 South Farnham School <i>The Continual Pursuit of Excellence</i> Part of the South Farnham Educational Trust	Science Subject Knowledge Organiser		
	Spring	Year 6	Strands covered: Human Body

What prior knowledge should students have?

- Describe the changes as humans develop to old age.
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats)
- Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)
- Describe the simple functions of the basic parts of the digestive system in humans.
- Identify the different types of teeth in humans and their simple functions.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.

What skills will students learn? (Disciplinary Knowledge)

- The children decide how to record and present evidence. They record observations e.g. using annotated photographs, videos, labelled diagrams, observational drawings, labelled scientific diagrams or writing. They record measurements e.g. using tables, tally charts, bar charts, line graphs and scatter graphs. They record classifications e.g. using tables, Venn diagrams, Carroll diagrams and classification keys.
- In their conclusions, children: identify causal relationships and patterns in the natural world from their evidence; identify results that do not fit the overall pattern; and explain their findings using their subject knowledge.
- They evaluate, for example, the choice of method used, the control of variables, the precision and accuracy of measurements and the credibility of secondary sources used.

What key knowledge will be taught? (Substantive Knowledge)

- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
- Describe the ways in which nutrients and water are transported within animals, including humans.
- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. (Y6 - Living things and their habitats)
- Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)

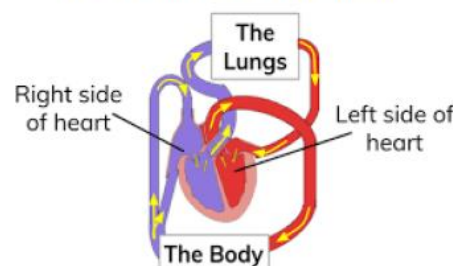
Key Vocabulary

Definition

Heart	The heart pumps blood around your body.
Pulse	Each time the heart beats it can be felt as a pulse in the arteries. Typically, in the wrist and neck.
Blood	The red liquid pumped around the body by the heart. It transports oxygen, nutrients and water to all the parts of the body.
Blood vessels	The narrow tubes which our blood flows through including the arteries, veins and capillaries.
Lungs	Two organs situated in the ribcage that fill with air when you breathe in. They remove carbon dioxide from blood and add oxygen.
Circulatory system	This circulates blood through the body. It consists of the heart, blood and blood vessels.

Diagram

The human circulatory system



- The heart pumps blood in the blood vessels to the lungs where oxygen goes into the blood and carbon dioxide is removed.
- The blood goes back to the heart.
- It is then pumped around the body so that water, nutrients and oxygen are transported in the blood to the muscles and all the other parts of the body where they are needed. As all these are used, they produce carbon dioxide and other waste products.
- Carbon dioxide is carried by the blood in blood vessels back to the heart.
- The cycle starts again as the carbon dioxide is then transported back to the lungs to be removed from the body.