

# Cat Digestive Dissection

## A. Cardiovascular/ Respiratory Removal

Remove the Cat's Heart, Lungs and Trachea one segment. To do this, You will need to cut the Blood vessels holding the heart in place (Aorta, Vena Cava) as well as cutting the trachea. The Trachea should be cut as superior as possible, in the area near where the cat had the stitches in it's neck. **Be careful not to cut the esophagus, which lies deep to the Trachea. You need to have it in tact.**

If you want, you may briefly examine the heart/ lung complex. If you feel really frisky, you can insert a straw into the trachea and inflate the lungs by sealing the top of the trachea around the straw with your fingers and blowing gently into the straw.

## B. External Observations and Identification.

Locate the following structures within the cat's thoracic and abdominal cavities.

Esophagus, Stomach (Fundus, Body, Pylorus), Small Intestine (duodenum), Large Intestine, Liver, Gall bladder, Pancreas, Spleen.

Using a scissors, separate the small intestine from the mesentery. Once you have freed the entire small intestine, measure its total length.

NOTE – Do not cut the intestine in any way, leave it attached while separating it from the mesentery.

Answer the questions on this section.

## C. Internal Observations and Identification.

Using a scissors, create an incision along the alimentary canal. Start in the esophagus approximately 3cm above the stomach and continue through the stomach to a point on the small intestine approximately 3cm below the stomach. Make an additional incision starting in the small intestine approximately 1cm before it meets the large intestine and continue until approximately 3 cm below this junction. Observe the thickness of the wall of each of these structures. Observe the texture of the inner lining of each of these structures. Locate the Cardiac Sphincter, Rugae, Pyloric Sphincter. Remove the contents of each of these organs and identify if possible.

Answer the Questions in this section.

Name \_\_\_\_\_ Per. \_\_\_\_\_

## Cat Digestive System Questions

### A. Cardiovascular/ Respiratory Removal

No Questions in this section. This is optional.

### B. External Observations and Identification.

1. Where is the esophagus located in the body cavity?
2. What is located over the anterior surface of most of the stomach?
3. How would you describe the general shape of the stomach?
4. How many lobes (segments) does the liver have?
5. What is the tiny green raisin like structure in the middle of the liver?
6. Why wouldn't it appear to be deflated in life?
7. Compared to the diagrams of a human digestive system, which part of the cat's alimentary canal looks significantly smaller than that of a human?
8. Any ideas why it is so much smaller?
9. What is the length of the small intestine of your cat in centimeters?

### C. Internal Observations and Identification.

1. Describe the thickness of the walls of each of these four structures.
2. What is the structure where the esophagus meets the stomach?
3. What is the purpose of the structure in #3?
4. What is the corresponding structure located where the small intestine meets the stomach?
5. Describe the texture of the inner lining of each of the four cut open structures.
6. Describe the contents, if any, of each of the four structures. Can you identify any contents that do not constitute food? If so, what.