

## Bournville School Curriculum Intent Statement 21-22

## Science

At Bournville, our intended aims are fulfilled by providing a broad, balanced curriculum offer while ensuring the progression in the development of conceptual knowledge and skills. Scientific skills are progressively mapped out across both key stages where pupils start by observing and comparing moving on to testing fairly and to designing their own test based on their questions and finding scientific research to support or refute their findings. Units are mapped so that pupils recall, recap and review their prior learning so that conceptual knowledge and skills can be built upon and deepened. When learning concepts that are more abstract (cannot be easily observed such as fossils, circulatory system etc.) pupils carry out simulations to support their understanding and reduce their cognitive load.

The aims for teaching Science in our school are:

- To develop pupil's knowledge and conceptual understanding through the scientific disciplines of Biology, Chemistry and Physics
- To develop understand and implementation of knowledge, methods, processes and uses of science
- To encourage pupils to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena
- To develop understand of the nature, processes, and methods of science through different types of science enquiries that help pupils to answer scientific questions about the world around them
- To be aware of how scientists in the past discovered phenomena's that impact how we live our lives/ understanding today and for the future
- To fulfil the requirements of the National Curriculum for science



## Science Curriculum KS1 and KS2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Plants – structure and names		Animals and Humans – grouping animals	Seasons	Materials	
Year 2	Plant Growth – Conditions and Lifecycles	Living Things and Their Habitats – food chains	Humans and Animals Health and Growth		Everyday Materials	
Year 3	Plants – Structure and function of parts	Animals, including humans – skeleton and muscles	Rocks	Forces and Magnets		Light and Shadows
Year 4	Living things and their habitats – changes and interdependence	Animals including humans – digestive system	States of Matter	Electricity	Sound and states of matter	
Year 5	Living Things and Their Habitats – Life Cycles and reproduction	Animals, including humans – growth and changes in humans	Properties and Changes of Materials – Reversible and irreversible changes	Forces – gravity, water resistance and air resistance	Earth and Space – The solar system	



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Year 6 Animals includin humans - circulatory system	g Living Things and their Habitats - classification including micro- organisms	Evolution and Inheritance	Electricity	Light
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