
Year 5

Units

Progression in learning

Properties and Changes of Materials	<ul style="list-style-type: none">• (K) 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• (K) Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution• (K) Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating• (K) Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic• (K) Demonstrate that dissolving, mixing and changes of state are reversible changes• (K) 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• (WS) Use test results to make predictions to set up further comparative and fair tests• (WS) Plan and co-plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary• (WS) Report and present findings from enquiries, including conclusions and evaluations
Animals including Humans	<ul style="list-style-type: none">• (K) Describe the changes as humans develop to old age.• (WS) Use test results to make predictions to set up further comparative and fair tests• (WS) Plan and co-plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary• (WS) Report and present findings from enquiries, including conclusions and evaluations
Forces	<ul style="list-style-type: none">• (K) Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object• (K) Identify the effects of air resistance, water resistance and friction, that act between moving surfaces• (K) Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.• (WS) Make systematic and careful observations• (WS) Use test results to make predictions to set up further comparative and fair tests
Living Things and their Habitats	<ul style="list-style-type: none">• (K) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird• (K) Describe the life process of reproduction in some plants and animals• (WS) Model the life cycle• (WS) Recognise which secondary sources will be most useful to research their ideas
Earth and Space	<ul style="list-style-type: none">• (K) Describe the Sun, Earth and Moon as approximately spherical bodies• (K) Describe the movement of the Earth, and other planets, relative to the Sun in the solar system• (K) Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.• (K) Describe the movement of the Moon relative to the Earth• (WS) Identify scientific evidence that has been used to support or refute ideas or arguments.• (WS) Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary• (WS) Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs• (WS) Use test results to make predictions to set up further comparative and fair tests