



Verulam School: Key Stage 3 CURRICULUM INFORMATION

Department: Science

Subject Leader: Mr L Charmokly

Subject Vision: Our Science curriculum is designed to develop our students as strong independent thinkers who are curious about the world around them and develop their own scientific interests. We want them to have a range of complex scientific & transferable skills that allows them to make reasoned judgments for themselves and for the wider community.

	YEAR 7					
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	Introduction to science (general) Basic laboratory skills for all 3 sciences including bunsen burners, acids/alkalis and microscopes, drawing & interpreting graphs and data analysis.	Introduction to energy (physics & chemistry) Understanding the conservation of energy, particles, changing states and energy changes in chemical reactions.	Introduction to the human body (biology) Cells and the human body (skeleton, muscles, organ systems).	Introduction to atoms (chemistry) Foundations of atoms, chemical reactions and separating mixtures.	Introduction to earth (general) Understanding the earth in terms of biology (variation, adaptations and classification), changes in the earth (atmosphere, fossilisation and the rock cycle) as well as the human impact on the earth.	Introduction to space (physics) Understanding our solar system and stars as well as investigating light & sound waves.
Assessment	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question. Some crossover	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question.	End of year assessment with exam style questions covering all the content covered so far this year.	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question.

	extended writing question.	writing question. End of module (term 1) Test)	with term autumn 1 and 2 content.	End of module (Term 2 test)		
YEAR 8						
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	Working Scientifically Learning the key numeracy and investigation skills needed to be successful in science	Working with Cells Taking existing knowledge from year 7 cell biology and further developing this knowledge to more complex concepts of animal and plant biology	Working with chemicals Further developing year 7 knowledge in atoms and making connections with chemical reactions in biology and physics (radioactivity)	Working with forces Understanding the basics of how objects interact with forces and how forces affect motion of an object.	Working with materials Further developing the ideas behind chemistry and understanding the periodic table, reactivity, metal extraction and the chemistry of common materials.	Working with fluids Understanding how the behaviour and movement of fluids shape our world, including pressure in gases and liquids, solubility and state changes.
Assessment	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question.	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question. End of module (term 1) Test).	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question. Some crossover with term autumn 1 and 2 content.	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question. End of module (term 2) Test).	End of year assessment with exam style questions covering all the content covered so far this year.	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question.
YEAR 9						
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	Fundamentals of electricity (physics) Building circuits, understanding current, potential difference and resistance as well as	Fundamentals of Evolution Further development of knowledge from years 7 and 8 in cells and interlinking with more advanced concepts	Scientific Reports Understanding the basics in carrying out an investigation, identifying variables as well as analysing & evaluating results both	Transition to GCSE Chemistry Introduction to the chemistry GCSE course covering topics: Earth's Atmosphere, Earth's resources and Using	Transition to GCSE Physics Introduction to the physics GCSE course covering topics: Energy resources, Electricity at	Transition to GCSE Biology Introduction to the biology GCSE course covering topics: biodiversity, adaptations,

	any calculations associated with these measurements.	such as specialised cells, genetics and evolution.	quantitatively and qualitatively.	Resources and making ties with KS3 curriculum.	home and making ties with KS3 curriculum.	competition, cycles and making ties with the KS3 curriculum.
Assessment	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question.	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question. End of module (term 1) Test).	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question. Some crossover with term autumn 1 and 2 content.	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question. End of module (term 2) Test).	End of year assessment covering all the content covered so far this year. Mix of exam questions from KS3 and KS4 topics covered so far & ranging in degrees of challenge.	Written assessment 20 mark in-book assessment sheet including multiple choice, short answer and a 6-mark extended writing question.