The Digestive System!

1. What does the digestive system do?
___________________________________________________________________

2. Label the digestive tract using the words below:

- Large Intestine
- Mouth
- Salivary Glands
- Liver
- Stomach
- Gall Bladder
- Small Intestine
- Rectum
- Pancreas
- Anus
- Esophagus
3. Fill in the blanks of the Human Digestive System!

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 waste exits the body through the **rectum** and **anus**.

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.

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 ________ is where digestion begins with the **teeth**, **tongue**, and the **salivary glands**.
4. 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.

<table>
<thead>
<tr>
<th>Phytoplankton</th>
<th>Zooplankton</th>
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<tbody>
<tr>
<td>- “plant” plankton – performs photosynthesis</td>
<td>- “animal” plankton – consumes other organisms for energy</td>
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</tbody>
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5. 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.
6. 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%!


a. In your own words, explain the whale poop loop and why it is so important to maintain?

b. What can we do as humans to help maintain a healthy poop loop?