



## Science Cycle A & B Overview



Cycle A – 2022 onwards - (beginning on even academic years)

Term	Reception	Year 1 and 2	Year 3 and 4	Year 5 and 6
Autumn 1	<u>Happy to be Me!</u> <i>Ourselves</i> Understanding how to look after our body	Living Things and their Habitats Big Idea(s): B1, B3	Animals Including Humans Big Idea(s): B2, B3	Light Big Idea(s): P1, P3
Autumn 2	<u>Time Detectives</u> <i>Materials</i> Understanding how different materials feel and respond (clothing – how did we wash clothes/space - gravity)	Uses of Everyday Materials Big Idea(s): C1, C2	Sound Big Idea(s): P1, P3	Electricity Big Idea(s): P1, P3
Spring 1	<u>Environments and Habitats</u> <i>Investigation</i> Understanding how and why ice responds the way it does	Living Things and their Habitats Big Idea(s): B1, B3	Electricity Big Idea(s): P1, P3, C2	Living Things and their Habitats Big Idea(s): B2
Spring 2	<u>How Does Your Garden Grow?</u> <i>Growth</i> Understanding how plants grow and what they need	Plants Big Idea(s): B1	Solids, Liquids and Gases (States of Matter) Big Idea(s): P2	Evolution and Inheritance Big Idea(s): B3
Summer 1	<u>Bugs Life</u> <i>Mini-beasts</i> Exploring the natural world immediately around us	Super Scientists* Additional unit – see non-statutory guidance for details	Living Things and their Habitats Big Idea(s): B1, B2, B3	Animals Including Humans Big Idea(s): B1
Summer 2	<u>Around the World in a Term</u> <i>Floating and sinking/travel and ramps</i> Understanding how certain materials respond in water and why	Animals Including Humans Big Idea(s): B1	Living Things and their Habitats Big Idea(s): B1, B2, B3	Animals Including Humans Big Idea(s): B1



## Science Cycle A & B Overview



Cycle B – 2023 onwards - (beginning on odd academic years)

Term	Reception	Year 1 and 2	Year 3 and 4	Year 5 and 6
Autumn 1	<u>Happy to be Me!</u> <i>Ourselves</i> Understanding how to look after our body	Animals Including Humans Big Idea(s): B2, B3	Animals Including Humans Big Idea(s): B1, B2, B3	Earth and Space Big Idea(s): E1, E2
Autumn 2	<u>Time Detectives</u> <i>Materials</i> Understanding how different materials feel and respond (clothing – how did we wash clothes/space - gravity)	Everyday Materials Big Idea(s): C1, C2	Light Big Idea(s): P1, P3	Forces Big Idea(s): P1, P2
Spring 1	<u>Environments and Habitats</u> <i>Investigation</i> Understanding how and why ice responds the way it does	Animals Including Humans Big Idea(s): B2, B3	Rocks and Fossils Big Idea(s): C1, C2, C3, E3	Properties and Changes of Materials Big Idea(s): C2, C3
Spring 2	<u>How Does Your Garden Grow?</u> <i>Growth</i> Understanding how plants grow and what they need	Plants Big Idea(s): B2	Forces and Magnets Big Idea(s): P2	Animals Including Humans Big Idea(s): B1
Summer 1	<u>Bugs Life</u> <i>Mini-beasts</i> Exploring the natural world immediately around us	Earth Science – Seasonal Changes Big Idea(s): E2	Plants Big Idea(s): B1, B2, B3	Living Things and their Habitats Big Idea(s): B1, B3
Summer 2	<u>Around the World in a Term</u> <i>Floating and sinking/travel and ramps</i> Understanding how certain materials respond in water and why	Retrieval and enquiry – linked to previously taught units	Super Scientists* Additional unit – see non-statutory guidance for details	Properties and Changes of Materials Big Idea(s): C2, C3



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### **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>