Name: _____   Date: _____
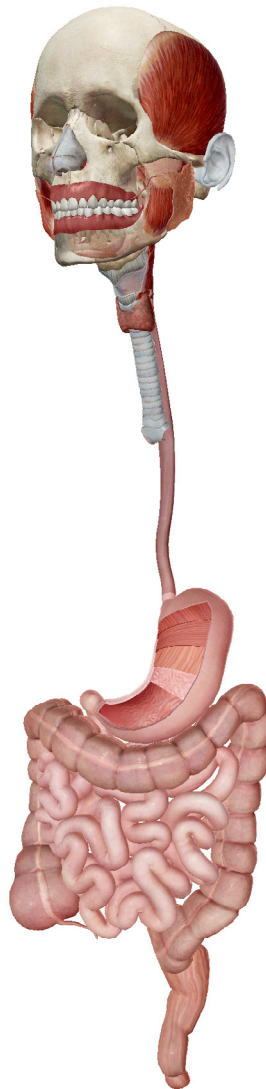
Activity 1: Digestive Lab

1. Launch the view!

• If you're already in AR mode: point your camera* at the image below.

• If you're not in AR mode:

  • Open Visible Body Suite.

  • Search for and select the view "Digestive System."

  • ⟨⟩ **Launch AR mode.**

2. Fill in the blanks.

• Find the structures listed in the word bank.

• Read the definitions, then fill in the blank with the correct digestive system structure from the word bank.

* Augmented Reality (AR) is supported on many iPhones, iPads, and Android mobile devices. See details at visiblebody.com/ar

Word bank:

- Alimentary canal
- Anal canal
- Epiglottis
- Esophagus
- Large intestine
- Oral cavity
- Salivary glands
- Small intestine
- Stomach
- Tongue
- Rectum

The _____ is a single, continuous tube that includes the oral cavity, esophagus, stomach, and intestines.

The _____ contains the teeth, tongue, and hard and soft palates. Food, also known as the bolus, passing through here is chewed by the teeth and partially digested by saliva.

The _____ secrete saliva to aid in chewing and swallowing of the bolus, beginning chemical digestion.

The _____ works with the teeth to break down food into small masses that can be swallowed.

The _____ prevents choking by folding down to close off the larynx and trachea, directing the bolus into the esophagus.

The _____ is a long, hollow, muscular tube that extends from the pharynx to the stomach. It's the pathway for the bolus to enter the stomach.

The _____ has four regions and three layers, provides food storage, and breaks down ingested food into chyme.

The _____ has three regions, the duodenum, jejunum, and ileum.

Name: _____   Date: _____

The _____ is composed of the colon, cecum, appendix, rectum, and anal canal. The final phases of digestion, absorption, and elimination occur here.

The _____ is the final segment of the large intestine and serves primarily to store and expel solid waste. It's a tube that's approximately 12 cm long.

The _____ is located at the inferior end of the rectum and extends to the anus. It's the termination point or end of the alimentary canal. It temporarily stores solid waste that's ready to be eliminated from the body.
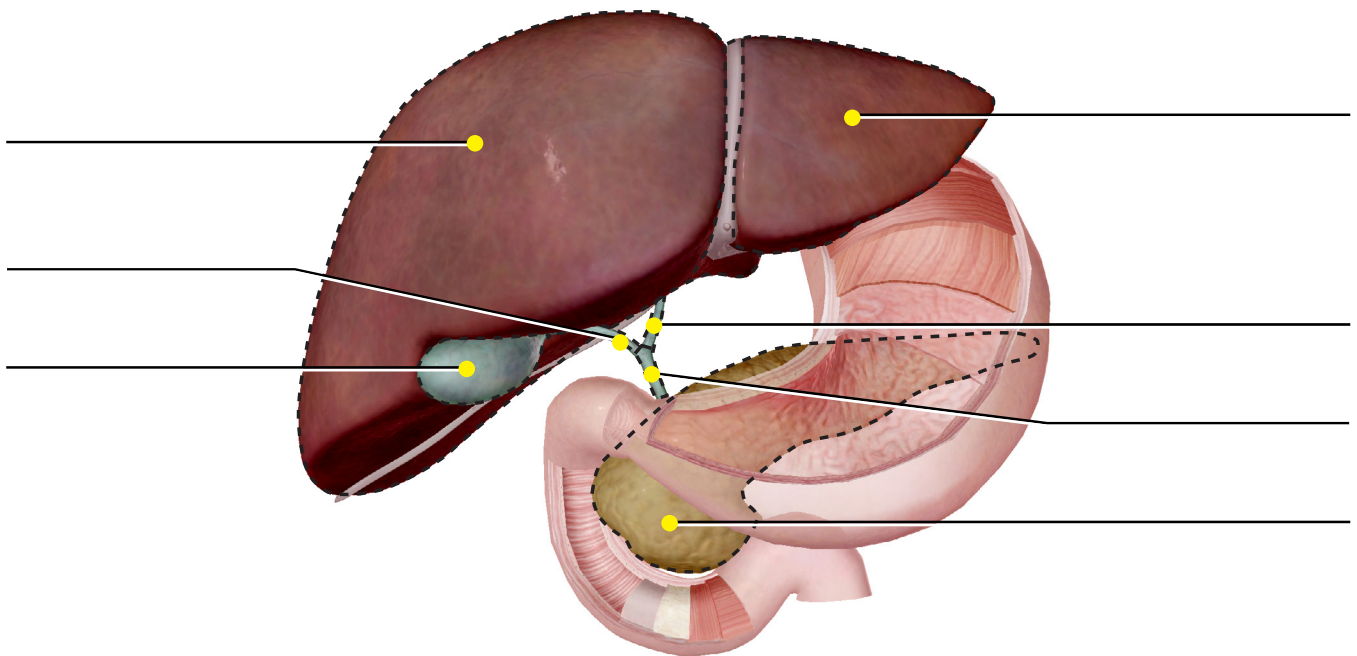
Name: _____   Date: _____

Activity 2: Digestive Lab

1. Launch the view!

• If you're already in AR mode: point your camera at the image below.

• If you're not in AR mode:

  • Open Visible Body Suite.

  • Search for and select the view "Accessory Organs."

  • ⟨⟩ **Launch AR mode.**

2. Label the image.

• Explore the 3D model of the accessory organs to locate the anatomy in the structure list.

• Use the structure list to label the image.

Structure list:

1. Common bile duct

2. Common hepatic duct

3. Cystic duct

4. Gallbladder

5. Liver, left lobe

6. Liver, right lobe

7. Pancreas

Name: _____ Date: _____

Activity 3: Digestive Lab

1. Review how food travels through the digestive system.

- Read the articles here: https://www.visiblebody.com/learn/digestive.
- Number the following statements, from 1 to 10, to accurately show the path food takes through the digestive system.

____ Gastric juices, produced in the gastric gland and containing hydrochloric acid and enzymes, digest food into chyme.

____ Solid waste is temporarily stored in the rectum before it is passed through the anal canal.

____ The tongue rises to the roof of the mouth, directing the bolus out of the oral cavity.

____ Food is consumed and taken into the oral cavity.

____ Pancreatic juice enters the duodenum through the pancreatic ducts to aid digestion in the small intestine.

____ The bolus passes from the oral cavity to the pharynx and into the esophagus.

____ Chyme travels through the small intestine, where nutrients are absorbed into the bloodstream.

____ Food is broken down into a small mass called the bolus by being chewed and mixed with saliva that is secreted by the salivary glands.

____ Chyme travels through the large intestine, where water and specific vitamins are absorbed and the remaining waste materials pass to the rectum.

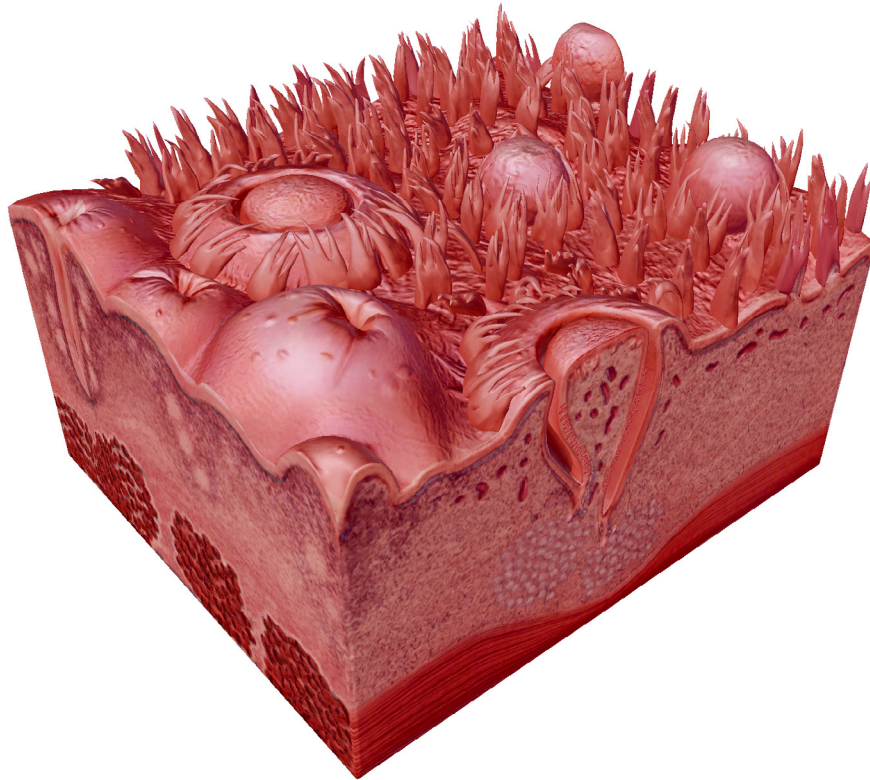____ Peristaltic waves move the bolus down the esophagus into the stomach.

Activity 4: Digestive Lab

1. Launch the view!

• If you're already in AR mode: point your camera at the image below.

• If you're not in AR mode:

- • Open Visible Body Suite.
- • Search for and select the view "Tongue Surface."
- • ⟨⟩ **Launch AR mode.**

Find the following structures of the tongue.

Papillae are elevations on the tongue, some of which contain taste buds. In the 3D model, find the **vallate papillae**: Each contains 100-300 taste buds. **Fungiform papillae** are shaped like mushrooms: Each contains about 5 taste buds.