



How does the Circulatory System work?



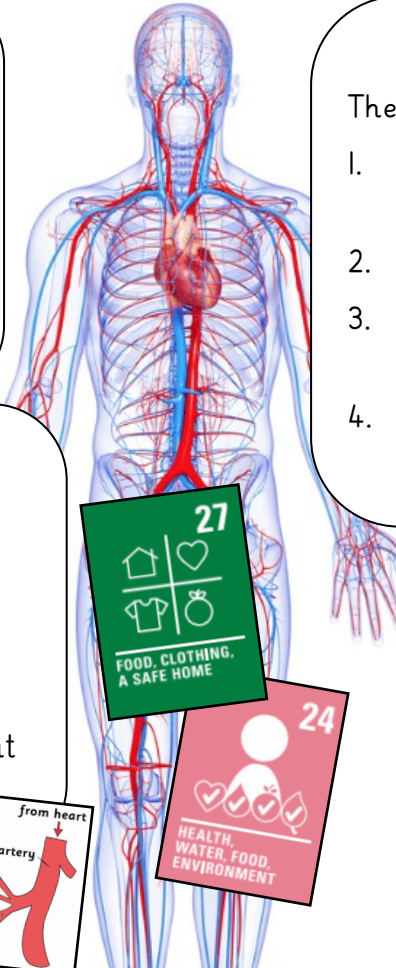
Applying Past Knowledge

This learning links with Year 3 when you learnt about nutrition and a healthy diet and in Year 4, when you learnt about digestion.

What is the circulatory system?

The **circulatory system** allows blood to **circulate** and **transport** nutrients and oxygen to the body. It is made up of **three parts**:

1. The blood
2. The blood vessels
3. The heart



How does the heart work?

The heart **pumps** blood through the blood vessels:

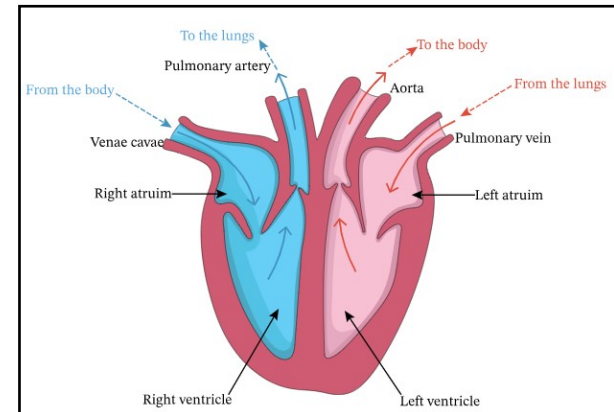
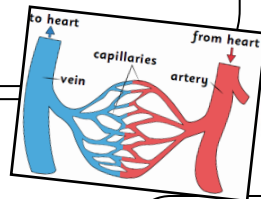
1. Arteries carry blood to the lungs, where it picks up oxygen.
2. Veins bring the blood back to the heart.
3. Arteries carry blood with oxygen to all parts of the body.
4. Veins bring the blood without oxygen back, and the cycle repeats.



What is the role of the blood vessels?

Blood vessels are found all over the body, and the **blood circulates** through them. There are three types of blood vessel:

- **Arteries** carry blood away from the heart.
- **Veins** carries blood back to the heart.
- **Capillaries** are where the substances move in and out of the blood.



What is the role of the blood?

The blood carries substances around the body.

White blood cells fight infection.

Red blood cells carry oxygen.

Platelets prevent bleeding.

Plasma is the liquid that carries these.

The body takes in **oxygen** - from air (via the lungs), **nutrients** from food and **water**.

The blood carries them around the whole body.

Our body parts use them for energy, and give waste substances **to the blood**.

The blood carries the **waste to the lungs and kidneys** to be removed.