

United Curriculum: Science



	N3-4	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	<p>It's getting cold outside / Bears Weather where we live, habitats where bears live.</p> <p>Our local area. Weather in Manchester.</p> <p>Curiosity and respect</p>	<p>Me and My World Exploring the natural world around us. Comparing us now to when we were babies – talking about how our body changes.</p> <p>Exploring our local area.</p> <p>Civility and Curiosity and respect.</p>	<p>BIOLOGY Plants Identifying and naming common plants and describing basic structures</p> <p>Nature walk around our school grounds. Tree and leaf hunt.</p> <p>Curiosity and respect</p>	<p>BIOLOGY Plant growth Plants grow from seeds, and require water, light and a suitable temperature</p> <p>Local plant walk</p> <p>Curiosity</p>	<p>CHEMISTRY Rocks Comparisons of types of rocks and how fossils are formed</p> <p>Fossil finding in an around our school</p> <p>curiosity and respect</p>	<p>BIOLOGY Classifying organisms Introduction to classifying animals and their environment</p> <p>Habitats and microhabitats at our forest school</p> <p>Curiosity and respect</p>	<p>CHEMISTRY Separating mixtures Identifying and separating mixtures; reversible and non-reversible changes</p> <p>Curiosity</p>	<p>PHYSICS Electricity Investigating variations in series and parallel circuits, and how electricity is generated</p> <p>Looking at local power plant</p> <p>Local use of renewable energy</p> <p>Curiosity</p>
Autumn 2	<p>Polar express / Special days Melting and freezing; natural and artificial materials</p> <p>civility and curiosity</p>	<p>My Heroes/Standing Ovation Looking at seasonal changes (Autumn).</p> <p>Curiosity and respect</p>	<p>BIOLOGY / PHYSICS Seasonal changes Observing changes across four seasons and describing associated weather.</p> <p>Observe weather in Gorton during the Autumn term.</p> <p>Curiosity</p>	<p>BIOLOGY Needs of animals Animals need water, food and air to survive and to have offspring</p> <p>Curiosity and respect</p>	<p>PHYSICS Light Relationship between light and how we see; the formation of shadows</p> <p>Curiosity</p>	<p>BIOLOGY Food & digestion The human digestive system and simple food chains</p> <p>Caterlink assembly about digesting food</p> <p>Curiosity</p>	<p>BIO / CHEM / PHYSICS Energy Introducing the concept of energy stores and energy transfers; relate this to prior knowledge</p> <p>Looking at local power plant</p> <p>Local use of renewable energy</p> <p>Curiosity and respect</p>	<p>BIOLOGY Evolution Fossils; introduction to the idea that adaptation may lead to evolution</p> <p>Research local fossil discoveries</p> <p>Curiosity and respect</p>
Spring 1	<p>On the Move / Toys Exploring pushes, pulls and magnets</p> <p>Civility and respect</p>	<p>Castles, Knights and Dragons Looking at seasonal changes (Winter)</p> <p>Curiosity</p>	<p>CHEMISTRY Everyday materials Distinguishing objects from their material, and describing simple properties.</p> <p>Look at materials that are produced in Manchester.</p> <p>Curiosity.</p>	<p>CHEMISTRY Uses of materials Comparisons of an object's material with its use; impact of bending, twisting on solid objects</p> <p>Curiosity</p>	<p>BIOLOGY Organisms The role of muscles and skeletons; the importance of nutrients</p> <p>Curiosity</p>	<p>CHEMISTRY Particle model and states of matter States of matter in relation to particle arrangement</p> <p>Locating solids, liquids and gases in our school environment</p> <p>Curiosity and respect</p>	<p>BIOLOGY Life cycles Life cycles of a mammal, amphibian, insect, bird, and some reproduction processes</p> <p>Look at lifecycles in microhabitats on the school grounds and surrounding areas.</p> <p>Curiosity and respect</p>	<p>PHYSICS Light How light travels and is reflected, and how this allows us to see</p> <p>Curiosity</p>



<p>On the Farm / Food Glorious Food Life cycles of farm animals and plants</p> <p>Plants and animals in local area./trip to Reddish Vale Farm</p> <p>Curiosity and civility and respect.</p>	<p>Spring in our step Wildlife and weather in spring and winter; habitats around our school.</p> <p>Curiosity and respect</p>	<p>Consolidation and review</p>	<p>BIOLOGY Living things & habitats Introduction to habitats, micro-habitats, and simple food chains Local habitats walk</p> <p>Civility, curiosity and respect</p>	<p>BIOLOGY Plants Features of flowering plants and what they need to survive</p> <p>School flower tour</p> <p>Curiosity and respect</p>	<p>PHYSICS Sounds Relationship between strength of vibrations and volume of sound Making panpipes</p> <p>Curiosity</p>	<p>BIOLOGY Human development Human development to old age</p> <p>Curiosity and respect</p>	<p>BIOLOGY Further classification Further classification of organisms based on characteristics</p> <p>Judgement</p> <p>Enthusiasm</p>
<p>Once upon a time 1 / 2 Properties of materials and exploring mixtures</p> <p>Curiosity</p>	<p>Where We Live Materials – looking at similarities and differences in construction Our local area – Gorton</p> <p>Curiosity</p>	<p>BIOLOGY Animals Naming reptiles, fish, amphibians, birds and mammals; carnivores, herbivores, omnivores</p> <p>School Trip to Lancaster Park and Animal Farm</p> <p>Civility, curiosity and respect</p>	<p>CHEMISTRY Solids, liquids and gases How the same substances can exist as solids, liquids and gases</p> <p>Curiosity</p>	<p>PHYSICS Forces & motion Introducing pushes and pulls; opposing forces, and balanced forces</p> <p>Curiosity.</p>	<p>PHYSICS Electricity Simple series circuits Power stations in Carrington and Stalybridge</p> <p>Curiosity and respect</p>	<p>PHYSICS Forces Gravity, air and water resistance and friction; introduction to pulleys</p> <p>Curiosity</p>	<p>BIOLOGY Functions of the human body Human circulatory system; transport of nutrients within the body Links with local hospitals</p> <p>Curiosity</p> <p>Enthusiasm</p>
<p>All creatures great and small 1 / 2 Life cycles of animals in trop. rainforests, sea, and grasslands</p> <p>Respect and curiosity</p>	<p>Science detectives Properties of materials and habitats around the world Visit to Debdale Park</p> <p>Civility, curiosity and respect</p>	<p>BIOLOGY Humans Human body parts and senses</p> <p>Walk of our local area to explore our senses.</p> <p>Civility and curiosity</p>	<p>Consolidation and review</p>	<p>PHYSICS Magnetism Contact and non-contact forces, including friction and magnetism</p> <p>Curiosity</p>	<p>CHEMISTRY Properties of materials Considering physical and chemical properties</p> <p>Curiosity</p>	<p>PHYSICS Earth and space Movements of planets and the Moon, and relationship to day and night Links to Jordrel Bank and the Lovell telescope</p> <p>Curiosity</p>	<p>CHEMISTRY Physical and chemical changes Identifying physical and chemical changes Everyday changes around us</p> <p>Critical thinking and curiosity</p> <p>Enthusiasm</p>

