

Digestion SL

1. Draw and annotate a diagram of the digestive system

2. The role of the digestive system is to convert large, _____ molecules into small, _____ molecules. The large molecules can be referred to as _____ and the smaller molecules are _____. Some examples of molecules that are digested fully into _____ include _____, _____, _____ and _____ acids. It is important to note that _____ is not digested due to the structure of the molecule, _____. Most of the digestion takes place in the _____ of the _____, with the help of enzymes secreted by the _____.

3. Complete the table of Enzymes:

Name	Source or site of Enzyme	Substrate(s)	End product(s)
	Pancreas	Polypeptides	
			Fatty acids and Glycerol
			Maltose
			Dextrin
			Glucose
			Glucose

4. Due to contraction of the _____ and _____ muscles, food moves along the gut. This process is called _____.

5. Draw and label a transverse cross-section of the small intestine:

6. After the _____ enzymes have done their work, the products are then absorbed by the _____, further along the _____. There are many of these in order to increase the _____ for absorption. They absorb the _____ from digestion, but also _____ and mineral _____. All products go directly to the _____ after being absorbed (blood vessels collect in the _____).

7. Depending on the type of molecule, the method for absorption varies:

- a. Small, non-_____ molecules simply cross over the _____ bilayer. This is called _____ diffusion. An example of a _____ that cross this way are _____.
- b. _____ molecules are repelled by the bilayer so they require a _____ protein. This is called _____ diffusion. An example is _____.
- c. _____, such as _____ and _____ are absorbed via _____ transport.
- d. _____ is an interesting case. It is taken in by _____, and then proteins are _____ in the _____ carrying it. This allows it to enter the bloodstream. This type of molecule is called a _____.