



	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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 Plant growth Plants grow from seeds, and require water, light and a suitable temperature	CHEMISTRY Rocks Comparisons of types of rocks and how fossils are formed	BIOLOGY Classifying organisms Introduction to classifying animals and their environment	CHEMISTRY Separating mixtures Identifying and separating mixtures; reversible and non-reversible changes	PHYSICS Electricity Investigating variations in series and parallel circuits, and how electricity is generated
Autumn 2	Polar express / Special days Melting and freezing; natural and artificial materials		BIOLOGY / PHYSICS Seasonal changes Observing changes across four seasons and describing associated weather	BIOLOGY Needs of animals Animals need water, food and air to survive and to have offspring	PHYSICS Light Relationship between light and how we see; the formation of shadows	BIOLOGY Food & digestion The human digestive system and simple food chains	BIO / CHEM / PHYSICS Energy Introducing the concept of energy stores and energy transfers; relate this to prior knowledge	BIOLOGY Evolution Fossils; introduction to the idea that adaptation may lead to evolution
Spring 1	On the Move / Toys Exploring pushes, pulls and magnets		CHEMISTRY Everyday materials Distinguishing objects from their material, and describing simple properties	CHEMISTRY Uses of materials Comparisons of an object's material with its use; impact of bending, twisting on solid objects	BIOLOGY Organisms The role of muscles and skeletons; the importance of nutrients	CHEMISTRY Particle model and states of matter States of matter in relation to particle arrangement	BIOLOGY Life cycles Life cycles of a mammal, amphibian, insect, bird, and some reproduction processes	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	Consolidation and review	BIOLOGY Living things & habitats Introduction to habitats, micro-habitats, and simple food chains	BIOLOGY Plants Features of flowering plants and what they need to survive	PHYSICS Sounds Relationship between strength of vibrations and volume of sound	BIOLOGY Human development Human development to old age	BIOLOGY Further classification Further classification of organisms based on characteristics
Summer 1	Once upon a time 1 / 2 Properties of materials and exploring mixtures		BIOLOGY Animals Naming reptiles, fish, amphibians, birds and mammals; carnivores, herbivores, omnivores	CHEMISTRY Solids, liquids and gases How the same substances can exist as solids, liquids and gases	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 within the body
Summer 2	All creatures great and small 1 / 2 Life cycles of animals in trop. rainforests, sea,	Science detectives Properties of materials and habitats around the world	BIOLOGY Humans Human body parts and senses	Consolidation and review	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



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Autumn 1	BIOLOGY Plants (Lesson 2) Embedded: Pupils write a simple report about the parts of a plant.	BIOLOGY Plant Growth (Lesson 6) Embedded: Pupils write a simple report about their favourite fruit or vegetable.	CHEMISTRY Rocks (lesson 5) Additional: Pupils write an explanation text about how the dodo became extinct.	BIOLOGY Classifying Organisms (Lesson 6) Embedded: Pupils write a persuasive text about how an endangered species could be protected.	CHEMISTRY Separating Mixtures (Lesson 2) Embedded: Pupils write a short explanation text about why nail varnish cannot be washed off with water.	PHYSICS Electricity (Lesson 6) Embedded: Pupils write a short report describing how electricity gets into our homes.
Autumn 2			PHYSICS Light (Lesson 5) Embedded: Pupils write instructions for carrying out a given investigation.	BIOLOGY Food & Digestion (Lesson 4) Additional: Pupils write an explanation text on how the digestive system works.		BIOLOGY Evolution (Lesson 4) Embedded: Pupils write an explanation text on how the peppered moth population evolved.
Spring 1	CHEMISTRY Everyday Materials (Lesson 4) Additional: Pupils write a short report about different objects and their physical properties.	CHEMISTRY Uses of Materials (Lesson 1) Embedded: Pupils write a short report about an object's purpose, material and properties.	BIOLOGY Organisms (Lesson 1) Additional: Pupils write a persuasive letter to a supermarket convincing them to them to sell wonky fruit and vegetables.		BIOLOGY Life Cycles (Lesson 1 and 2) Embedded: Pupils write an explanation text on sexual reproduction in animals.	
Spring 2			BIOLOGY Plants (Lesson 5) Additional: Pupils write a report on how seeds are dispersed in the form of a poster or fact file.	PHYSICS Sound (Lesson 6) Embedded: Pupils write a report about hearing loss in the form of an informative poster or leaflet.	BIOLOGY Human Development (Lesson 4) Additional: Pupils write a discussion text in response to the question, 'Should IVF be offered to everyone by the NHS?'	BIOLOGY Further Classification (Lesson 5) Embedded: Pupils write an explanation text about the way in which bacteria is not always harmful.
Summer 1	BIOLOGY Animals (lesson 6) Additional: Pupils write a short report about their favourite animal.	CHEMISTRY Solids, Liquids and Gases (Lesson 4) Additional: Pupils write a short explanation text about the impact of global warming on polar bears' habitat.	PHYSICS Forces and Motion (Lesson 4) Embedded: Pupils write an explanation text to demonstrate the impact of balanced and unbalanced forces in a game of tug of war.		PHYSICS Forces (Lesson 3) Additional: Pupils write an explanation of why an ice skate has a rough part and a smooth part.	BIOLOGY Functions of the Human Body (Lesson 6) Additional: Pupils write an informative and persuasive text about the dangers of smoking.
Summer 2	BIOLOGY Humans (Lesson 6) Additional: Pupils write sentences about the senses.			CHEMISTRY Properties of Materials (Lesson 5 and 6) Embedded: Pupils write a report about a toxic substance in the form of a poster.	PHYSICS Earth and Space (Lesson 6) Additional: Pupils write a letter from the perspective of an astronaut on the ISS.	CHEMISTRY Physical and Chemical Changes (Lesson 6) Embedded: Pupils write an explanation text about why polar bears are endangered.

