The Circulatory System

Red blood cells are pushed around your body by your heart, which acts like a pump, beating about 100,000 times a day!
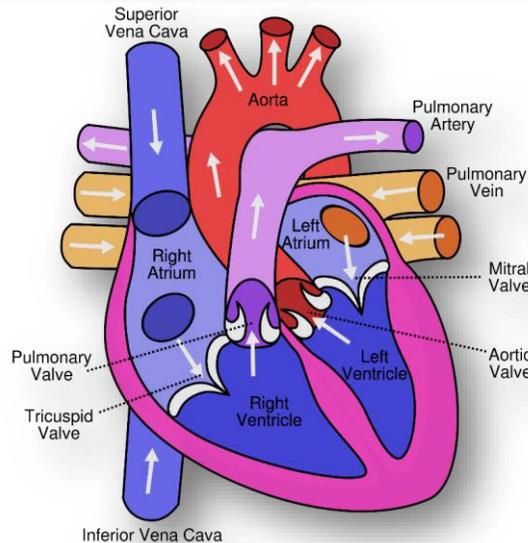
As the blood cells reach your **heart**, they pass through **valves**, which are like doors and only open one way, keeping blood pumping in the same direction.

Blood is pumped to the **lungs** to pick up oxygen (O2) which has been inhaled (breathing in). It then goes back to the heart to get pumped to every other part of the body

As it drops off **oxygen** around the body, it picks up **carbon dioxide** (CO2) to take back to the lungs for the lungs to exhale (breathing out).

Nutrients
(which are made from eating carbohydrates, fats and proteins) allow your body to perform daily activities. They travel around the body in the **bloodstream.**

Superior Vena Cava
Aorta
Pulmonary Artery
Pulmonary Vein
Left Atrium
Right Atrium
Mitral Valve
Pulmonary Valve
Aortic Valve
Left Ventricle
Tricuspid Valve
Right Ventricle
Inferior Vena Cava

STAYING HEALTHY

Cigarettes contain huge amounts of chemicals which can cause lung damage and lung cancer.

Fatty foods can clog blood vessels and cause a heart attack.

Regular exercise keeps our hearts healthy.

Blood Vessels
Arteries – Take blood AWAY from the heart to the body organs and tissues. When blood is pumped through these, you can feel your pulse.
Veins – Take blood TOWARDS the heart from body organs and tissues,
Capillaries – Tiny blood vessels which take the blood into organs and tissues.

Components of the blood:

a liquid called **plasma, red blood cells** to transport oxygen, **white blood cells** which fight infection and **platelets** help clot the blood and repair a wound.

Prior knowledge

Year 2- importance of exercise and about basic nutrition, know the basic needs of animals,

Year 3- know that animals cannot make their own food and they get nutrition from what they eat

Year 4-know the different types of teeth and their functions, basic parts of digestive system and their functions

Key Vocabulary

Arteries, veins, capillaries, plasma, red blood cells, white blood cells, platelets, oxygen, carbon dioxide, bloodstream, valve, heart

Mammalian Double Circulatory System

Pulmonary Artery
Pulmonary Vein
Lungs
Vena Cava
Aorta
Heart
Body Organs