

| As a Year 5 Scientist I will know  |   |   |
|--|---|---|
| Solar System   | <u>Forces</u>   | Properties and changes of materials   |
| the movement of the Earth and other planets in relative to<br>the SUn in the Solar System                                    | because of the force of gravity acting between the  | how to compare and group together everyday materials on the basis of their properties, including                          |
| the movement of the Moon relative to the Earth   | Earth and the falling object  | their hardness, solubility, transparency, conductivity  |
| how to describe the Sun, Earth and Moon as spherical   | the effects of air resistance, water resistance and friction that act between moving surfaces                     | (electrical and thermal) and response to magnets  |
| how to explain the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky | recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect | that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution    |
|  |   | the best method to separate solids, liquids and gases   |
| Animals inc. Humans  | Living things and their habitats  | including filtering, sieving and evaporation  |
| the changes as humans develop to old age   | the difference in life cycles of a mammal,an amphibian, an insect and a bird.                                     | reasons based on evidence from comparative and fair<br>tests why we use particular materials in our everyday<br>materials |
|  | the life process of reproduction in some plants and animals   |   |
|  |   | how to demonstrate dissolving, mixing and changes of state are reversible changes   |



## As a Year 5 Scientist I can...

Working Scientifically

- 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, 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 tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in 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

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