

Science - Year 6 - autumn 2 - Animals Including Humans

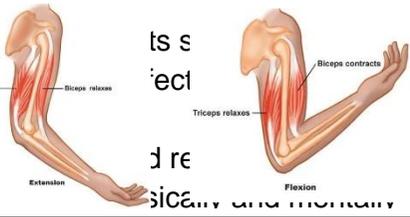
Vocabular	Meaning
arteries	Large vessels that carry oxygenated blood from the heart around the body.
capillaries	Small blood vessels which enable the moving of water, oxygen and carbon
circulatory system	The body's delivery system. Made up of the heart, blood and blood vessels.
drug	Any drug which changes or alters our physical or mental state.
extensor	A muscle that contracts to extend a limb or joint.
flexor	A muscle that contracts to bend a limb or joint.
heart	A muscle which pumps blood and keeps blood moving around the body.
lungs	Air sacks that allow the blood to absorb O ₂ and release CO ₂ .
medicine	A drug for the treatment or prevention of disease.
muscles	Small, stretchy fibres grouped together and attached to bones.
veins	Blood vessels that carry de oxygenated blood back to the heart.

Skills

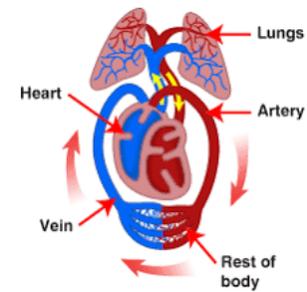
- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where necessary.
- Identifying scientific evidence that has been used to

Knowledge

- The **circulatory system** is made of the **heart, lungs** and **blood vessels**.
- Arteries** carry **oxygenated** blood from the **heart** to the rest of the body.
- Veins** carry **deoxygenated** blood from the body to the **heart**.
- Nutrients, oxygen** and **carbon dioxide** are exchanged **via the capillaries**.
- Some choices, such as smoking and drinking alcohol can be harmful to our health.
- Tobacco can cause short-term effects such as shortness of breath, difficulty sleeping and loss of taste and long-term effects such as lung disease, cancer and death.
- Alcohol can cause and loss of control i
- Exercise can: tone
- increase fitness: m



Books



What I should be able to do and

Knowledge:

- Which things are living and which are not.
- Classification of animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates).
- Animals that are carnivores, herbivores and omnivores.
- Animals have offspring which grow into adults.
- The basic needs of animals for survival (water, food, air).
- The importance of exercise, hygiene and a balanced diet.
- Animals get nutrition from what they eat.
- Some animals have skeletons for support, protection and movement.
- The basic parts of the digestive system.
- The different types of teeth in humans.
- Respiration is one of the seven life processes.
- The life cycle of a human and how we change as we grow.

Skills:

- Ask relevant questions and use different types of scientific enquiries to answer them.
- Set up simple practical enquiries, comparative and fair tests.
- Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Growth Mindset Strategies

Understand the difference between a FIXED mindset and a GROWTH mindset.

Be Curious; Be courageous.

Challenge yourself.

Give everything your best effort and persevere.

What I will be learning

- How scientific ideas about food and diet were tested in the past and how this has contributed to our knowledge of a balanced diet.
- Why a variety of foods is important for a healthy diet.
- How nutrients and water are transported in the human body.
- What happens to the heart when we exercise and why?
- How muscles move the skeleton and how muscle activity requires increased

What I will know and be able to do at the end of the topic.

Knowledge:

Vitamin C is important to your diet because

...

Vitamin C is important to your diet, but ...

Vitamin C is important to your diet, so ...

Fibre keeps your digestive system healthy because ...

Fibre keeps your digestive system healthy, but

Fibre keeps your digestive system healthy, so ...

Veins take blood back to the heart because

...

Veins take blood back to the heart, but ...

Veins take blood back to the heart, so ...

All vertebrates have a heart, arteries and veins because ...

All vertebrates have a heart, arteries and veins, but ...

All vertebrates have a heart, arteries and veins, so ...

Nicotine and alcohol are very addictive drugs because ...

Nicotine and alcohol are very addictive drugs, but ...