

Year 6 Science - Autumn

Our big topic on: Animals including Humans

Prior learning: Children will be able to use knowledge gained from the units of learning below to support their understanding of the new concepts that they will learn.

- Animals, including humans (Year 3) - Discuss the function of a skeleton in humans and some animals.
- Animals, including humans (Year 4) - Describe the functions of the digestive system; identify the types and functions of human teeth.
- Animals, including humans (Year 5) - Understand changes in human development from birth to old age.

Lesson objectives

1.What is the human circulatory system?

2.How does blood get around the body?

3.What is in the blood?

4.How do we get water and nutrients?

5.How can we keep our heart healthy?

6.What are some blood disorders?

National Curriculum Objectives

- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
- Describe the ways in which nutrients and water are transported within animals, including humans.



Key Vocabulary

<u>Word</u>	<u>Definition</u>
circulatory system	The circulatory system is made up of blood vessels that carry blood away from and towards the heart.
arteries	Arteries carry blood away from the heart and transport oxygen and useful nutrients to the body's cells.
capillaries	Tiny passages that connect the arteries and the veins to the body's tissues.
tourniquet	A device used to stop or slow bleeding or blood flow by compressing blood vessels.
clot	A clot is a mass of coagulated blood.
valves	Let something in and keeps it there by closing.

As children of God we are loved, we are called, and we are inspired.



Year 6 Science - Autumn

Our big topic on: The science of light

Prior learning: Children will be able to use knowledge gained from the units of learning below to support their understanding of the new concepts that they will learn.

Year 3 - Light, Plants
Year 4 - Sound

Lesson objectives

National Curriculum Objectives

1. How does light travel?

2. How does reflection help us see?

3. Can we increase reflection?

4. What shapes our shadows?

5. What causes rainbows?

6. Can we make a red apple blue?

- Recognise that light appears to travel in straight lines.
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them



Key Vocabulary

<u>Word</u>	<u>Definition</u>
ray	A thin beam of light
surgeon	A medical doctor who does surgery
opaque	Opaque materials do not allow any light to pass through them.
translucent	Translucent materials are those that let light through but in the process, it is diffused or scattered.
transparent	Transparent materials are those that let light through with very little or no diffusing or scattering of the light.
periscopes	A periscope is a device that was created to make looking over, around or through objects possible.
distort	Instead of forming an image, the reflected light is scattered in all directions. This causes the image you see to be distorted.



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