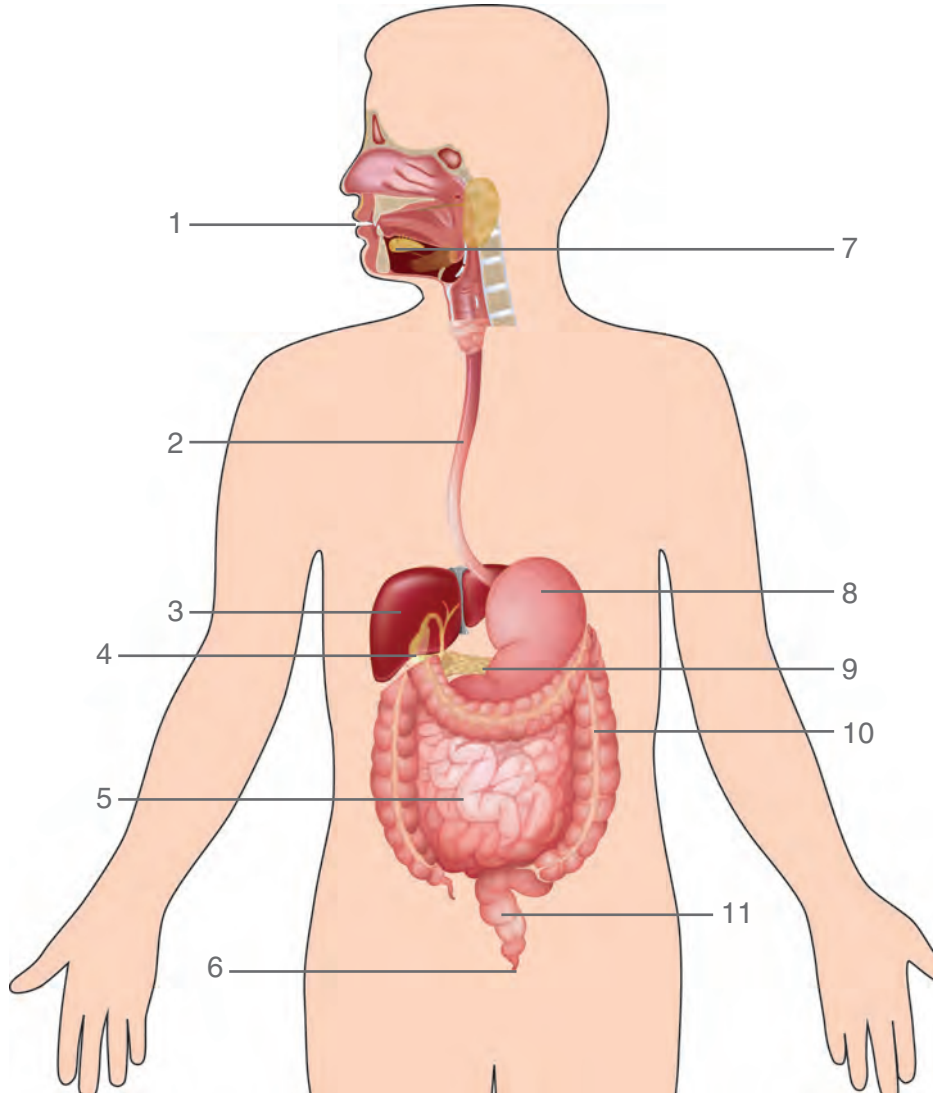




Exercise 2

Date: _____

Provide labels for the following sketch.



1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

11 _____



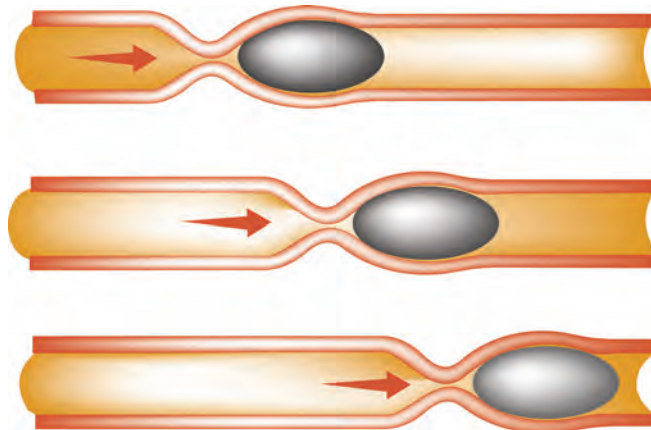
1.2 Provide a title for this sketch.

1.3 Number 1 consists of a variety of parts. Name each of the parts and give a function of each one.

1.4 Name two things that are produced by number 3 and give a function of each one.

1.5 What is absorbed by number 10?

2 Look at the following sketch.





2.1 What is illustrated in this sketch?

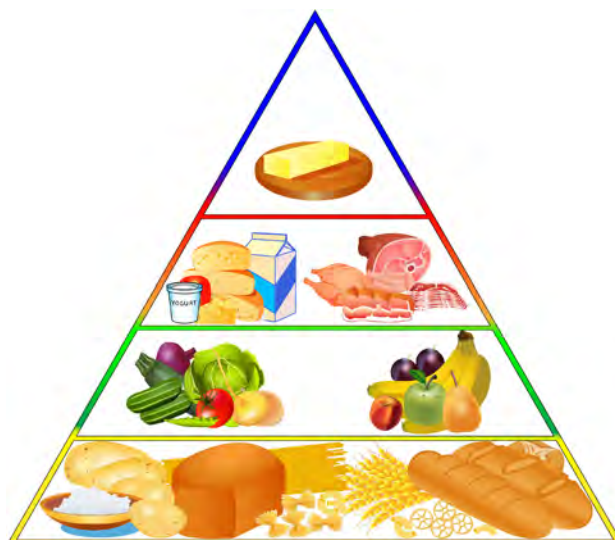
2.2 Write down the definition of the term given in your answer in Question 2.1.

2.3 In which body parts does this process take place?

3. Do research and complete the following table. Write down a disease which may be caused by a deficiency of the nutrient mentioned.

Nutrient	Disease due to a deficiency
Example: protein	Kwashiorkor
Vitamin A	
Vitamin C	
Vitamin B ₁	
Vitamin D	
Iron	
Iodine	
Calcium	

4 Study the food pyramid below and answer the questions that follow.





4.1 Water is not included in this food pyramid, although it plays an essential part in your diet. What function(s) does water fulfil in your body?

4.2 What effects does a shortage of water have on your body?

4.3 Name any three nutrients and give a source of each.

4.4 Which nutrient forms the top of the food pyramid?

4.5 Name a natural source of the nutrient named in Question 4.4.

4.6 How many portions of the following food groups are required for a balanced diet?

4.6.1 Grains and cereals _____

4.6.2 Meat, fish, chicken, nuts _____

4.6.3 Milk, cheese, yoghurt _____

4.7 What important role do fruit and vegetables play in the human diet?



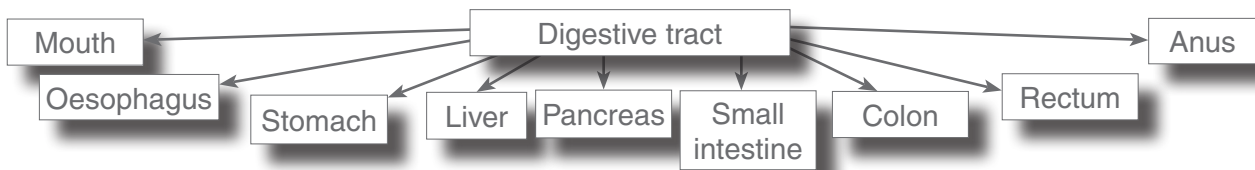
8. Why do humans shiver when they are cold?

9. Which part in the brain controls thermoregulation?

10. Explain point by point the difference between the blood vessels in the skin when you feel hot compared to when you feel cold.

Summary

- Steps of nutrition: ingestion → mastication → digestion → absorption → transport → assimilation → egestion
- Two types of digestion: mechanical and chemical



- The mouth consists of:
 - lips and teeth
 - jaws and teeth
 - tongue
 - soft palate
 - salivary glands
- The oesophagus is the tube which connects the throat and the stomach.
- Peristalsis is the process of involuntary muscle contractions causing the bolus to move down the oesophagus.
- The stomach:
 - mechanical digestion
 - chemical digestion
- The liver: just below the diaphragm and partly covers the stomach.
 - Produces bile.
 - Produces glycogen.
 - Stores vitamins.
 - Stores blood and iron
- Gall bladder is attached to the bottom of the liver and stores the bile.
- Functions of bile:
 - Breaks up fats so that they can be digested more easily.
 - Promotes peristalsis in the intestines.
 - It neutralises chyme which comes out of the stomach.
 - It is an antiseptic and prevents the intestine from rotting.