

Year 6 Science - The Aims of Our Curriculum

1. Enable children to retain and apply this essential knowledge. 2. Inspire children to become life-long learners. 3. Create a culture of high aspiration through challenging content and therefore pride in achievement. 4. Promote the spiritual, moral, social and cultural development of children, including fundamental British values of democracy, the rule of law, individual liberty, mutual respect and tolerance for those with different faiths and beliefs and for those without faith. 5. Provide opportunities for developing self-confidence, self-awareness, independence, creativity, respect and resilience in children. 6. Promote knowledge and understanding of how children can keep themselves safe and healthy. 7. Develop children's numeracy, literacy and oracy, including the sustained expansion of their vocabulary. 8. Promote reading as a life skill and enable our children to become life-long readers.

Year 6	Areas	Term 1	Term 2	Term 3
	Content	<p><u>Electricity</u> Pupils will construct simple series circuits to help them to answer questions about what happens why they try different components (for example switches, bulbs, buzzer and motors). They will also learn how to represent a simple circuit in a diagram using recognised symbols.</p> <ul style="list-style-type: none"> • Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cell used in the circuit • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off positions of switches • Use recognised symbols when representing a simple circuit in a diagram 	<p><u>Light Project</u> Pupils will extend the knowledge from last term during the completion of a project on light.</p> <ul style="list-style-type: none"> • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them <p><u>Living things and their habitats</u> Pupils will be introduced to the theory of classification. Through observations they will classify animals into commonly found invertebrates and vertebrates.</p> <p>They will learn how to justify the reasons why living things are placed in one group and not another. They will also explore the significance of the work of scientists such as Carl Linnaeus.</p>	<p><u>Animals including Humans</u> Pupils will build upon the work begun last term to explore the impact of lifestyle choices upon the body.</p> <ul style="list-style-type: none"> • 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 <p><u>Evolution and inheritance</u> Pupils will find out about how living things on earth have changed over time. They will be introduced to the idea that characteristics are passed from parents to their offspring. They will also appreciate that variation in offspring can make animals more or less able to survive in particular habitats.</p>

		<p>Light Pupils will build upon the work begun in Year 3 to explore the properties and behaviour of light. They will also have the opportunity to extend their learning by looking at a range of natural phenomena including rainbows.</p> <ul style="list-style-type: none"> • Pupils will begin to investigate the way light behaves. • 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 	<ul style="list-style-type: none"> • Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics <p>Animals including humans Pupils will explore how the circulatory system enables the body to function. Pupils will also learn how to keep their bodies healthy and how their bodies might be damaged.</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago • Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
	Literacy link	<ul style="list-style-type: none"> • Key vocabulary. • Electricity project write up. 	<ul style="list-style-type: none"> • Key vocabulary. • Light project write up. • Animals including humans project write up. 	<ul style="list-style-type: none"> • Key vocabulary. • Command words (eg. Predict, explain, describe, evaluate)

	Assessment	<ul style="list-style-type: none"> • Electricity project. • Electricity assessment. • Light assessment. 	<ul style="list-style-type: none"> • Light project. • Living things and their habitats assessment.. • 	<ul style="list-style-type: none"> • Animals including humans assessment. • Animals including humans project. • Evolution assessment.
	Cross curricular links	<ul style="list-style-type: none"> • DT (constructing electrical circuits) • Maths (lines of symmetry, measurements and units) 	<ul style="list-style-type: none"> • Maths (taking measurements, recording data and constructing keys) • Maths (recording data and constructing graphs) 	<ul style="list-style-type: none"> • Art (constructing models)