



Peel Hall Primary School

Science Year 5 Overview

National Curriculum Working Scientifically UKS2	Peel Hall Specific Working Scientifically Year 5				
<ul style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Taking measurements, using a range of scientific equipment with increasing accuracy and precision, taking repeat readings when appropriate Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Using test results to make predictions to set up further comparative and fair test Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Identify scientific evidence that has been used to support or refute ideas or arguments. 	Planning	Investigating and Observing	Identifying, Classifying and Recording	Concluding	Evaluating
	<ul style="list-style-type: none"> Raise different types of scientific questions. 	<ul style="list-style-type: none"> Plan a range of science enquiries, including comparative and fair testing. Plan and carry out comparative and fair tests, making systematic and careful observations. Take accurate and precise measurements using a range of scientific equipment such as newton meters, compasses and pneumatic pumps. Measure with increasing accuracy and precision. 	<ul style="list-style-type: none"> Use and develop keys to identify, classify and describe living things and materials. Record data and results of increasing complexity using scientific labels, classification keys, tables, bar and line graphs and models. 	<ul style="list-style-type: none"> Report findings from investigations and begin to use evidence to justify ideas and conclusions. 	<ul style="list-style-type: none"> Use relevant scientific language (from the Y5 programme of study) and illustrations to discuss, share and justify their scientific ideas. Begin to separate fact and opinions in secondary sources.
Properties and Changes of Materials			Living Things and their Habitats	Scientists and Inventors	
<ul style="list-style-type: none"> 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 Know that some materials will dissolve in liquid to form a solution, and 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, melting 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. 			<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Research and learn about the lives and work of prominent scientists in history. Linking to topics related to animals including humans, plants, chemistry, astronomy, engineers and physicist. 	

Animals including Humans	Earth and Space	Forces
<ul style="list-style-type: none"> Describe the changes as humans develop to old age 	<ul style="list-style-type: none"> 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 Describe 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 	<ul style="list-style-type: none"> 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 Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.