



Science Topic: Animals, including Humans

Year: 6 Term: Autumn 1

Key Knowledge/Content:

- The heart pumps blood around the body.
- Oxygen is breathed into the lungs where it is absorbed by the blood.
- Muscles need oxygen to release energy from food to do work. (Oxygen is taken into the blood in the lungs; the heart pumps the blood through blood vessels to the muscles; the muscles take oxygen and nutrients from the blood.)

Scientist Focus:

Marie Maynard Daly (biochemist)

Known for making a link between high cholesterol and blocked blood arteries. The first African-American to earn a PHD.

Links to:

Prior learning:

To understand the life cycle and life stages in a human's life.

Future learning:

To explore how microorganisms can affect the health and working of the human body.

Key vocabulary with definition:

Prior vocabulary:

- Digestive system- The body system that breaks down and digests food.
- Exercise- Movement of the body.
- Oxygen- The gas needed for humans to survive.
- Nutrients- Substance needed to sustain and live, such as food and drink for humans.

New vocabulary:

- Oxygenated- With oxygen.
- Deoxygenated- Without oxygen.
- Valve- Door-like parts of the blood vessels that open and close to let blood through.
- Heart- The organ responsible for pumping blood round the body.
- Blood vessels- The part of the body that carries blood around the body.
 - Artery- Carries blood away from your heart.
 - Vein- Carries blood to your heart.
 - Capillaries- Smaller blood vessels.
- Drugs- Substances, including alcohol and tobacco, that have an effect on the body. There are legal and illegal drugs.
- Transport- Carry

By the end of this unit

All children can: describe the parts and roles of the circulation system, including the heart and blood vessels, and explain the role of the heart.

Most children can: understand the impact and dangers of drugs on the human body and explain how exercise affects the body.

Some children can: understand how nutrients are transported round the body and explain how the heart rate changes throughout the day and in different situations.

Background understanding for teachers and parents:

This unit focuses on the human body, including the circulation system (such as the heart and blood vessels), how nutrients transport round the body and the effects of drug and exercise on the body. Children will understand what is healthy and unhealthy for their bodies.

Curriculum Driver (one):

Healthy Lifestyle

Evidence outcome:

Understand the things that are healthy and unhealthy for the human body, knowing that exercise is good for the body.