



**Prior learning to reactivate**

- Identify and describe different types of animals, and group them using vocabulary such as herbivore, omnivore and carnivore.
- Match parts of the human body with its senses.
- Notice that animals have offspring, which grow into adults.
- Basic needs for animal and human survival (food/water/air etc) and more complex health related choices such as exercise and nutrition.
- Identify parts of the body responsible for movement and digestion.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.
- Describe the changes as humans develop to old age.

**Key learning**

The heart is a muscle which transports blood around the body.

The heart is made of the right and left atrium and right and left ventricle.

Blood is used to carry oxygenated blood to the body's muscles and organs.

Our bodies can function differently depending on how we use them.

Blood travels through the pulmonary artery and veins to the lungs and to the muscles through the aorta.

Nutrients and water are transported within blood in animals through the circulatory system.

**Key vocabulary**

Circulatory	Factors, processes and organs related to the blood.
Pulmonary	Factors, processes and organs related to the lungs.
Chambers	The heart's ventricles and atriums, which allow blood to pass through them.
Heart	A muscle with four chambers that is responsible for passing blood around the body.
Veins	Thinner tubes that carry deoxygenated blood (except pulmonary) away from the heart
Arteries	Thick-walled tubes that (except the pulmonary) carry oxygenated blood away from the heart.
Blood Cells	Red blood cells—the cells that carry oxygen. White blood cells—cells used to fight infection.
Platelets	A component of blood that enables clotting.
Viscosity	The thickness of a substance.

### SCIENTIFIC SKILLS

By the end of the year, children should be able to...

- Plan scientific enquiries to answer different questions, recognising and controlling variables where necessary
- Take measurements, using a range of scientific equipment
- Record data and results, using charts, tables, diagrams, keys and graphs
- Use test results to make predictions to set up further tests
- Report and present findings, drawing conclusions about results
- Identify scientific evidence which has been used to support or refute ideas

Opportunities for scientific enquiry within the unit:

- Exploring the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health.
- Plan experiments to determine the correct components of blood in order to allow a person to survive.

