

Year 5 coverage sheet

Working scientifically

The working scientifically objectives will be ongoing throughout all topics.

- planning 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
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Year 5 objectives	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 to old age.	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 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
Topic and term covered	Spring 2	Spring 2	Spring 2	Summer	Summer	Summer
Year 5 objectives	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	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.	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
Topic and term covered.	Summer	Summer	Summer	Summer	Autumn 2	Autumn 2

Year 5 objectives	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.	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.	
Topic and term covered.	Autumn 2	Autumn 2	Autumn 2	Autumn 2	Spring 1	