

## **Food Glorious Food**

### **KS4**

### **Monday - Science**

#### **The Digestive System**

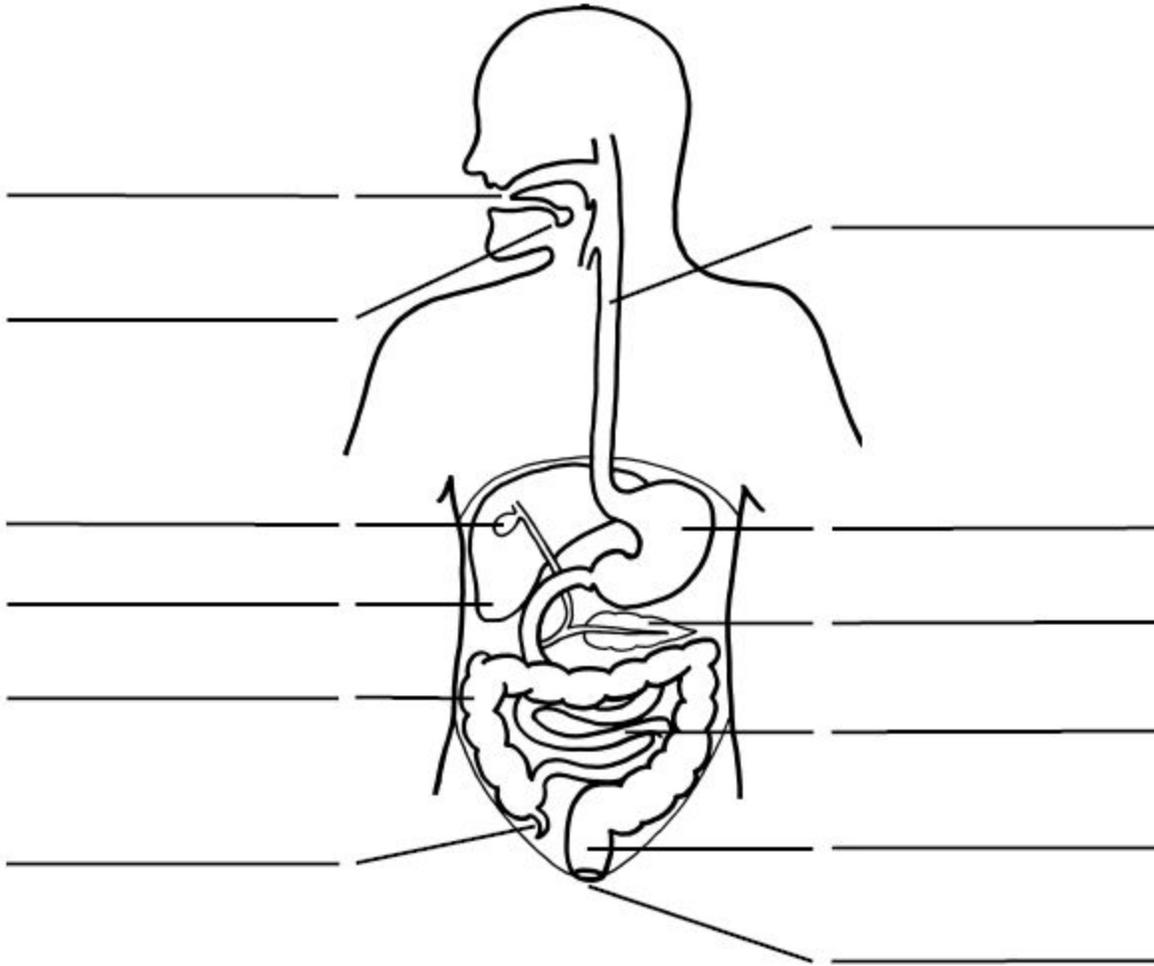
Today's work is on the digestive system. It is made up of practice questions to test your knowledge. Before you attempt these questions you should check your notes on this area. You may also want to watch one (or both) of these informative videos.

<https://www.youtube.com/watch?v=aini8zNFyL0>

<https://www.youtube.com/watch?v=goSC-1YvHVk>

#### **Questions**

1. Define the word tissue. [1 mark]
2. Define the word organ [1 mark]
3. Describe how the stomach is adapted for its role in the digestion of food. [5 marks]
4. Using the human digestive system as an example, explain how the organs in an organ system rely on each other to function properly. [6 marks]
5. Three types of enzymes found in the body are amylase, protease and lipase.
  - a. Describe where each enzyme is made in the body. [3 marks]
  - b. Identify which reaction each enzyme catalyses. [3 marks]
  - c. Describe where each reaction works in the digestive system. [3 marks]
6. The small intestine contains structures known as villi. Why does the small intestine contain these? What are they for? [2 marks]
7. Describe the roles of the liver and the pancreas in digestion. [2 marks]
8. Complete the labels on the diagram.



tongue      salivary gland      liver      gall bladder      small intestine      gullet  
 pancreas      stomach      large intestine      appendix      rectum      anus

9. Complete the table with the correct organs.

Organ	Function
	Here the food is chewed and moistened with saliva. The food is shaped into a round ball before it is swallowed.
	This is a tube that squeezes the food down to the stomach.
	This is a bag that churns up the food. It contains gastric juice and hydrochloric acid. Gastric juice contains an enzyme that digests protein. The acid kills germs.
	This is a very long tube that the food passes into after it leaves the

	stomach. Here the food is completely digested and then it is absorbed through the walls and into the blood stream.
	This is a small leaf-shaped organ. It makes pancreatic juice which passes into the small intestine. This juice contains an alkali that helps to neutralise the acid from the stomach. It also contains several enzymes.
	This organ makes a chemical called BILE which is stored in a small bag called the GALL BLADDER. The bile is squeezed into the small intestine where it helps to break up large pieces of fat.
	This is a wide tube that the undigested food passes through. Water is absorbed from this back into the body.
	This organ has no function in humans but it helps with digestion of plant material in herbivores such as sheep. It sometimes becomes infected in humans and then it must be removed.
	The dried out waste food material is stored here until it is ready to be passed out of the body through the anus.