Year 5 science

Objective	Strand
Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Living things and their habitats
Describe the life process of reproduction in some plants and animals	Living things and their habitats
Describe the changes as humans develop to old age	Animals, including humans
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	Properties and changes of materials
Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	Properties and changes of materials
Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	Properties and changes of materials
Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	Properties and changes of materials
Demonstrate that dissolving, mixing and changes of state are reversible changes	Properties and changes of materials
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	Properties and changes of materials
Describe the movement of the Earth, and other planets, relative to the Sun in the solar system	Earth and space
Describe the movement of the Moon relative to the Earth	Earth and space
Describe the Sun, Earth and Moon as approximately spherical bodies	Earth and space
Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky	Earth and space
Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	Forces
Identify the effects of air resistance, water resistance and friction, that act between moving surfaces	Forces
Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	Forces
Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Working scientifically
Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	Working scientifically
Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Working scientifically
Using test results to make predictions to set up further comparative and fair tests	Working scientifically
Reporting and presenting 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	Working scientifically
Identifying scientific evidence that has been used to support or refute ideas or arguments	Working scientifically