

- I can report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in presentations
- I can identify scientific evidence that has been used to support or refute ideas or arguments.

Animals Including Humans	Living Things and their Habitats	Properties and Changes of Materials	Earth and Sp
<ul style="list-style-type: none"> <li>• I can describe the changes as humans develop to old age.</li> </ul>	<ul style="list-style-type: none"> <li>• I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>• I can describe the life process of reproduction in some plants and animals.</li> </ul>	<ul style="list-style-type: none"> <li>• I can 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>• I can know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</li> <li>• I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</li> <li>• I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</li> <li>• I can demonstrate that dissolving, mixing and changes of state are reversible changes</li> <li>• I can 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> </ul>	<ul style="list-style-type: none"> <li>• I can describe the move and other planets, rela the solar system</li> <li>• I can describe the move relative to the Earth</li> <li>• I can describe the Sun, I as approximately sphe</li> <li>• I can use the idea of the to explain day and nigt apparent movement of the sky.</li> </ul>

### Guidance

Animals Including Humans	Living Things and their Habitats	Properties and Changes of Materials	Earth and Sp
<p>Pupils should draw a timeline to indicate stages in the growth and development of humans. They should learn about the changes experienced in puberty.</p>	<p>Pupils should study and raise questions about their local environment throughout the year. They should observe life-cycle changes in a variety of living things, for example, plants in the vegetable garden or flower border, and animals in the local environment. They should find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane</p>	<p>Pupils should build a more systematic understanding of materials by exploring and comparing the properties of a broad range of materials, including relating these to what they learnt about magnetism in year 3 and about electricity in year 4. They should explore reversible changes, including, evaporating, filtering, sieving, melting and dissolving, recognising that melting and</p>	<p>Pupils should be introducec the Sun and Earth that ena explain day and night. Pupi that the Sun is a star at the solar system and that it has Mercury, Venus, Earth, Ma Saturn, Uranus and Neptur reclassified as a 'dwarf plar They should understand th</p>

		<p>circuit than others and that some materials will feel hotter than others when a heat source is placed against them. Safety guidelines should be followed when burning materials.</p>	
Working Scientifically			
<p>Pupils could work scientifically by researching the gestation periods of other animals and comparing them with humans; by finding out and recording the length and mass of a baby as it grows.</p>	<p>Pupils might work scientifically by: observing and comparing the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times), asking pertinent questions and suggesting reasons for similarities and differences. They might try to grow new plants from different parts of the parent plant, for example, seeds, stem and root cuttings, tubers, bulbs. They might observe changes in an animal over a period of time (for example, by hatching and rearing chicks), comparing how different animals reproduce and grow.</p>	<p>Pupils might work scientifically by: carrying out tests to answer questions, for example, 'Which materials would be the most effective for making a warm jacket, for wrapping ice cream to stop it melting, or for making blackout curtains?' They might compare materials in order to make a switch in a circuit. They could observe and compare the changes that take place, for example, when burning different materials or baking bread or cakes. They might research and discuss how chemical changes have an impact on our lives, for example, cooking, and discuss the creative use of new materials such as polymers, super-sticky and super-thin materials.</p>	<p>Pupils might work scientifically by: comparing the time of day at different locations on the Earth through international communication; creating simple models of the solar system; constructing shadow clocks and sundials to show midday and the start of the school day; finding out why ancient structures such as Stonehenge might have been used as a clock.</p>