



Science KS3 Long-Term Plan– Implementation Overview September 2023

Year 7

<u>Term Topic/Focus</u>	<u>Topic/Skills taught/used</u>	<u>Links to Previous Learning</u>	<u>Curriculum Links</u>	<u>Culture Capital</u>	<u>Outcomes</u>
Autumn Term 1 –	Cells Acids and alkalis	Recapping Primary Education (if any) of science. Any practical skills learnt.	English – keywords Maths – calculating and measuring.	Alkalis discovered in Middle East as ash from burning.	Safely use scientific equipment including microscopes and show understanding of subject knowledge covered.
Autumn Term 2 –	Energy Resources Chemical reactions Electricity	Recapping Primary school Education. Previous topic work e.g., cells and build on it.	English – keywords Maths – calculating and measuring.	Places of oil resources Different religions with rituals, circumcision.	Safely use scientific equipment including Power packs and show understanding of subject knowledge covered.
Spring Term 1 –	Feeding relationship Particle models Forces	Recapping Primary school Education. Previous topic work.	English – keywords Maths – calculating and measuring.	Organisms found in different continent related to climate and food resources.	Safely use scientific equipment including Bunsen burners and show understanding of subject knowledge covered.
Spring Term 2	Variation & classification Solar system Food & digestion	Recapping Primary school Education. Previous topic work.	English – keywords Maths – calculating and measuring. ICT – researching and presenting information. E.g., other planets.	Theories of the solar system from scientist across the globe. Different culture foods testing, spices/pasta/spaghetti.	Safely use scientific equipment to test foods and show understanding of subject knowledge covered.
Summer Term 1 –	Respiration Solution Forces and transport	Recapping Primary school Education. Previous topic work.	English – keywords Maths – balancing numbers.	How Middle Eastern countries obtain drinking water from salty seawater.	Safely use scientific equipment and show understanding of subject knowledge covered.
Summer Term 2 –	Compounds Atoms & elements	Recapping Primary school Education. Previous topic work.	English – keywords Maths – balancing numbers.	Discoverers of the atomic theory.	Safely use scientific equipment and show understanding of subject knowledge covered.



Year 8

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Autumn Term 1 –	Microbes & disease Heating & cooling Light	Recapping Primary school Education. Previous topic work.	English – keywords Maths – calculating and measuring.	Spread of various diseases and treatment across the world.	Safely use scientific equipment and show understanding of subject knowledge covered.
Autumn Term 2 –	Ecological relationship Sound Reproduction	Recapping Primary school Education. Previous topic work.	English – keywords Maths – calculating and measuring.	Organisms found in different continent related to climate and food resources.	Safely use scientific equipment and show understanding of subject knowledge covered.
Spring Term 1 –	Inheritance & selection Reaction of metals Energy 2 - magnetism	Previous topic work.	English – keywords Maths – calculating and measuring.	Different breeds of animals and plants across the globe.	Safely use scientific equipment and show understanding of subject knowledge covered.
Spring Term 2	Fit & Healthy Patterns of reactivity Gravity & space	Previous topic work.	English – keywords Maths – calculating and measuring. ICT – researching space and presenting the findings.		Safely use scientific equipment and show understanding of subject knowledge covered.
Summer Term 1 –	Plants & photosynthesis Environmental chemistry	Previous topic work.	English – keywords Maths – calculating and measuring.	Different climate effect on plants found, e.g., cactus.	Safely use scientific equipment and show understanding of subject knowledge covered.
Summer Term 2 –	Speeding up CATCH UP & REVISION	Previous topic work.	English - keywords Mathematics – using equations and rearranging them.	Rules for driving in different countries.	Safely use scientific equipment and show understanding of subject knowledge covered.



Year 9

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Autumn Term 1 –	Plants for food Using Chemistry Pressure	Previous topic work.	English – keywords Maths – calculating and measuring.	Different climate effect on plants found, e.g., cactus.	Safely use scientific equipment and show understanding of subject knowledge covered.
Autumn Term 2 –	CATCH UP & REVISION				
Spring Term 1 –	Entry Level Certificate (ELC) – Science Chemistry – Elements, compounds & mixtures	KS3 Elements & compounds, solutions, metals and pattern of reactivity series topics	English – keywords Maths – calculating and measuring. ICT – researching and presenting information.	Work of scientists throughout the world to come up with the current model of atom. Place where element(s) were discovered. Recycling methods throughout the world.	Safely use scientific equipment to show understanding of subject knowledge covered.
Spring Term 2	ELC Finish off Chemistry. Teacher devised assignment & external set assignment	Previous topics			
Summer Term 1 –	ELC Physics – Energy, forces, and the structure of matter	KS3 energy resources & stores, heat transfer, forces and speed topics	English – keywords Maths – calculating and measuring. ICT – researching and presenting information.	Energy resources in different places, e.g. Geothermal. Metric units in countries, km or miles.	Safely use scientific equipment to show understanding of subject knowledge covered.
Summer Term 2 –	ELC Teacher devised assignment & external set assignment	Previous topics			