Year 5 Science LTM 2024-2025

Autumn 1 A Kingdom United 6 weeks Properties of materials 6 weeks	**Autumn 2** **Food Glorious Food** WR: Reversible and Irreversible changes Global warming- sustainability	**Spring 1** Earthlings Space 8 weeks) *could start in Autumn 2	**Spring 2** Inventors and Inventions Forces (9 weeks)	**Summer 1** Amazon Adventure Life cycles (4 steps) Reproduction A (6 steps) and B- continue in summer 2	**Summer 2** Faster, Higher, Stronger Animals including humans (6 weeks)
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 **Working Scientifically** Use and develop keys and other information records to identify, classify and describe living things and materials (non-statutory). Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter	• know 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 • Demonstrate that dissolving, mixing and changes of state are reversible changes. • Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	• 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 • 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. **Working Scientifically** Identifying scientific evidence that has been used to support or refute ideas or arguments.	• 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 **Working scientifically** Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas (non-statutory)	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird **Working scientifically** Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas' (non-statutory). Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Reporting and presenting findings from enquiries,	Describe the changes as humans develop to old age **Working Scientifically** planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Use relevant scientific language and illustrations to discuss, communicate and

graphs, bar and line graphs. Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. − Using test results to make predictions to set up further comparative and fair tests. Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas (non-statutory).	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. **Working Scientifically** Using test results to make predictions to set up further comparative and fair tests. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. − Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate.	se relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas and should talk about how scientific ideas have developed over time (non-statutory). − Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and	Recognise which secondary sources will be most useful to research their ideas (non-statutory) Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results. Taking measurements, using a range of scientific equipment, with increasing	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 **Reproduction A** • Describe the life process of reproduction in some plants and animals **Working scientifically** Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. − Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and	justify their scientific ideas' (non-statutory). Identifying scientific evidence that has been used to support or refute ideas or arguments. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. 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.

	Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas (non-statutory). Identifying scientific evidence that has been used to support or refute ideas or arguments. Global Warming To understand what global warming is. To understand what are the impacts of global warming on living things? **<u>Working Scientifically</u>** Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas (non-statutory) Identifying scientific evidence that has been used to support or refute ideas or arguments.	written forms such as displays and other presentations.	accuracy and precision, taking repeat readings when appropriate. Identifying scientific evidence that has been used to support or refute ideas or arguments Recognise which secondary sources will be most useful to research their ideas (non-statutory)	written forms such as displays and other presentations. Identifying scientific evidence that has been used to support or refute ideas or arguments. 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. **<u>WS: Reproduction B</u>** Using test results to make predictions to set up further comparative and fair tests.	

Year 5 Science LTM 2024-2025
