Virtual Guts Journal

NAME
Digestive System

What is the job of the digestive system? ________________________
___________________________________________________________
___________________________________________________________
___________________________________________________________
___________________________________________________________

What does the word digestion mean? __________________________
___________________________________________________________
___________________________________________________________
___________________________________________________________

Fun fact: How long is the gastrointestinal tract? ________________

Draw a picture of your favorite food, and describe what happens when you think about it.
Digestive System

Label the parts.
large intestines  mouth  pancreas
small intestines  liver  gall bladder
stomach  esophagus
What kind of breakdown is happening?
(Check box)
☐ Mechanical by what? __________________
☐ Chemical by what? __________________
☐ None

**Sweet Tart Experiment:** Draw the sweet tart at each breakdown stage.

<table>
<thead>
<tr>
<th>Before Breakdown</th>
<th>Mechanical Breakdown</th>
<th>Chemical Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fun Fact:** Unlike in humans, the frog's tongue attaches at the _________ of the mouth.
What kind of breakdown is happening?

☐ Mechanical by what? __________________

☐ Chemical by what? __________________

☐ None

How does peristalsis help move food from the mouth to the stomach?

Fun fact: You can swallow while upside down and in space because of__________________.
What kind of breakdown is happening?
(Check box)

☐ Mechanical by what? __________________
☐ Chemical by what? __________________
☐ None

After your food is broken down in the stomach, it is called **chyme**.

Why does the stomach have rugae? __________________
________________________________________________
________________________________________________
________________________________________________

Draw the frog’s rugae

Fun fact: The stomach can stretch to the size of a ____________________.

Fun fact: How long does food stay in the stomach? ____________________.
# Small Intestines

What kind of breakdown is happening?
(Check box)

- [ ] Mechanical by what? __________________
- [ ] Chemical by what? __________________
- [ ] None

What is the job of small intestine? __________________

Fun Fact: How long is the small intestine? __________________

## Accessory Organs: Match the organ with its job.

<table>
<thead>
<tr>
<th>Organ</th>
<th>Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gall Bladder</td>
<td>Stores bile and releases it into the small intestine</td>
</tr>
<tr>
<td>Pancreas</td>
<td>Makes bile that helps break down fats</td>
</tr>
<tr>
<td>Liver</td>
<td>Makes pancreatic enzymes that help break down proteins</td>
</tr>
</tbody>
</table>
Large Intestines

What kind of breakdown is happening?
(Check box)

☐ Mechanical
☐ Chemical
☐ None

by what?

All nutrients are absorbed in the small intestines. What is absorbed in the large intestine?

Fun fact: How long does chyme stay in the large intestine?

Trace the path of food through the gastrointestinal tract.
Observations

Use this space to draw/write your observations from the dissection.

Did you notice any differences between the frog and human digestive system? Why do you think that is?

**Breakdown Review.** What kind of breakdown happens in each part of the digestive system?

<table>
<thead>
<tr>
<th>Part</th>
<th>Chemical breakdown</th>
<th>Mechanical breakdown</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esophagus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Intestine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Intestine</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>