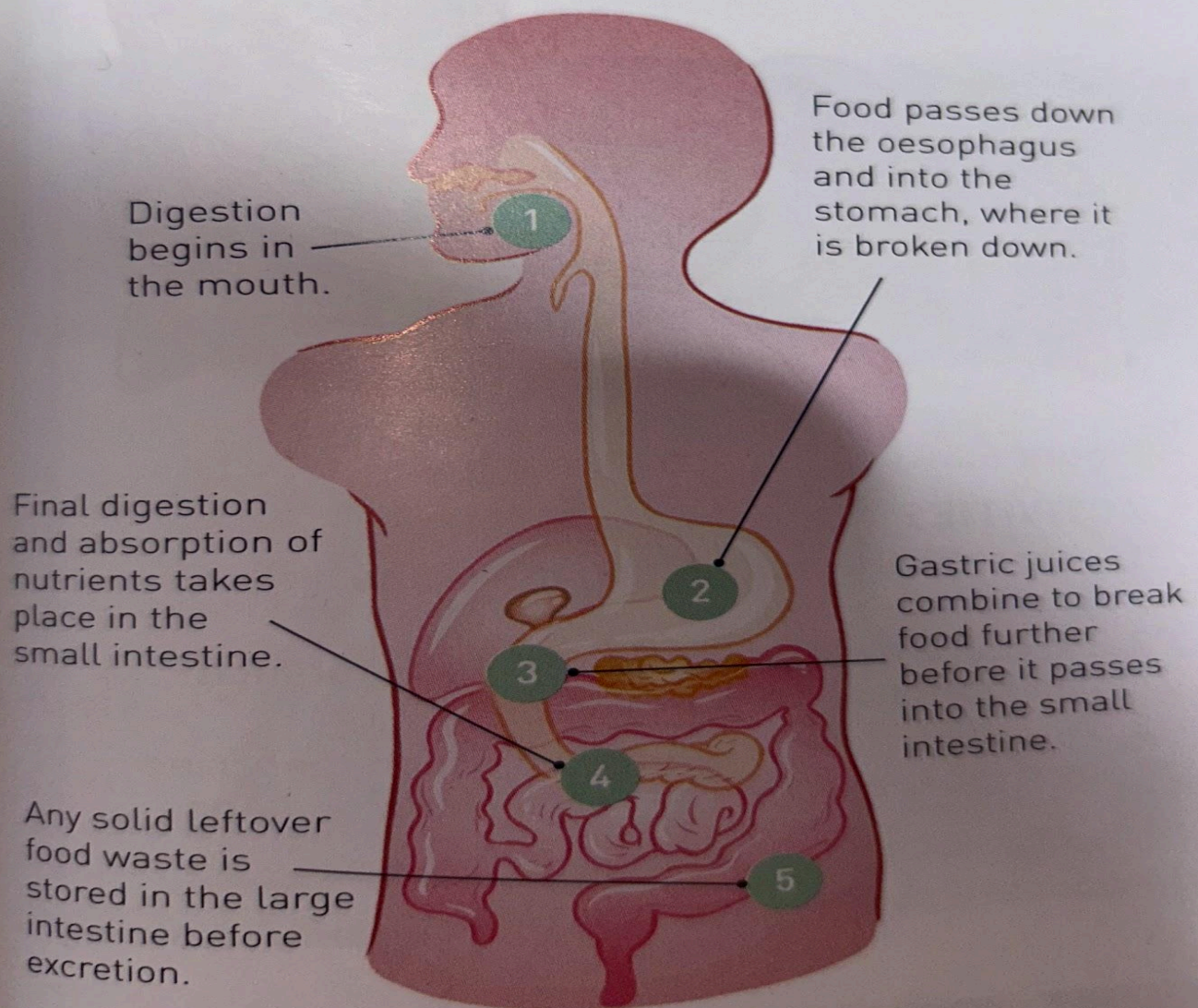


## DIGESTION PROCESSES



**Figure 6.2** The process of digestion

### Activity 1: Match each component of the gastrointestinal tract to its function

Component of the Gastrointestinal Tract		Function	
1	Mouth	<ul style="list-style-type: none"> <li>- Extract nutrients and further digests food from the stomach.</li> <li>- Pancreas assists with the digestion of fats and protein</li> <li>- Liver produces bile and the gall bladder stores bile until it's needed to help with the digestion of fats</li> <li>- Nutrients pass into the bloodstream and into the liver and body cells</li> </ul>	
2	Oesophagus <ul style="list-style-type: none"> <li>- 25cm stretchy tube</li> </ul>	3 Primary Functions <ol style="list-style-type: none"> <li>1. Absorb water and electrolytes</li> <li>2. Produce and absorb vitamins</li> <li>3. Forms waste that is pushed into the rectum</li> </ol>	
3	Stomach <ul style="list-style-type: none"> <li>- A stretchy sac that is a J in shape</li> </ul>	<ul style="list-style-type: none"> <li>- Eating and speaking</li> <li>- Saliva breaks foods and help for us to swallow food</li> </ul>	
4	Small Intestine <ul style="list-style-type: none"> <li>- A long tube that is 4-5cm in diameter and about 6m long.</li> <li>- The first section is called the duodenum and the final section is called the rectum.</li> </ul>	<ul style="list-style-type: none"> <li>- Transports the food to the stomach</li> </ul>	
5	Large Intestine <ul style="list-style-type: none"> <li>- A tube 7-10cm in diameter and about 1.5m long.</li> </ul>	<ul style="list-style-type: none"> <li>- Chemically breaks down food and passes it to the small intestine</li> <li>- This is assisted by the action of gastric juices to create chyme</li> </ul> Role: <ul style="list-style-type: none"> <li>- Store food</li> <li>- Digest food into chyme</li> </ul>	

**Activity 2: Fill in the table using the information on the board**

Type of metabolic rate	Description	Contribution to daily energy use
Basal metabolic rate (BMR)		
Energy used during physical activity		
Thermic effect of food		

**Factors affecting metabolism:**

Factor	Description
Age	The metabolism decreases with age due to loss in: <ul style="list-style-type: none"><li>- muscle tissue</li><li>- hormonal and neurological changes.</li></ul>
Stage of life cycle	Infants and children have increased demands for energy per kilogram of body weight due to the energy required for growth and the maintenance of body temperature.
Gender	Males tend to have a higher metabolism than females because they are larger and have less body fat.
Amount of lean muscle tissue	Muscle burns kilojoules faster.
Amount of body fat	Fat cells burn fewer kilojoules than most other tissues and organs of the body.
Level of physical activity	Regular physical activity increases muscle mass and trains the body to burn kilojoules at a faster rate, even when at rest.
Infection or illness	Metabolism increases during infection or illness because the body has to work harder to create new tissues and an immune response.