The Circulatory System

Key vocabulary

- **red blood cells** – part of the blood that carries oxygen and removes waste products

- **white blood cells** – part of the blood that fights viruses and bacteria

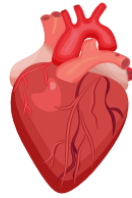- **lungs** – organs that exchange gases during breathing

- **nutrients** – substances that provide the important nourishment we need for our bodies to grow and repair themselves
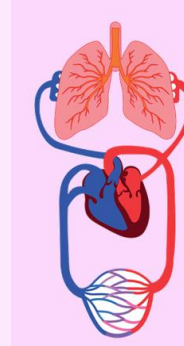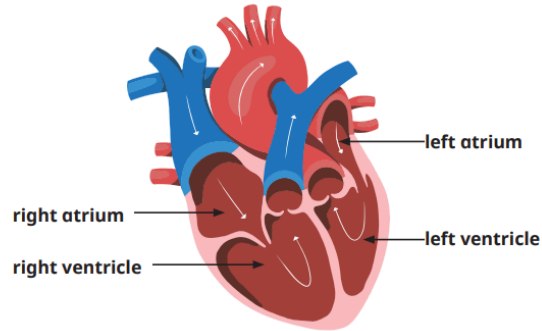
- **plasma** – part of the blood that carries nutrients

- **oxygen** – a gas in the air we breathe that all cells in our body need to survive

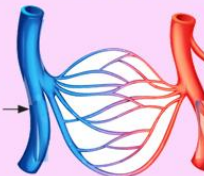- **heart** – the organ responsible for pumping blood around the body

- **atria** – the top two chambers in the heart
- **ventricles** – the bottom two chambers in the heart

left atrium

right atrium

left ventricle

right ventricle

blood vessels – tubes within the body that carry blood

veins – blood vessels that carry blood towards the heart

arteries – blood vessels that carry blood away from the heart

capillaries – blood vessels that connect veins and arteries

Learning Questions:

What is the function of the circulatory system?
What is the role of blood in the circulatory system?
Why does the heart need to pump blood around the body?
What do arteries and veins do?
What is oxygenated/deoxygenated blood?
Why do you think there is a difference between the left and right sides of the heart?

Factual knowledge:

- The heart is part of the circulatory system.
- The heart is a muscle which beats regularly.
- As the heart beats, it pumps blood around the body.
- The heart is split into four chambers. It has two atria and two ventricles.
- Blood flows through the heart as part of its journey through the circulatory system.
- Veins carry blood towards the heart. They have valves to stop the blood flowing in the wrong direction.
- Blood then flows through the right atrium, then out of the right ventricle to the lungs.
- Blood from the lungs then flows into the left atrium and out of the left ventricle towards the rest of the body.
- Oxygenated blood is blood that carries lots of oxygen.
- Deoxygenated blood is blood that has little oxygen in it.
- Oxygenated blood mostly travels from the heart through the arteries.
- Deoxygenated blood mostly travels from the parts of the body back to the heart, through veins.

- To work scientifically.
- To understand animals and humans.

British Heart Foundation

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