Year 7 Key Stage 3 Science 2023-2024

<u>Curriculum Intent</u> We believe that students deserve a broad and ambitious Science curriculum that enriches in skill and knowledge, which ignites curiosity and prepares them well for future learning or employment. Our curriculum is sequenced to build upon prior knowledge learnt from KS1, KS2 and KS3 and firmly embed the precise learning points that pupils need to succeed in their qualification and also to go on to further career success.

Term	Торіс	Knowledge and Skills	Assessments	Careers	SMSC	SRE/ British Values	Literacy	Character Virtues
Autumn 1								
	Introduction to Science	Lab skills - to develop practical scientific and mathematical skills and knowledge.	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as required.	Laboratory based. Careers relating to "The Scientific Method".	Moral: How Scientists work / investigate.	The need for rules to make a happy, safe and secure environment to live and work. A culture built upon freedom and equality, where everyone is aware of their rights and responsibilities.	Key words, reading, comprehension and homework tasks. Tassomai.	Moral: How Scientists work / investigate without bias Performance: Team work, confidence
	Particles & Separation Techniques	Relate the features of the particle model to the properties of materials in different states. Devise ways to separate mixtures based	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as required.	Material Scientists.	N/A	The need for rules to make a happy, safe and secure environment to live and work.	Key words, reading, comprehension and homework tasks. Tassomai.	Intellectual: Critical thinking Performance: Team work, confidence

Cells, Tissues & Organs	on their properties. To identify principal features of animal and plant cells and describe their function. To develop microscopy skills To identify the	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as	Cell Biologists.	Spiritual: Learning about the surrounding world.	The need for rules to make a happy, safe and secure environment to live and work.	Key words, reading, comprehension and homework tasks. Tassomai.	Intellectual: critical thinking, reflection Performance: Team work, confidence.
	different	required.					
	Half to	erm 23 ^{ra} October -27	October				
Forces	To determine the different types of forces, investigate factors that affect the size of frictional or drag forces, determine the difference between mass and weight.	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as required.	Relating to everyday experiences, car design, rocket design	Spiritual: learning about the surrounding world.	The need for rules to make a happy, safe and secure environment to live and work.	Key words, reading, comprehension and homework tasks. Tassomai.	Intellectual: Critical thinking, focus. Performance: Team work, confidence.
Energy Stores	Identify energy stores and describe how energy is transferred between objects. Describe the term efficiency and calculate using the given equation. Also	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as required.	Physics relating to energy transfers, electrical energy production and transfer.	Spiritual – learning about the surrounding world.	The need for rules to make a happy, safe and secure environment to live and work.	Key words, reading, comprehension and homework tasks. Tassomai.	Intellectual: Critical thinking, focus Performance: Team work, confidence.

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		the rate at which						
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		End of Term	18 th December-1 ^s	t Tanuary 2024				
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	Periodic Table	Sort elements	Lessons start	chemists,	Spiritual	The need for	Key words,	Intellectual
		using chemical	with retrieval	material	Learning about	rules to make a	reading,	Critical
		data and relate	questions.	scientises.	the world	happy, safe and	comprehension	thinking,
		this to their	End of topic		around us.	secure	and homework	focus.
		position on the	assessment			environment to	tasks. Tassomai.	
		Periodic Table,	Pupils			live and work.		Performance:
		compare the	encouraged to					Team work,
		properties of	reflect and					confidence.
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		properties of	required.					
		compounds.						
	Electrical	Introduction to	Lessons start	Electrician,	Spiritual:	The need for	Key words,	Intellectual:
	Circuits	series and	with retrieval	careers making	Learning about	rules to make a	reading,	Critical
		parallel circuits,	guestions.	use of electrical	the surrounding	happy, safe and	comprehension	thinking,
		compare the	End of topic	circuits.	world.	secure	and homework	focus.
		voltage drop	assessment			environment to	tasks. Tassomai.	
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		Halt term	12" February -16	rebruary				
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	Reproduction	Graph data	Lessons start	Careers relating	Cultural: aware	What is sexual	Key words,	Moral:
		relating to	with retrieval	to human	of differences.	reproduction?	reading,	Respect
		variation and	questions.	biology.			comprehension	
		explain how it	End of topic			Reproductive	and homework	
		may lead to the	assessment			organs.	tasks. Tassomai.	

survival of the	Pupils			Performance:
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End of [*]				
SUMMER 1		I		

	Acids & Alkalis	How metals react with acid, use of experimental data to suggest an order of reactivity of various metals, investigate pH with an investigation	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as required.	Chemistry – careers relating to making new materials and substances.	Spiritual: Learning about the world around us.	The need for rules to make a happy, safe and secure environment to live and work.	Key words, reading, comprehension and homework tasks. Tassomai.	Performance: teamwork, confidence, motivation Intellectual: critical thinking, reflection.
	Sound	Sound is caused by longitudinal waves, relate changes in the shape of an oscilloscope trace to changes in pitch and volume. Describe how the ears work.	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as required.	Careers relating to communication.	Spiritual: Learning about the world around us.	The need for rules to make a happy, safe and secure environment to live and work.	Key words, reading, comprehension and homework tasks. Tassomai.	Performance: teamwork, confidence, Intellectual: critical thinking, reflection.
		Half	Term 27 th May-3	1 st May				
Summer 2	1		1		1			
	Feeding Relationships	Energy transfer within an organism. Food chains and webs change a population of one organises	Lessons start with retrieval questions. End of topic assessment Pupils encouraged to reflect and amend work as required.	Careers relating to habitat conservation and ecology.	Spiritual: Learning about the world around us. Moral: human impact on the environment / food supply	A culture built upon freedom and equality, where everyone is aware of their rights and responsibilities.	Key words, reading, comprehension and homework tasks. Tassomai.	Performance: teamwork, confidence, motivation Intellectual: critical thinking, reflection.
	Space	The tilt of the Earth's axis affects the amount of solar energy absorbed	Lessons start with retrieval questions. End of topic assessment	Careers relating to aspects of Space.	Spiritual: Learning about the surrounding world	The need for rules to make a happy, safe and secure	Key words, reading, comprehension and homework tasks. Tassomai.	Performance: teamwork, confidence, motivation

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