**Monogastric Digestion Worksheet**

1. Label the following parts of the human digestive system: 

A: \_\_\_\_\_\_\_\_\_\_\_Mouth\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B: \_\_\_\_\_\_\_\_\_\_\_Esophagus\_\_\_\_\_\_\_\_\_\_\_\_\_

C: \_\_\_\_\_\_\_\_\_\_\_Stomach\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

D: \_\_\_\_\_\_\_\_\_\_\_Large Intestine/Colon\_\_\_\_

E: \_\_\_\_\_\_\_\_\_\_\_Small Intestine\_\_\_\_\_\_\_\_\_\_

F: \_\_\_\_\_\_\_\_\_\_\_Rectum/Anus\_\_\_\_\_\_\_\_\_\_\_

1. Explain one similarity and one difference between true monogastric animals and hindgut fermenters.

Both monogastric animals and hindgut fermenters have one stomach that digests food enzymatically. True monogastrics have very limited fiber digestion, but hindgut fermenters have a better ability to digest fiber due to their extensive cecum.

1. In the cracker experiment performed during the presentation, what enzyme were you testing the presence of in your saliva?

Salivary amylase

1. What is the difference between fermentation and enzymatic digestion?

Fermentation happens anaerobically (without oxygen present) when microbes breakdown nutrients. In ruminant animals this occurs in the rumen (primarily), reticulum, omasum, and large intestine. Enzymatic digestion occurs through secretion of enzymes by the animal. This occurs in the abomasum and small intestine in the ruminant animal.

1. The stomach of monogastric animals is at least partially glandular, what does this mean?

This means that it secretes enzymes.

1. What do many scientists hypothesize that the appendix in the human was?

Scientists believe that it is the remnant from a larger cecum when forages were utilized more in our diet.

1. List three examples of a monogastric animal:

Answers will vary but some of the more common answers may be: horse, human, pig, rabbit, cat, dog, bird, elephant, sloth, etc.