Digestive System

Directions: Identify what each part of the diagram below represents.

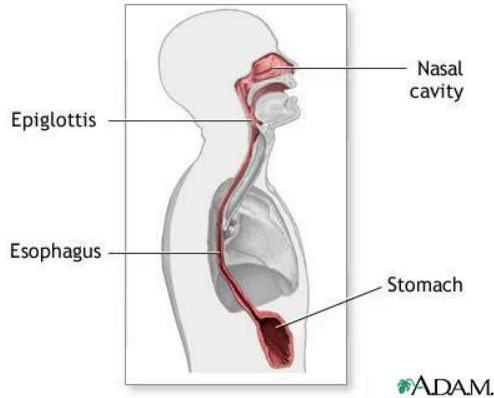






### #3 Liver, Pancreas, and Gall Bladder (Accessory Organs)

- Liver Produces bile that breaks down **LARGE** fat molecules into small fat molecules.
- Gall Bladder stores bile.
- Pancreas produces enzymes that digest all nutrients in the small intestine.
- Nutrients never pass through these organs.



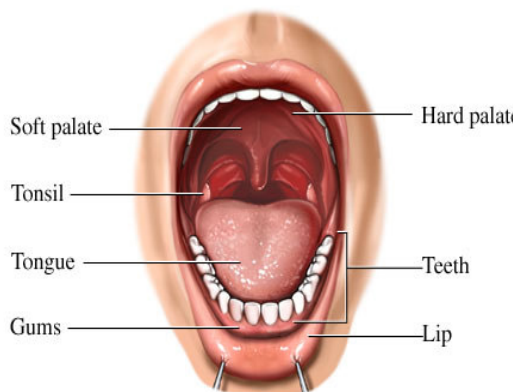
### #6 Esophagus

- Hollow tube-like organ that serves as a passageway for food between the mouth and stomach.
- Muscles contract and relax to move food along. This process is called peristalsis.



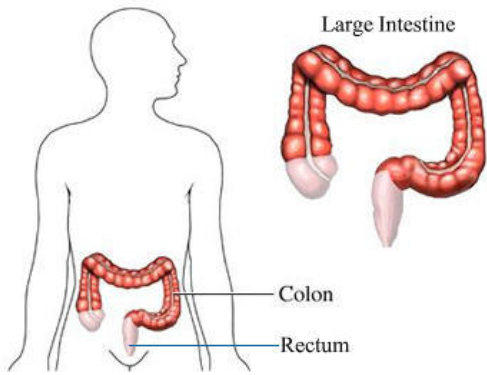
### # 2 Stomach

- This organ temporarily stores food.
- Contains gastric glands that secrete mucus, acid, and enzymes.
- The enzyme pepsin begins the digestion of proteins.
- Muscles of the stomach grind up **LARGE** pieces of food into smaller pieces.



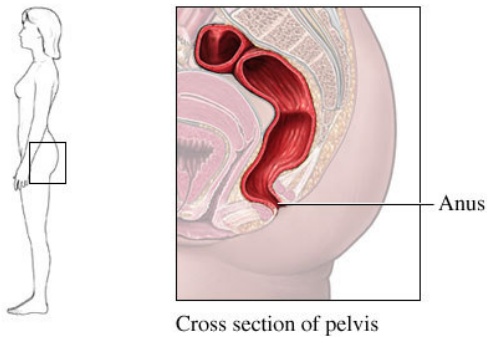
### # 8 Mouth

- Opening for the intake (ingestion) of food.
- Teeth break **LARGE** pieces of food into smaller pieces (mechanical digestion).
- Salivary glands produce saliva to moisten food and enzymes to begin the digestion of carbohydrates (chemical digestion).
- The start of mechanical and chemical digestion.



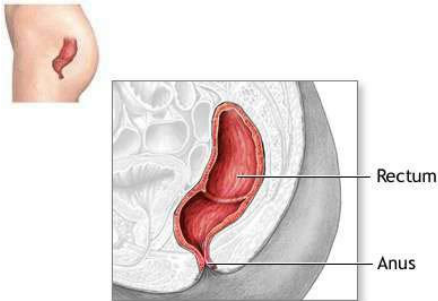
## #7 Large Intestine

- All non-digestible food passes into this organ.
- Contains bacteria (*E. Coli*) that break down wastes.
- Absorbs excess water and salt.
- Solid waste gets passed along.



## # 4 Anus

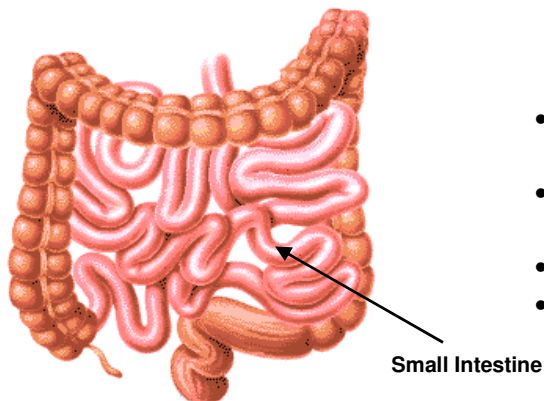
- This organ contains muscles that control the removal of solid wastes (egestion) from the body.



## # 1 Rectum

- Temporarily stores undigested solid wastes.

ADAM.



## #5 Small Intestine

- Don't let the name fool you. This organ is 20 feet long.
- Receives bile from the liver and enzymes from the pancreas.
- All chemical digestion is completed here.
- All digested (small and simple) nutrients are absorbed into the blood here.