

# United Curriculum: Science



	N3-4	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	<p><b>It's getting cold outside / Bears</b> Weather where we live, habitats where bears live.</p> <p>Our local area. Weather in Manchester.</p> <p>Curiosity and respect</p>	<p><b>Me and My World</b> 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><b>BIOLOGY</b> <b>Plants</b> 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><b>BIOLOGY</b> <b>Plant growth</b> Plants grow from seeds, and require water, light and a suitable temperature</p> <p>Local plant walk</p> <p>Curiosity</p>	<p><b>CHEMISTRY</b> <b>Rocks</b> 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><b>BIOLOGY</b> <b>Classifying organisms</b> Introduction to classifying animals and their environment</p> <p>Habitats and microhabitats at our forest school</p> <p>Curiosity and respect</p>	<p><b>CHEMISTRY</b> <b>Separating mixtures</b> Identifying and separating mixtures; reversible and non-reversible changes</p> <p>Curiosity</p>	<p><b>PHYSICS</b> <b>Electricity</b> 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><b>Polar express / Special days</b> Melting and freezing; natural and artificial materials</p> <p>civility and curiosity</p>	<p><b>My Heroes/Standing Ovation</b> Looking at seasonal changes (Autumn).</p> <p>Curiosity and respect</p>	<p><b>BIOLOGY / PHYSICS</b> <b>Seasonal changes</b> Observing changes across four seasons and describing associated weather.</p> <p>Observe weather in Gorton during the Autumn term.</p> <p>Curiosity</p>	<p><b>BIOLOGY</b> <b>Needs of animals</b> Animals need water, food and air to survive and to have offspring</p> <p>Curiosity and respect</p>	<p><b>PHYSICS</b> <b>Light</b> Relationship between light and how we see; the formation of shadows</p> <p>Curiosity</p>	<p><b>BIOLOGY</b> <b>Food &amp; digestion</b> The human digestive system and simple food chains</p> <p>Caterlink assembly about digesting food</p> <p>Curiosity</p>	<p><b>BIO / CHEM / PHYSICS</b> <b>Energy</b> 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><b>BIOLOGY</b> <b>Evolution</b> 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><b>On the Move / Toys</b> Exploring pushes, pulls and magnets</p> <p>Civility and respect</p>	<p><b>Castles, Knights and Dragons</b> Looking at seasonal changes (Winter)</p> <p>Curiosity</p>	<p><b>CHEMISTRY</b> <b>Everyday materials</b> Distinguishing objects from their material, and describing simple properties.</p> <p>Look at materials that are produced in Manchester.</p> <p>Curiosity.</p>	<p><b>CHEMISTRY</b> <b>Uses of materials</b> Comparisons of an object's material with its use; impact of bending, twisting on solid objects</p> <p>Curiosity</p>	<p><b>BIOLOGY</b> <b>Organisms</b> The role of muscles and skeletons; the importance of nutrients</p> <p>Curiosity</p>	<p><b>CHEMISTRY</b> <b>Particle model and states of matter</b> 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><b>BIOLOGY</b> <b>Life cycles</b> 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><b>PHYSICS</b> <b>Light</b> How light travels and is reflected, and how this allows us to see</p> <p>Curiosity</p>



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

