

The Digestive System!

The digestive system breaks down the food we eat into smaller and smaller pieces allowing us to absorb nutrients and get rid of waste.

1. Label the digestive tract using the words below:

Large Intestine

Mouth

Salivary Glands

Liver

Stomach

Gall Bladder

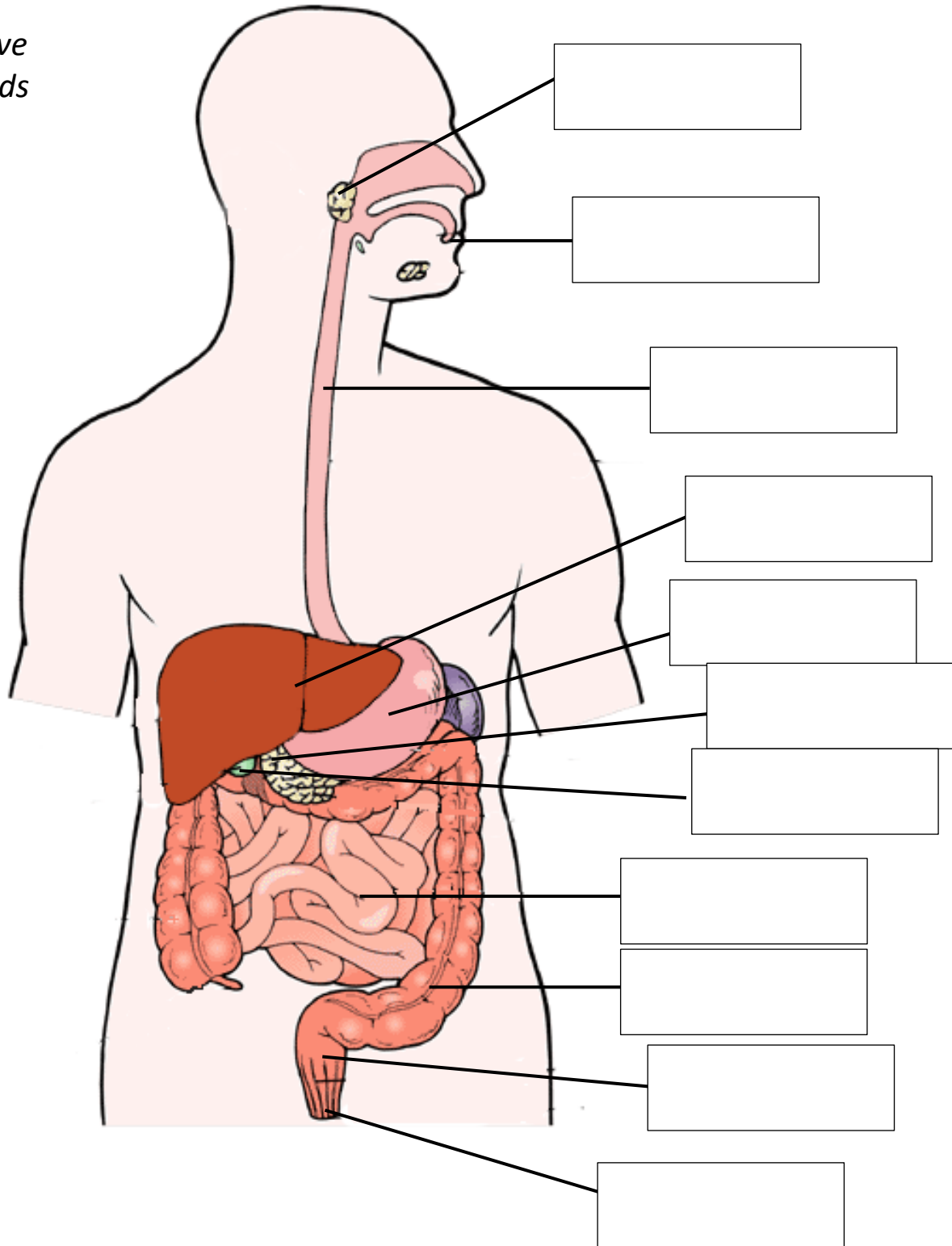
Small Intestine

Rectum

Pancreas

Anus

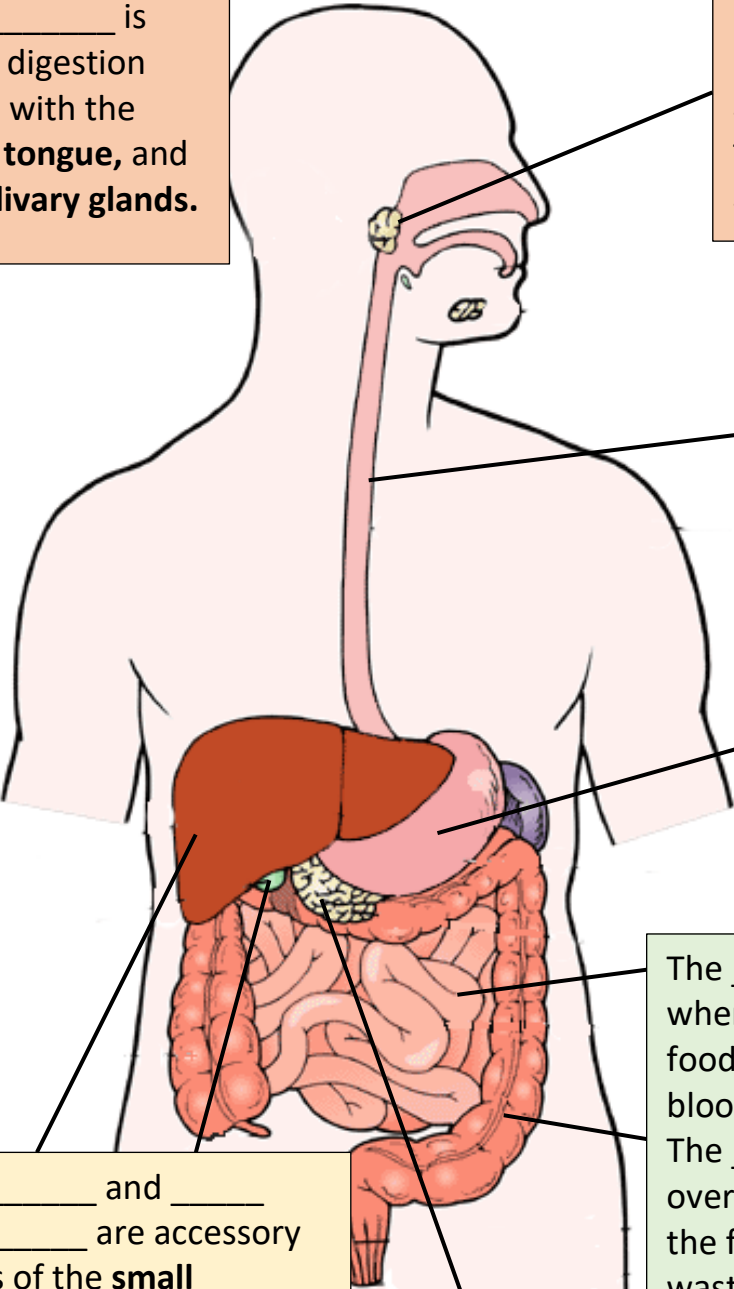
Esophagus



2. Fill in the blanks of the Human Digestive System!

The _____ is where digestion begins with the **teeth**, **tongue**, and the **salivary glands**.

We **teeth** chew food to begin mechanical digestion. The **tongue** moves the food around to mix it with saliva from the _____ for the start of the chemical breakdown of starchy foods.



When you swallow food, it goes down the _____, a long muscular tube about 10 inches (25 cm) to the **stomach**.

The _____ is a storage tank for digesting food. It does both mechanical and chemical digestion and churns the food and mixes it with gastric juices.

The _____ is a long tube where digestion is completed and all the food nutrients are absorbed into the blood.
The _____ absorbs any left over water, vitamins and electrolytes in the food passing through it before the waste exits the body through the **rectum** and **anus**.

The _____ and _____ are accessory organs of the **small intestine**. The **liver** makes bile, which breaks down fat and stores it in the **gall bladder**. The **liver** also filters the blood and stores vitamins and nutrients for when the body needs them.

The _____ makes an enzyme that lowers the acidity of the food coming out of the **stomach** into the **small intestine**. It also makes insulin, which lowers sugars in the bloodstream.

3. Our oceans depend on the digestive systems of whales. Whales eat some of the smallest organisms in the world called plankton.

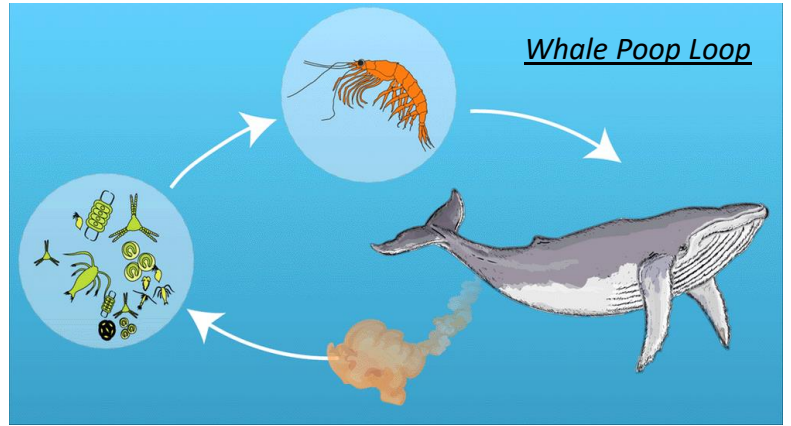
There are two different types of plankton. Please research the difference between the two and continue to fill in the table below. Find at least **three** new characteristics for each.

Phytoplankton	Zooplankton
<ul style="list-style-type: none"> - <i>“plant” plankton – performs photosynthesis</i> 	<ul style="list-style-type: none"> - <i>“animal” plankton – consumes other organisms for energy</i>

4. Draw and label a food chain that includes the **sun, phytoplankton, zooplankton, and a baleen whale (humpback, grey, or blue whale)**. You can include other animals, but make sure to include the ones listed above.

5. Just like humans, whales poop once food travels through their entire digestive tract. Baleen whales’ poop provides A LOT of nutrients to the ocean, giving whales the name “farmers of the ocean.” Their poop provides the nutrients phytoplankton need to grow and survive.

Phytoplankton are incredibly important because they give us most of the oxygen we breathe, about 70%!



Watch this video! <https://video.nationalgeographic.com/video/til/00000159-0493-db34-a5d9-85b730170000>

- a. Without whale poop we would not have _____.
- b. Without phytoplankton we would not have _____ to breathe.

Draw and label your own whale poop loop below!

