United Curriculum: Science



	N3-4	Reception	Year 1-2		Year 3-4		Year 5-6	
			Cycle A	Cycle B	Cycle A	Cycle B	Cycle A	Cycle B
Autumn 1	**It's getting cold outside / Bears** Weather where we live, habitats where bears live		**BIOLOGY** **Plants** Identifying and naming common plants and describing basic structures	**BIOLOGY / PHYSICS** **Seasonal changes** Observing changes across four seasons and describing associated weather	**CHEMISTRY** **Rocks** Comparisons of types of rocks and how fossils are formed	**PHYSICS** **Light** Relationship between light and how we see; the formation of shadows	**BIOLOGY** **Life cycles** Life cycles of a mammal, amphibian, insect, bird, and some reproduction	**CHEMISTRY** **Separating mixtures** Identifying and separating mixtures; reversible and non-reversible changes
Autumn 2	**Polar express / Special days** Melting and freezing; natural and artificial materials		**BIOLOGY** **Plant growth** Plants grow from seeds, and require water, light and a suitable temperature	**CHEMISTRY** **Everyday materials** Distinguishing objects from their material, and describing simple properties	**BIOLOGY** **Organisms** The role of muscles and skeletons; the importance of nutrients	**BIOLOGY** **Food & digestion** The human digestive system and simple food chains	**BIOLOGY** **Human development** Human development to old age	**BIO / CHEM / PHYSICS** **Energy** Introducing the concept of energy stores and energy transfers; relate this to prior knowledge
Spring 1	**On the Move / Toys** Exploring pushes, pulls and magnets		**BIOLOGY** **Animals** Reptiles, fish, amphibians, birds and mammals; carnivores, herbivores, omnivores	**BIOLOGY** **Humans** Human body parts and senses	**BIOLOGY** **Plants** Features of flowering plants and what they need to survive	**CHEMISTRY** **Particle model and states of matter** States of matter in relation to particle arrangement	**BIOLOGY** **Evolution** Fossils; introduction to the idea that adaptation may lead to evolution	**PHYSICS** **Light** How light travels and is reflected, and how this allows us to see
Spring 2	**On the Farm / Food Glorious Food** Life cycles of farm animals and plants	**Spring in our step** Wildlife and weather in spring and winter; habitats around our school	**BIOLOGY** **Needs of animals** Animals need water, food and air to survive and to have offspring	**CHEMISTRY** **Uses of materials** Comparisons of an object's material with its use; impact of bending, twisting	**BIOLOGY** **Classifying organisms** Introduction to classifying animals and their environment	**PHYSICS** **Sounds** Relationship between strength of vibrations and volume of sound	**PHYSICS** **Electricity** Investigating variations in series and parallel circuits; electricity generation	**BIOLOGY** **Further classification** Further classification of organisms based on characteristics
Summer 1	**Once upon a time 1 / 2** Properties of materials and exploring mixtures		**Consolidation and review** *(particularly plant growth for all pupils, and cycle B chemistry for year 2 age pupils)*	**Consolidation and review** *(particularly seasonal changes for all pupils, and cycle A biology for year 2 age pupils)*	**PHYSICS** **Forces & motion** Introducing pushes and pulls; opposing forces, and balanced forces	**PHYSICS** **Electricity** Simple series circuits	**PHYSICS** **Forces** Gravity, air and water resistance and friction; introduction to pulleys	**BIOLOGY** **Functions of the human body** Human circulatory system; transport of nutrients in the body
Summer 2	**All creatures great and small 1 / 2** Life cycles of animals in trop. rainforests, sea, and grasslands	**Science detectives** Properties of materials and habitats around the world	**BIOLOGY** **Living things & habitats** Habitats, micro-habitats, and simple food chains	**CHEMISTRY** **Solids, liquids and gases** How substances exist as solids, liquids and gases	**PHYSICS** **Magnetism** Contact and non-contact forces, including friction and magnetism	**CHEMISTRY** **Properties of materials** Considering physical and chemical properties	**PHYSICS** **Earth and space** Movements of planets and the Moon, and relationship to day and night	**CHEMISTRY** **Physical and chemical changes** Identifying physical and chemical changes

Units that appear in a different place to that in the single-year planning have been highlighted in green; if it's in a different year group it is highlighted in orange.