Science Key Skills
Year 5

Working scientifically	To plan different types of scientific enquiries to answer questions including recognizing and controlling variables where necessary
	To take measurements using a range of scientific equipment with increasing accuracy and precision, taking repeat readings where necessary
	To recording data and results of increasing complexity using scientific diagram and labels, classification keys, tables and bar graphs
	To use primary and secondary sources of information to support a scientific idea
	To use test results to make predictions to set up further comparative and fair tests
Biology - Living things - life cycles	To describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
	To describe the life processes of reproduction in some plants
	To describe the life processes of reproduction in some animals
Biology - Animals, including humans	To draw timelines to indicate stages of growth and developments of humans
	To learn about the changes experienced in puberty
Chemistry - properties and changes of materials	To compare and group together everyday materials on the basis of their properties (including hardness solubility, transparency, electrical conductivity, thermal conductivity and response to magnets)
	To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials
	To know that some materials will dissolve to form a solution
	To describe how to recover a substance from a solution
	To use knowledge of solids, liquids and gases to describe how mixtures might be separated (sieving, filtering and evaporating)
	To know that some physical changes are easy to reverse and some are more difficult
	To explain that some changes result in the formation of new materials, through chemical changes
Physics - Earth and space	To describe the movement of the Earth, and other planets, relative to the Sun in the solar system
	To explain that the Moon moves around the Earth taking 28 days to do so
	To know that the Sun is a star at the center of our solar system
	To use idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky
	To know that there are eight planets in our solar system and be able to name them
Physics - Forces	To explain how unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the object
	To recognise that some mechanisms, including leavers, pulleys and gears, allow a smaller force to have a greater effect
	To recognise some positive and negative implications of air resistance
	To understand that forces can make things begin to move, get faster or slow down
	To know that friction can slow down or stop moving objects
	To explain how water resistance effects objects and link this to air resistance
	To accurately measure the size of a force