

# Science Curriculum Map 2018 - 2019 (Cycle 2)



		Science 2018-19		
		Autumn	Spring	Summer
Years 1&2	<p><b>Y1:3 Everyday materials:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>distinguish between an object and the material from which it is made</li> <li>identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>describe the simple physical properties of a variety of everyday materials</li> <li>compare and group materials on physical properties.</li> </ol> <p><b>Y1:2 Animals:</b> <u>Pupils should be taught to:</u></p> <ol 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, herbivores and omnivores Identify carnivores, herbivores, omnivores.</li> <li>identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>identify basic parts of human body and relate these to the senses.</li> </ol> <p><b>Y2:3 Animals including humans:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <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 and air)</li> <li>describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. (QCA 2B)</li> </ol> <p>Include some seasonal change</p>	<p><b>Y2:4 Uses of everyday materials:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ol> <p>Include some seasonal change</p> <p><b>Y1:4 Seasonal changes:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>observe changes across the four seasons.</li> <li>observe and describe weather associated with the seasons and how day length varies.</li> </ol>	<p><b>Y2:2 Plants:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>observe and describe how seeds and bulbs grow into mature plants.</li> <li>find out and describe how plants need water, light and suitable temperature to grow and stay healthy. (QCA 1B)</li> </ol> <p><b>Y1:2 Animals:</b> <u>Pupils should be taught to:</u></p> <ol 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, herbivores and omnivores Identify carnivores, herbivores, omnivores.</li> <li>identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>identify basic parts of human body and relate these to the senses.</li> </ol>	
	Years 3&4	<p><b>Y3:2 Animals including humans:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</li> <li>Identify that humans and some other animals have skeletons and muscles for support, protection and movement. (QCA 3A, 4A)</li> </ol> <p><b>Y4:2 Animals including humans:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>describe the simple functions of the basic parts of the digestive system in humans</li> <li>identify the different types of teeth in humans and their simple functions</li> <li>construct and interpret a variety of food chains, identifying producers, predators and prey. (QCA 3A, 4B)</li> </ol>	<p><b>Y4:3 States of matter:</b> <u>Pupils should be taught to:</u></p> <ol 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, and measure or research the temperature at which this happens in degrees Celsius (°C)</li> <li>identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ol> <p><b>Y3:1 Plants:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves, flowers.</li> <li>Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.</li> <li>Investigate the way in which water is transported within plants.</li> <li>Explore the part that flowers play in the life cycle of flowering plants,</li> </ol>	<p><b>Y3:4 Light:</b> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>recognise that they need light in order to see things and that dark is the absence of light</li> <li>notice that light is reflected from surfaces</li> <li>recognise that light from the sun can be dangerous and that there are ways to protect their eyes</li> <li>recognise that shadows are formed when the light from a light source is blocked by a solid object</li> <li>find patterns in the way that the size of shadows change.</li> </ol>

		including pollination, seed formation and dispersal.	
<b>Years 5&amp;6</b>	<p><u>Y5:1 Living things and their habitats:</u> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>describe the life process of reproduction in some plants and animals.</li> </ol> <p><u>Y5:1 Living things and their habitats:</u> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</li> <li>give reasons for classifying plants and animals based on specific characteristics.</li> </ol> <ol style="list-style-type: none"> <li></li> </ol>	<p><u>Y5:5 Forces:</u></p> <ol style="list-style-type: none"> <li>explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</li> <li>identify the effects of air resistance, water resistance and friction, that act between moving surfaces</li> </ol> <p>recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p><u>Y5:4 Earth and space:</u> <u>Pupils should be taught to:</u></p> <ol 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 Sun, Earth and Moon as approximately spherical bodies</li> <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> </ol>	<p><u>Y5:3 Properties and changes of materials:</u> <u>Pupils should be taught to:</u></p> <ol style="list-style-type: none"> <li>compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</li> <li>know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</li> <li>use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</li> <li>give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</li> <li>demonstrate that dissolving, mixing and changes of state are reversible changes</li> <li>explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</li> </ol>