



## Science Curriculum at Scargill C of E Primary School (2022-2023)

### Long-term Overview

	Reception	KS1 Cycle A	KS1 Cycle B	LKS2 Cycle A	LKS2 Cycle B	UKS2 Cycle A	UKS2 Cycle B
Autumn 1	<u>Our Bodies</u> Understanding how to look after our body	Living Things and their Habitats Big Ideas	Animals Including Humans Big Ideas	Animals Including Humans Big Ideas	Light Big Ideas	Light Big Ideas	Earth and Space Big Ideas
Autumn 2	<u>Materials</u> Understanding how different materials feel and respond	Uses of Everyday Materials Big Ideas	Everyday Materials Big Ideas	Sound Big Ideas	Light Big Idea	Electricity Big Ideas	Forces Big Ideas
Spring 1	<u>Investigations</u> Ice investigation – Understanding how and why ice responds the way it does	Living Things and their Habitats Big Ideas	Animals Including Humans Big Ideas	Electricity Big Ideas	Rocks and Fossils Big Ideas	Living Things and their Habitats Big Ideas	Properties and Changes of Materials Big Ideas
Spring 2	<u>Growth</u> Understanding how plant grow and what they need	Plants Big Ideas	Plants Big Ideas	Solids, Liquids and Gases (States of Matter) Big Ideas	Forces and Magnets Big Ideas	Evolution and Inheritance Big Ideas	Animals Including Humans Big Ideas
Summer 1	<u>Minibeasts</u> Exploring the natural world immediately around us	Super Scientists	Earth Science – Seasonal Changes Big Ideas	Living Things and their Habitats Big Ideas	Plants and Animals Big Ideas	Animals Including Humans Big Ideas	Living Things and their Habitats Big Ideas
Summer 2	<u>Floating and Sinking</u> Understanding how certain materials respond in water and why	Animals Including Humans Big Ideas	Retrieval and enquiry	Living Things and their Habitats Big Ideas	Plants and Animals Big Ideas	Animals Including Humans Big Ideas	Properties and Changes of Materials Big Ideas



Long-term Overview

**Science at Scargill - The 'Big Ideas' of Science**

The 'Big Ideas' of Science are recurring themes that appear throughout the Science National Curriculum from KS1 to UKS2. Each unit of learning that is taught will link to a 'Big Idea'. The 'Big Ideas' focus on the 4 main components of Scientific knowledge: Physics, Chemistry, Biology and Earth Science.

Physics	Chemistry	Biology	Earth Science
<p>P1: The universe follows unbreakable rules that are all about forces, matter and energy.</p> <p>P2: Forces are different kinds of pushes and pulls that act on all the matter that is in the universe. Matter is all the stuff, or mass, in the universe.</p> <p>P3: Energy, which cannot be created or destroyed, comes in many different forms and tends to move away from objects that have lots of it.</p>	<p>C1: All matter (stuff) in the universe is made up of tiny building blocks.</p> <p>C2: The arrangement, movement and type of the building blocks of matter and the forces that hold them together or push them apart explain all the properties of matter (e.g. hot/cold, soft/hard, light/heavy, etc).</p> <p>C3: Matter can change if the arrangement of these building blocks changes.</p>	<p>B1: Living things are special collections of matter that make copies of themselves, use energy and grow.</p> <p>B2: Living things on Earth come in a huge variety of different forms that are all related because they all came from the same starting point 4.5 billion years ago.</p> <p>B3: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.</p>	<p>E1: The Earth is one of eight planets that orbit the sun.</p> <p>E2: The Earth is tilted and spins on its axis leading to day and night, the seasons and the climate.</p> <p>E3: The Earth is made up of several layers, including a relatively thin rocky surface which is divided into tectonic plates, and the movement of these plates leads to many geologic events (such as earthquakes and volcanoes) and geographical features (such as mountains).</p>