

What do I already know?

- To keep healthy, humans need to eat a **balanced diet**.
- Humans need some exercise to keep their muscles and bones healthy.
- There are **six essential nutrients** that the body needs to function properly.
- Each **nutrient** helps our bodies in different ways.
- Animals can be grouped by their diet.
- Skeletons provide support and protection.
- Muscles enable us to move.
- Muscles work in pairs to contract or relax.
- There are different types of skeleton (**endoskeleton and exoskeleton**)
- The digestive system is made up of organs that break down food into nutrients, which the body needs for **energy, growth and repair**.

Science

What is blood made of?

Red blood cells - red blood cells carry oxygen through the human body.

Plasma - plasma helps humans to stop bleeding if they get hurt.

White blood cells - helps humans to fight and prevent infection.



How will you use your knowledge organiser to help your learning stick?

Remember: if we haven't remembered it, we haven't learned it.

What is the Circulatory System?

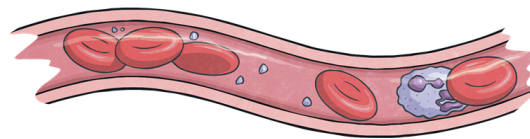
The circulatory system is a really important part of our body. The word 'circulatory' means something that is going round and round in a circle or loop. This is exactly what is happening in our bodies all the time.

Key Vocabulary

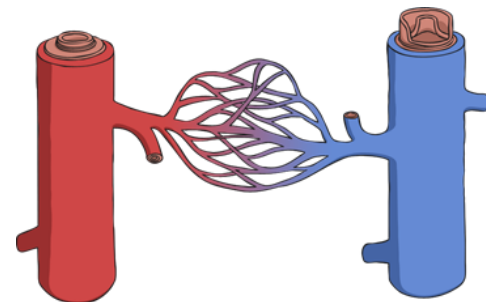
Arteries - carries oxygenated blood away from the heart

Capillaries - enable exchange of oxygen with body

Veins - carries blood from capillaries back to the heart to be pumped to the lungs to be re-oxygenated.



capillaries



artery

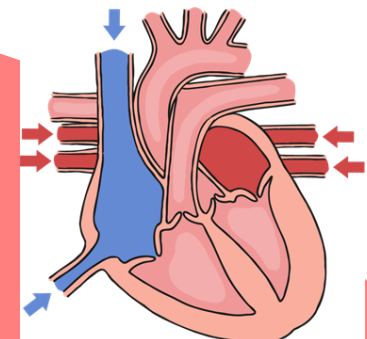
vein

What Circulates and Why?

The simple answer is your blood is circulated all around your body. The blood is doing a really important job - it is taking nutrients, hormones and oxygen all around the body to all the places they need to go. The oxygen comes into your body when we breathe in and it goes into our lungs. Then, inside the lungs, this oxygen goes into our blood and starts its journey around the body. You could think of the blood cells a bit like delivery drivers that drop off the oxygen to where it needs to be. Oxygen is dropped off all around the body to thinner blood vessels, which transfer (move across) the oxygen to the cells in the body.

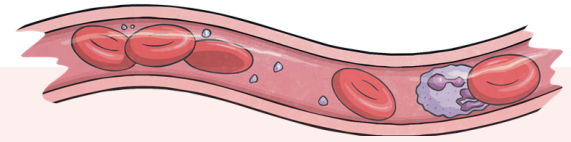
What does your heart do?

The heart is a powerful muscle that is situated between your lungs, protected by the ribcage. The heart pumps blood to the lungs to get oxygen. The heart pumps the oxygenated blood to the rest of the body.



How will you use your knowledge organiser to help your learning stick?

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How much water should humans drink? Why is this important?

Humans should drink between 6-8 glasses of water a day.

Benefits of drinking water:

- Supports brain to work at its best
- Carries nutrients and oxygen to cells.
- Lubricates joints.
- Lessens burden the on kidneys and liver by flushing out waste products.
- Helps dissolve minerals and nutrients to make them accessible to your body.

**What are the main food groups?
What makes a balanced diet?**

Fruits and vegetables -

These are packed with minerals to support a healthy immune system.

They are packed with vitamins. They are also a great source of fibre.

Carbohydrates -

These foods provide us with all the energy we need for everyday activity and internal bodily functions, such as our nervous systems, kidneys etc.

Protein -

Foods that contain protein are essential for our bodies to grow, repair and make new cells. Eating from this food group will give you healthy muscles.

Fats and oils-

These give us an energy store and essential fatty acids, which allow our bodies to absorb the vitamins we get from other food groups.

