**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.

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| **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. |