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

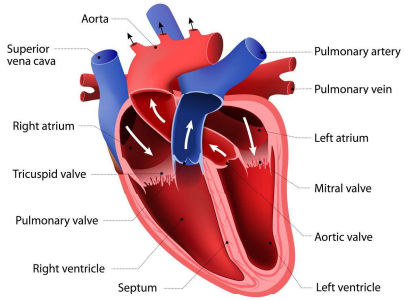
4. Learn how the body transports water and nutrients

5. Investigate what affects your heart rate

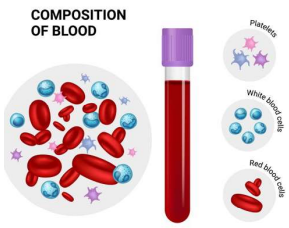
6. Learn about the impact of drugs and alcohol on the body

The Heart

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

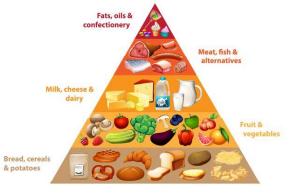


The red vessels are **arteries** and the blue vessels are **veins**. **Arteries** have thick, muscular walls and carry **oxygenated** blood from the **heart** to the rest of the body. **Veins** carry **deoxygenated** blood back to the heart and have thinner walls. **Capillaries** are microscopic vessels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

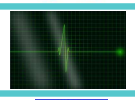
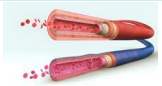
To keep our **heart** and body healthy, we need to:

- 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.

Unit Rocket Words: Year 6 – Animals, including humans

Rocket Words

	circulatory system	the system that controls the flow of blood around the body
	BPM	beats per minute measuring heart rate
	diet	the kind of food an animal usually eats
	pulse	the rhythmical throbbing of the arteries as blood is pumped through them
	oxygenated	containing oxygen
	deoxygenated	not containing oxygen
	atrium	the upper chambers of the heart
	ventricle	the lower chambers of the heart
	vessel	tube which circulates the blood through the body
	valve	flaps which open and close to allow blood flow
	diffusion	diffusion is the movement of all liquids and gases
	osmosis	osmosis is the movement of water only