



Year 5: Programme of Study		Date Achieved
Working scientifically	Plan different types of scientific enquiries to answer questions, including recognising and controlling obvious variables where necessary.	
	Take measurements, using a range of scientific equipment, with increasing accuracy and precision.	
	Record data and results using scientific diagrams and labels, classification keys, tables, and bar and line graphs.	
	Use test results to make predictions to set up further tests.	
	Report and present findings from enquiries and explanations of results, in oral and written forms such as displays and other presentations.	
	Make conclusions and determine causal relationships (e.g. the harder the push, the further it goes).	
	Identify scientific evidence that has been used to support or refute ideas or arguments.	
Living things (Biology)	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	
	Describe the life process of reproduction in some plants and animals.	
	Describe the changes as humans develop from birth to old age.	
Properties and changes of materials (Chemistry)	Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.	
	Understand that some materials will dissolve in liquid to form a solution, and can describe how to recover a substance from a solution.	
	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.	
	Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.	
	Demonstrate that dissolving, mixing and changes of state are reversible changes.	
	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.	
Earth and space (Physics)	Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.	
	Describe the movement of the Moon relative to the Earth.	
	Recognise the Sun, Earth and Moon as approximately spherical bodies.	
	Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.	
Forces (Physics)	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.	
	Identify the effects of air resistance, water resistance and friction that act between moving surfaces.	
	Identify friction as a force that may prevent objects from starting to move.	
	Identify the different forces acting on a body.	
	Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs.	