

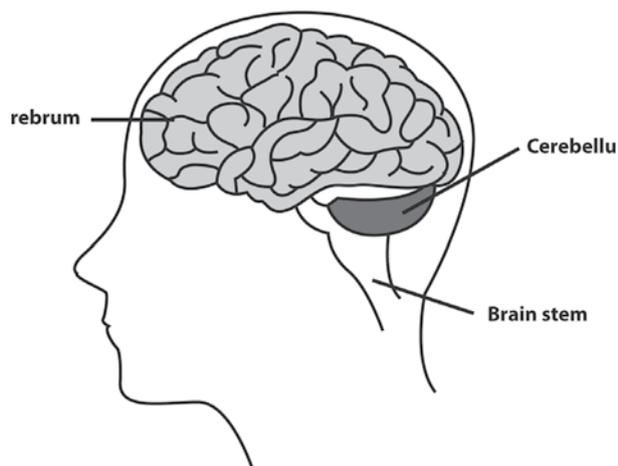
## Unit 1 Teaching notes

The function of the excretory system is to collect blood containing waste substances such as urea, unwanted salts and excess water, and to filter it so that the wastes are removed. Useful substances such as glucose are absorbed back into the blood.

## The nervous system

The main components include: the brain that processes and analyses information; the spinal cord which is the main communications link between the brain and the rest of the body; the nerves which are the cells that carry messages in the form of electrical impulses; and the receptors or sense organs which react to stimuli from the environment. The sense organs are: ears which react to sound; nose which reacts to smells; eyes which react to light; skin which responds to touch; and tongue which reacts to taste.

This unit deals with the brain. The three main parts of the brain are: (1) the cerebrum – this is the largest brain structure in humans and accounts for about two-thirds of the brain’s mass. It is divided into two sides, the left and right hemispheres, which are separated by a deep groove down the centre from the back of the brain to the forehead. The cerebrum controls most of our body functions including the senses, the body’s motor skills, reasoning and language; (2) the cerebellum – this consists of two peach-sized mounds of folded tissue located at the top of the brain stem and is responsible for coordinated movement and balance. The cerebellum is also involved in some learning pathways; and (3) the brain stem or medulla oblongata – this part of the brain connects to the spinal cord. The brain stem controls functions essential to the survival of all animals, such as heart rate, breathing, digestion and sleeping.



## Unit overview

Topic	Number of lessons	Outline of lesson content	Resources in Learner’s Book	Resources in Activity Book	Resources in Teacher’s Resource
1.1 Body organs	1	The major body organs are the heart, stomach and intestines, lungs, kidneys and brain.	Activity 1.1 Questions 1–5	Exercise 1.1 Su	Worksheet 1.1
1.2 The heart	1	The heart pumps blood carrying food and oxygen to all parts of the body.	Questions 1–3	Exercise 1.2	Worksheet 1.2
1.3 Heartbeat and pulse	2	The heartbeat creates a pulse which increases during exercise.	Activity 1.3 SE Questions 1–5 SE	Exercise 1.3 SE Su	Worksheet 1.3A SE Ex Worksheet 1.3B SE Su Worksheet 1.3C SE Ex
1.4 The lungs and breathing	2	The lungs breathe in air containing oxygen and breathe out air containing carbon dioxide.	Activity 1.4 SE Questions 1–4	Exercise 1.4	Worksheet 1.4 SE