

# Moor House School & College Curriculum Map



Boldened text = National Curriculum objectives

YEAR GROUP/PATHWAY: KS2		SUBJECT AREA: Science	
	Rotation Year 1 – Autumn Term Rocks & Soils (Yr 3)	Rotation Year 1 – Spring Term Plants & Seasons (Yr 1)	Rotation Year 1 – Summer Term Materials (Yr 1) & Forces (Yr 3)
Knowledge	<p>Core:</p> <ul style="list-style-type: none"> <li>Recognise that soils are made from rocks and organic matter.</li> <li>Identify what different rocks are used for based on their properties.</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>Identify how different types of rocks are formed – sedimentary, igneous, metamorphic</li> <li>Identify and label different layers of soil</li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li>Identify and name a variety of common trees, wild and garden plants.</li> <li>Identify and describe the basic structure of a plant.</li> <li>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>Identify common trees or plants from their leaves, seeds or flowers.</li> <li>Understand in simple terms the processes of photosynthesis and reproduction in plants.</li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li><b>MATERIALS</b> – Identify and name a variety of materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li> <li><b>FORCES</b> – Identify push, pull and twist forces.</li> <li><b>FORCES</b> – Identify surfaces that have more and less friction.</li> </ul> <p>Extended:</p>
Skills	<p>Core:</p> <ul style="list-style-type: none"> <li><b>Compare &amp; group together different kinds of rocks on the basis of their appearance and simple physical properties.</b></li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li><b>Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</b></li> <li>Identify and describe causes of erosion</li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li><b>Observe how seeds and bulbs grow into mature plants.</b></li> <li><b>Investigative work around plants – identify parts, compare and group plants.</b></li> <li>Sequence and describe changes across the four seasons.</li> <li><b>Observe and describe weather associated with seasons.</b></li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>Identify and group plants that are evergreen and deciduous.</li> <li><b>Observe and describe weather associated with seasons and how day length varies.</b></li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li><b>MATERIALS</b> – Describe the properties of different materials and sort according to these properties.</li> <li><b>FORCES</b> – <b>Compare how things move on different surfaces. Notice that some forces need contact between 2 objects.</b></li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li><b>MATERIALS</b> – Explain why a material is fit for a particular purpose.</li> </ul>
Vocabulary	<p>Core:</p> <p><b>ROCKS</b> – Properties, durable, permeable, natural, man-made</p> <p><b>SOILS</b> – Decompose,</p>	<p>Core:</p> <p>Absorb, produce, reproduce, transport</p> <p>Extended:</p> <p>Deciduous, evergreen, germinate</p>	<p>Core:</p> <p><b>MATERIALS</b> – properties, durable, transparent, waterproof, flexible</p> <p><b>FORCES</b> - Force, push, pull, twist, friction, surface</p>

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	Extended: Fossil, erosion, organic matter, igneous, sedimentary, metamorphic		Extended:
	<b>Rotation Year 2 – Autumn Term States of Matter (Yr 4)</b>	<b>Rotation Year 2 – Spring Term Light (Yr 3) &amp; Sound (Yr 4)</b>	<b>Rotation Year 2 – Summer Term Animals Including Humans</b>
<b>Knowledge</b>	<p>Core:</p> <ul style="list-style-type: none"> <li>identify the part played by evaporation and condensation in the water cycle</li> <li></li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>associate the rate of evaporation with temperature</li> <li></li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li>LIGHT – Recognise that they need light in order to see things and that dark is the absence of light.</li> <li>LIGHT – Recognise that light from the Sun can be dangerous and that there are ways to protect their eyes.</li> <li>LIGHT – Recognise that shadows are formed when the light from a light source is blocked by a solid object.</li> <li>SOUND - identify how sounds are made, associating some of them with something vibrating</li> <li>SOUND - recognise that vibrations from sounds travel through a medium to the ear</li> <li>SOUND - recognise that sounds get fainter as the distance from the sound source increases</li> <li></li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>LIGHT – Find patterns in the way that shadows change.</li> <li></li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li> <li>Identify and name a variety of common animals that are carnivores, omnivores and herbivores.</li> <li>Identify and name the basic parts of the human body and say which part of the body is associated with each sense.</li> <li>Notice that animals including humans, have offspring which grow into adults.</li> <li>Find out about and describe the basic needs of animals, including humans, for survival (water, food, air)</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds, mammals, including pets).</li> <li>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</li> </ul>
<b>Skills</b>	<p>Core:</p> <ul style="list-style-type: none"> <li>compare and group materials together, according to whether they are solids, liquids or gases</li> <li>observe that some materials change state when they are heated or cooled</li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li>LIGHT – Observe how light is reflected from different surfaces.</li> </ul> <p>Extended:</p>	<p>Core:</p> <ul style="list-style-type: none"> <li>Identify, draw and label the basic parts of the human body.</li> </ul> <p>Extended:</p>

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	<ul style="list-style-type: none"> <li>•</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>• Measure or research the temperature at which materials change state in degrees Celsius (°C)</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• SOUND - find patterns between the pitch of a sound and features of the object that produced it</li> <li>• SOUND - find patterns between the volume of a sound and the strength of the vibrations that produced it</li> </ul>	
Vocabulary	<p>Core:</p> <p>Extended:</p>	<p>Core:</p> <p>Extended:</p>	<p>Core:</p> <ul style="list-style-type: none"> <li>• Animal, fish, amphibian, reptile, bird, mammal, insect, wild, pet, carnivore, herbivore, omnivore</li> <li>• Human, body parts, senses – touch, smell, sight, hear, taste</li> <li>• Offspring, grow, adult, live, survive, air</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>• Exercise, hygiene, healthy</li> </ul>
<b>Summer Term</b>	<b>Rotation Year 3 – Autumn Term Electricity (Yr 4)</b>	<b>Rotation Year 3 – Spring Term Living Things &amp; Their Habitats (Yr 2)</b>	<b>Rotation Year 3 – Summer Term Earth &amp; Space (Yr 5)</b>
Knowledge	<p>Core:</p> <ul style="list-style-type: none"> <li>• Identify common appliances that run on electricity.</li> <li>• Identify whether a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>• Recognises that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</li> <li>• Recognise some common conductors and insulators, and associate metals with being conductors.</li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li>• Identify that most living things live in habitats to which they are suited</li> <li>• Describe how different habitats provide for the basic needs of the different kinds of animals and plants, and how they depend on each other.</li> <li>• Identify and name a variety of animals and plants in their habitats, including micro-habitats.</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>• Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li>• Describe the movement of the Earth, and other planets, relative to the Sun in the Solar system.</li> <li>• Describe the movement of the Moon relative to the Earth.</li> <li>• Describe the Earth, Moon and Sun as approximately spherical bodies.</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li>• Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.</li> </ul>

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<p>Skills</p>	<p>Core:</p> <ul style="list-style-type: none"> <li>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li></li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li>Explore and compare the differences between things that are living, dead and that have never been alive.</li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li></li> </ul>	<p>Core:</p> <ul style="list-style-type: none"> <li></li> </ul> <p>Extended:</p> <ul style="list-style-type: none"> <li></li> </ul>
<p>Vocabulary</p>	<p>Core:</p> <p>Battery, bulb, wire, circuit, buzzer, switch, complete circuit, electricity, connect</p> <p>Extended:</p> <p>Insulator, conductor</p>	<p>Core:</p> <p>Habitat, animal, plant, live/alive, dead, food, diet, micro-habitat</p> <p>Extended:</p> <p>Adapt, food source, herbivore, carnivore, omnivore</p>	<p>Core:</p> <p>Planet, Sun, Moon, Earth, Solar system, stars, astronaut, rotate, orbit, movement, sphere</p> <p>Extended:</p>