



# Year 6 | Science | Autumn 1 | Animals Inc Humans



## Key Learning

The **circulatory system** is a group of organs that work together to transport substances around the body.

Humans have a **double circulatory system**: One loop of blood vessels transports blood from the heart to the lungs to pick up oxygen and drop off carbon dioxide. Another loop of blood vessels transports blood around the body to deliver useful substances and pick up waste products.

The **heart is split into two sides**: one side pumps blood to the lungs and the other side pumps blood to the body. The heart muscle is under involuntary control to contract and relax; we cannot choose to move it.

## Vocabulary

**Circulatory** – relating to the system that moves blood around the body.

**Heart** – a muscular organ that pumps blood around the body.

**Blood** – the liquid that carries oxygen, nutrients and waste around the body.

**Vessels** – tubes that carry blood around the body.

**Veins** – blood vessels that carry blood back to the heart.

**Arteries** – blood vessels that carry blood away from the heart.

**Oxygenated** – containing a high level of oxygen.

**Deoxygenated** – containing a low level of oxygen.

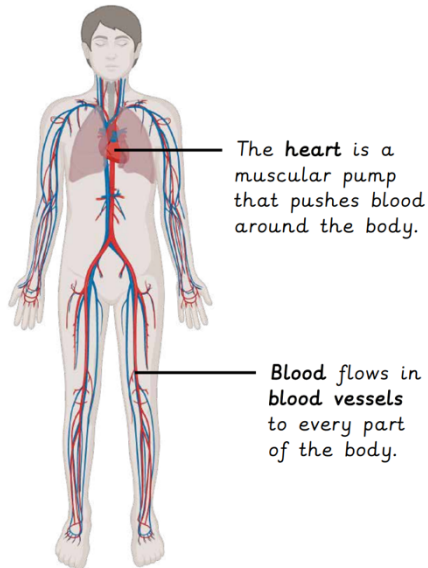
**Valve** – a flap that opens and closes to keep blood flowing in the correct direction.

**Respiration** – the chemical process in cells that releases energy from glucose.

**Xylem** – tubes in plants that carry water and minerals from the roots to the rest of the plant.

**Cell membrane** – the thin outer layer of a cell that controls what enters and leaves it.

## Circulatory System

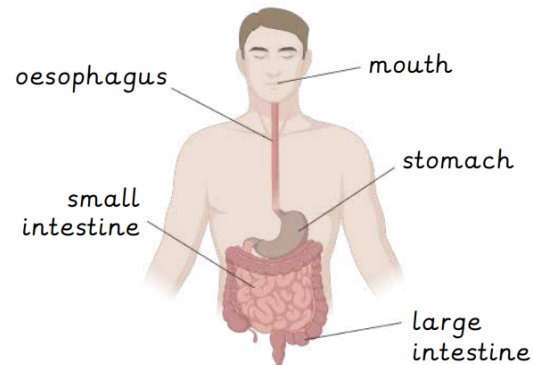


### Factors affecting health

drugs, exercise, diet, alcohol, hygiene, smoking

## Nutrients

Nutrients are absorbed from the small intestine into the bloodstream to be transported around the body, whereas water is absorbed from the large intestine into the blood.



~ Blood ~