**AP Biology: The Digestive System**

An animal’s digestive system depends on the animal’s\_\_\_\_\_\_\_\_\_\_. The key to digestion in \_\_\_\_\_\_\_\_\_. When this is maximized, with the help of \_\_\_\_\_\_\_\_\_\_\_\_\_ digestion,\_\_\_\_\_\_\_\_\_\_\_ digestion if more efficient.

**Swallowing:** occurs in the **\_\_\_\_\_\_\_\_\_\_**. During swallowing the soft palate (**\_\_\_\_\_\_\_**) covers the nasopharynx and the **\_\_\_\_\_\_\_\_\_\_\_\_** covers the glottis (the opening to the larynx -voice box)) and stops food from going down the .

\_\_\_\_\_\_\_\_\_\_\_ is secreted as

you chew.

It is full of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to

help break down your food to

prepare it for absorption

**Peristalsis** – rhythmic **\_\_\_\_\_\_\_\_\_\_\_** (of muscles) that moves **\_\_\_\_\_\_**along. Found in the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

At this point your food is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Stomach:**

* thick walls, contains **\_\_\_\_\_\_\_\_\_\_\_\_** that lead to **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* Mechanical digestion is achieved by the \_\_\_\_\_\_\_\_
* the folds disappear as the stomach grows to **\_\_\_\_L** max capacity
* **\_\_\_\_\_\_\_\_\_\_\_\_** produced by the gastric glands contains **\_\_\_\_\_\_\_\_\_\_\_\_** (the precursor for pepsin) (enzyme), **\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_**).
* Hydrochloric acid causes the pH of the stomach to be pH = **\_\_\_\_** and helps to break down the food in the stomach along with **\_\_\_\_\_\_\_\_\_\_\_\_\_**.
* **\_\_\_\_\_\_\_\_\_\_\_** protects the walls from the **\_\_\_\_\_\_\_\_\_** (HCl)
* **\_\_\_\_\_\_\_\_**, **\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_** are absorbed into your blood stream here.
* empties in about **\_\_\_\_\_** hours and the food is now called **\_\_\_\_\_\_\_\_\_**
* The chyme travels through the **\_\_\_\_\_\_\_\_\_\_\_** sphincter into the small intestine

**Small intestine:** – takes part in **\_\_\_\_\_\_\_\_\_\_**digestion- with the release of **\_\_\_\_\_\_\_\_\_\_\_\_\_** that break down **\_\_\_\_\_\_\_,** **\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_**.

Also, takes part in **\_\_\_\_\_\_\_\_\_** digestion – through continued **\_\_\_\_\_\_\_\_\_\_\_**.

The first section of the small intestine is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ where there is a great deal of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Villi:** Finger like **\_\_\_\_\_\_\_\_\_\_** on the **\_\_\_\_\_\_\_\_** of the small intestine, increase the **\_\_\_\_\_\_\_\_\_\_\_\_\_** available for absorption of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

**Microvilli:** **\_\_\_\_\_\_\_\_\_\_\_\_** extensions that produce enzymes (such as peptidase and maltase) and absorb **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

Glucose, amino acids and nucleic acids are absorbed into the **\_\_\_\_\_\_\_\_\_\_** capillaries

Fats including Glycerol and fatty acids are absorbed into the **\_\_\_\_\_\_\_\_\_\_** and enter the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** system



**Bile**: made in the **\_\_\_\_\_\_\_\_\_\_,** stored in the **\_\_\_\_\_\_\_\_\_\_\_**, secreted through the **\_\_\_\_\_\_\_\_\_\_\_\_\_** into the **\_\_\_\_\_\_\_\_\_\_\_\_\_**. The bile emulsifies **\_\_\_\_\_\_\_\_\_** – breaks it down into fat **\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**Pancreas**: produces **\_\_\_\_\_\_\_\_\_\_\_\_** which consists of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, pancreatic amylase, trypsinogen (the precursor for trypsin), nuclease and lipase.

**Large Intestine:** The beginning portion is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The main role of the large intestine is to remove \_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_. It contains anaerobic (live without **\_\_\_\_\_\_\_\_\_\_\_**) bacteria which break down food and produce **\_\_\_\_\_\_\_\_\_\_\_\_\_** and other molecules which can be **\_\_\_\_\_\_\_\_\_\_\_\_\_**.