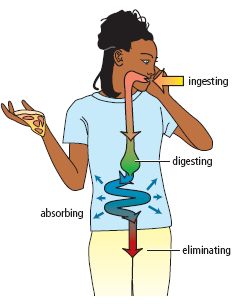
**2.2 THE DIGESTIVE System (PART 2) Name:**

**(Refer to pp. 70 – 76 of BC Science 8)**

**The Four Stages of Digestion**

**What is digestion?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* ****The four stages of digestion are:
  1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Digestion occurs along a big tube**

* Your digestive system is basically one big tube that starts at your \_\_\_\_\_\_\_\_\_\_\_ and ends at your \_\_\_\_\_\_\_\_\_\_\_.
* Digestion breaks down your food so that the nutrients can get \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Anything not absorbed is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the feces.

|  |  |  |
| --- | --- | --- |
| **Stage of Digestion** | **Location** | **Key Features of Stage** |
| 1. **Ingesting** | **Mouth** | “To ingest” means to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  It is the starting point of the digestive process. |
| 1. **Digesting** | **Mouth**  **Teeth, tongue**  **Pharynx**:  **Epiglottis**    **Esophagus**    **Stomach**    **Small Intestine**  **(Liver, Gall Bladder)** | You start digesting food the moment you start \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  When food enters your mouth, it undergoes both mechanical and chemical digestion.  **mechanical digestion**: It occurs by your teeth and tongue \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  Each small piece of food is called **\_\_\_\_\_\_\_\_\_\_**.  **chemical digestion**: When saliva coats the bolus it begins to break it down \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  An enzyme called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in your saliva begins to break down complex carbohydrates into simple carbohydrates.  As food moves from your mouth it passes through the pharynx  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  To make sure that food doesn’t enter your airway tube, a small flap of flesh covers the airway tube. It is called the **\_\_\_\_\_\_\_\_\_\_\_\_.**  When you swallow, the epiglottis covers your airway tube and your food enters the esophagus.  The bolus is pushed through the esophagus in a process called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, in which muscles in the esophagus push boli down to the stomach.  Inside the stomach is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, which is very acidic.  It is made from hydrochloric acid, mucus and enzymes.  The stomach walls are lined with **\_\_\_\_\_\_\_\_\_** to protect the tissue from being damaged by the acid.  An enzyme called **\_\_\_\_\_\_\_\_\_\_\_**, present in gastric juice, breaks down protein.  The bolus that enters your stomach breaks down into a liquid called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.  The first metre of the small intestine is called the **\_\_\_\_\_\_\_\_\_\_\_**.  The pancreas adds \_\_\_\_\_\_\_\_\_\_\_\_\_ that help break down the carbohydrates, protein, and fat in the chyme.  The liver produces \_\_\_\_\_\_ which is stored in the gall bladder.  Bile breaks the globs of \_\_\_\_\_\_ into smaller droplets. |
| 1. **Absorbing** | **Small intestine**    **Large Intestine** | Absorption: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  The small intestine is covered with \_\_\_\_\_\_\_ to help increase the rate at which nutrients are absorbed.  villi: fold-like structures lining the wall of the small intestine, which increase the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ available to absorb nutrients.  The large intestine reabsorbs \_\_\_\_\_\_\_\_ and some \_\_\_\_\_\_\_\_\_\_\_.  \_\_\_\_\_\_\_\_\_ moves the undigested food along the digestive system.  **The role of bacteria in digestion**  Beneficial bacteria aid in the breakdown and absorption of \_\_\_\_\_\_ and use undigested material to make \_\_\_\_\_\_\_\_\_\_\_\_\_.  Ex. Vitamin K, which helps your blood clot. |
| 1. **eliminating** | **Rectum & Anus** | Any solid material, undigested by the end of the large intestine is called \_\_\_\_\_\_\_\_\_.  Feces are stored in the \_\_\_\_\_\_\_ until they are eliminated through the \_\_\_\_\_.  \_\_\_\_\_\_\_\_\_\_\_\_\_ is the end of the digestion process. |