Knowledge Organiser: Year 6 – Animals, including humans

Lesson Sequence

1. Understand the function of the heart and its role in the circulatory system

2. Identify and compare blood vessels

3. Explore blood

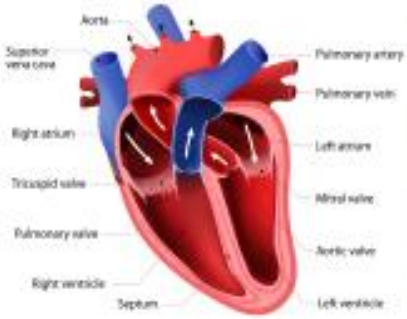
4. Learn how the body transports water and nutrients

5. Investigate what affects your heart rate

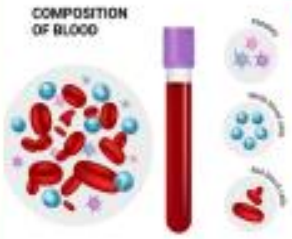
6. Learn about the impact of drugs and alcohol on the body

The Heart

The **heart** pumps **blood**, carrying nutrients and oxygen, around every part of the body.



The red vessels are **arteries** and the blue vessels are **veins**. **Arteries** have thick, muscular walls and carry **oxygenated** blood from the **heart** to the rest of the body. **Veins** carry **deoxygenated** blood back to the heart and have thinner walls. **Capillaries** are microscopic vessels which link the veins and arteries together.



Red blood cells carry **oxygen**.
White blood cells fight infection as part of the immune system.
Platelets help to clot (thicken) the blood and form a scab.
Plasma is the fluid part of the blood, which transports

Looking After Our Heart

Healthy Food Pyramid

To keep our **heart** and body healthy, we need to:

- eat a balanced diet (not too much sugar or fat);
- exercise regularly;
- drink approximately 2 litres of water a day;
- limit alcohol intake, in adults;
- get approximately 8 hours of sleep.

Drugs, including alcohol, can cause liver damage, poor sleep, high blood pressure, and different types of cancer. Drugs can be classified into four groups – painkillers, stimulants, depressants and hallucinogens.