



Year 6 Science

Spring 2

The Circulatory System

Diet, drugs and lifestyle

Science strand -

Biology

Key Facts

THE CIRCULATORY SYSTEM –

A group of organs and vessels which transport blood around the body. It consists of:

The circulatory system allows blood to circulate and transport nutrients, oxygen, hormones and blood cells to and from the cells in the body to provide nourishment and help fight diseases.

Blood

- Transports oxygen and nutrients to the lungs and tissues
- Forms blood clots to prevent blood loss
- Carries cells to fight infection
- Brings waste products to organs
- Regulates body temperature

The heart

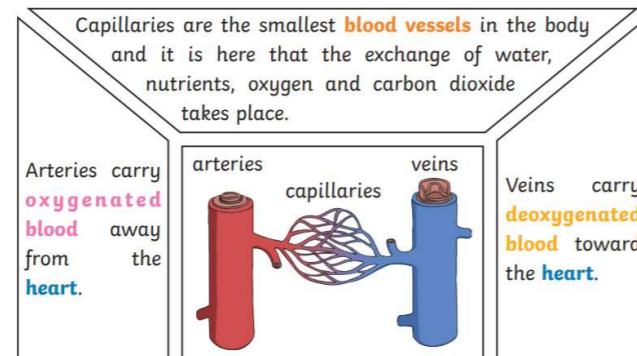
The heart pumps oxygen-rich blood to every cell in the body.

Blood vessels

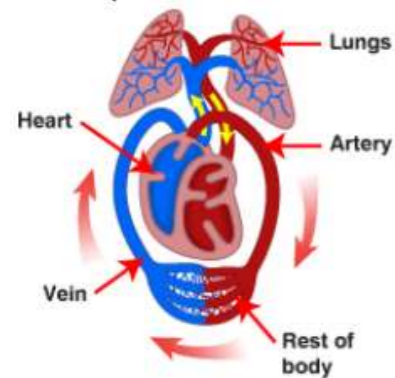
A network of arteries and veins that provide the pathway for blood to travel.

BLOOD VESSELS

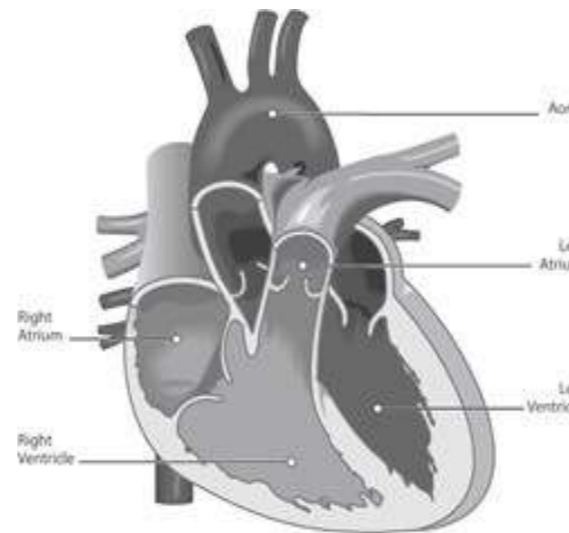
These are the tubes that carry blood around the body. There are three main types:



THE HEART



The heart pumps blood to the lungs to get oxygen. The oxygenated blood is then pumped around the body. Arteries carry oxygenated blood away from the heart. Veins carry de- oxygenated blood towards the heart.



BLOOD

| | | | |
|--|---|---|---|
| Plasma is liquid. The other parts of your blood are solid. | | Platelets help you stop bleeding when you get hurt. | |
| | Red blood cells carry oxygen through your body. | | White blood cells fight infection when you're sick. |

Vocabulary

| Word | Definition |
|--------------------|---|
| Arteries | Muscular-walled tubes which carry blood from the heart to the rest of the body. |
| Atrium | Each of the two upper cavities of the heart from which blood is passed to the ventricles. |
| Capillaries | Thin blood vessels that connect arteries to veins. |
| Circulatory system | It is made up of the blood, heart and blood vessels. It delivers nutrients, water, and oxygen to the body cells and carries away wastes such as carbon dioxide that body cells produce. |
| Plasma | Blood is made up of blood cells and plasma. It is a yellowish liquid that has nutrients, proteins, hormones and waste products. |
| Pulse | A rhythmical throbbing of the arteries as blood is propelled through them, typically as felt in the wrists or neck. |
| Red blood cells | Red blood cells carry fresh oxygen throughout the body using a protein called haemoglobin. They also carry carbon dioxide to the lungs for removal. |
| Veins | Muscular-walled tubes which carry blood from the body to the heart. |
| Balanced diet | A diet consisting of a variety of different types of food and providing adequate amounts of the nutrients necessary for good health. |
| Calories | A unit for measuring an amount of energy produced by food. |