



Year 6 Science Knowledge Organiser: Animals Including Humans



Subject Specific Skills

- I can identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- I can recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- I can describe the ways in which nutrients and water are transported within animals, including humans.

Prior Learning

- Describe the changes as humans develop to old age.
- 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

DIET, EXERCISE AND LIFESTYLE

Diet, exercise, drugs and lifestyle have an impact on the way our bodies function.

They can affect how well out heart and lungs work, how likely we are to suffer from conditions such as diabetes, how clearly we think, and generally how fit and well we feel.

Some conditions are caused by deficiencies in our diet e.g. lack of vitamins.



William Harvey



William Harvey was born 1st April 1578 and died 3rd June 1657. He was an English physician who was the first to recognize the full circulation of the blood in the human body.

THE CIRCULATORY SYSTEM

The heart pumps blood in the blood vessels around to the lungs. Oxygen goes into the blood and carbon dioxide is removed. The blood goes back to the heart and is then pumped around the body.

Nutrients, water and oxygen are transported in the blood to the muscles and other parts of the body where they are needed. As they are used, they produce carbon dioxide and other waste products. Carbon dioxide is carried by the blood back to the heart and then the cycle starts again as it is transported back to the lungs to be removed from the body. This is the human circulatory system.



Key Vocabulary:

Blood: A fluid that transports substances around the body.

Blood Vessels: A system of tubes that carry the blood throughout the body

Carbon dioxide: When the cells use the oxygen, they make carbon dioxide and other waste products that get carried away by the blood.

Circulatory System: The group of organs that transport essential nutrients, gases, chemicals and blood cells around the body.

Heart: A large muscular organ that pumps blood around the body.

Lungs: The main organs of the respiratory system, responsible for breathing.

Lifestyle:

Nutrients: Any chemical that is needed by an organism in order to survive and grow.

Nutrients are used for energy, to build and repair tissues, and to control body functions.

Oxygen: The air that we breathe contains this life-giving gas.

Pulse: Caused by the heart pumping blood through the body.