



SUBJECT Science -KS3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Area of Study: Enquiry process Matter Organisms	Area of Study: Matter forces	Area of Study: Ecosystem Reactions	Area of Study: Energy	Area of Study: Genes Earth	Area of Study Waves
	Content: Working Scientifically Particle model Cells Movement	Content: Separating mixtures Forces Gravity	Content: Interdependence Plant reproduction Acids and alkalis Metals and non- metals	Content: Energy cost Energy transfer	Content: Human reproduction Variation Earth Universe	Content: Sound Light

Support at home

For all areas	Seneca website	Revision guide	Flash cards
	Seneca	https://www.cgpbooks.co.uk/secondary-books/ks3/science/shs34-ks3-science-complete-revision-practice	books/ks3/science/shf31-ks3-science-revision-question-cards
Assessments: AP1: Written test- on Autumn 1 content AP2: Written test on Autumn 1, 2 and spring 1 content AP3: Written test on all content		Careers in the Curriculum: 'Guess the job'- at the start of every topic. Shows jobs related to the topic being studied Career video- shows the 'day in the life' of a job related to the topic.	



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 8	Area of Study: Organisms Matter	Area of Study: Electromagnets Ecosystems	Area of Study: Reactions Forces	Area of Study: Genes	Area of Study: Energy Waves Earth	Area of Study: Enquiry processes
	Content: Digestion Breathing Elements Periodic table	Content: Current Potential difference and resistance Magnets and electromagnets Respiration Photosynthesis	Content: Types of reaction Chemical energy Contact forces Pressure	Content: Inheritance Evolution	Content: Work, energy and machines Heating and cooling Wave properties and wave effects Climate Earth resources	Content: How science works

Support at home (Please add any online resource links below to support home learning)

For all areas	Seneca website	Revision guide	Flash cards
	Seneca	https://www.cgpbooks.co.uk/secondary-books/ks3/science/shs34-ks3-science-complete-revision-practice	https://www.cgpbooks.co.uk/secondary-books/ks3/science/shf31-ks3-science-revision-question-cards

<p>Assessments: AP1: Written test- on Autumn 1 content AP2: Written test on Autumn 1, 2 and spring 1 content AP3: Written test on all content</p>	<p>Careers in the Curriculum: 'Guess the job'- at the start of every topic. Shows jobs related to the topic being studied Career video- shows the 'day in the life' of a job related to the topic.</p>
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	Area of Study: Cells Atoms and periodic table	Area of Study: Energy Infection and disease	Area of Study: Energy Infection and disease	Area of Study: Bonding Electricity	Area of Study: Molecules and matter Calculations	Area of Study: Organisation 2
	Content: Cell structure and transport Cell division Atomic structure Periodic table	Content: Conservation and dissipation of energy Energy transfer Energy resources Communicable and non-communicable diseases Preventing and treating diseases	Content: Conservation and dissipation of energy Energy transfer Energy resources Communicable and non-communicable diseases Preventing and treating diseases	Content: Structure and bonding Electrical circuits Electricity in the home	Content: Molecules and matter Chemical calculations	Content: Organising animals and plants

Support at home

(Please add any online resource links below to support home learning)

For all areas	Seneca website	Flash cards
	Seneca	Amazon Revision cards

<p>Assessments: AP1: Written test- on Autumn 1 content AP2: Written test on Autumn 1, 2 and spring 1 content AP3: Written test on all content</p>	<p>Careers in the Curriculum: 'Guess the job'- at the start of every topic. Shows jobs related to the topic being studied</p>
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SUBJECT: GCSE Biology, Chemistry and Physics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	B1: Bioenergetics P1: Radioactivity	C2: Rates and equilibrium	B2: Homeostasis Revision for AP2	P2: Forces 2 (Force, Motion and Pressure)	C2: Organic chemistry Revision for mock	Revision for mock B2: Ecology
	C1: Energy Changes Revision for AP1	P2: Forces 1 (Balance and motion)	C2: Chemical analysis	B2: Reproduction and Inheritance	P2: Waves	B2: Ecology

Assessments:	AP1: Year 9 and Autumn 1 content (end of Autumn term 1) AP2: Autumn 1, 2 and spring 1 content (End of Spring term 1) Mock exam: Summer term 2
Recommended revision resources:	
Recommended revision guide:	CGP Biology CGP Chemistry CGP Physics
Free Revision websites:	Seneca BBC Bitesize Fuse School
Revision websites requiring paid subscription	My GCSE Science Snap Revise



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 11	B2: Ecology	P2: Forces 1 (8.4-7) and 2 (11.1-1.4) Triple booster P1: Matter (triple booster: 6.6-6.7)	C2: Chemistry of the atmosphere C2: Using resources	P2: Waves triple booster (12.5-12.7) P2: Electromagnetism		
	P1: Matter (triple booster: 6.6-6.7) P1: Energy (triple booster 2.2-2.3) P1: Radioactivity	B2: Genetics, Variation and evolution Mock revision	B2: Reproduction C2: Chemical Analysis	P2: Space		

Assessments:	<p>Year 11 November Mocks: Combined Paper 1 and paper 2 assessments for Biology, Chemistry and Physics</p> <p>Year 11 February Assessment: Paper 2 exam (after February half term)</p> <p>GCSE External exams: To be updated once confirmed by AQA</p>
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Careers in the curriculum:

Biology	<p>Medicine and health care: https://www.healthcareers.nhs.uk/</p> <p>Veterinary and animal care: https://www.caw.ac.uk/careers/</p>	<p>Physics: https://www.iop.org/careers-physics/your-future-with-physics/career-paths#gref</p> <p>Careers in the energy sector: https://www.energynetworks.org/careers-in-energy/</p> <p>Motorsports: https://www.motorsportjobs.com/en/content/career-advice</p>
Chemistry	<p>Chemistry: https://edu.rsc.org/future-in-chemistry/career-options</p> <p>Pharmacy: https://www.rpharms.com/pharmacycareers</p>	



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Biology - Y12	Math and Practical Skills <ul style="list-style-type: none"> • Apparatus and techniques • Uncertainty, percentages and graphs Cells <ul style="list-style-type: none"> • Prokaryotic • Eukaryotic • Methods of studying cells • Cell cycle and mitosis • Membranes and transport across Biological molecules Structure and properties of: <ul style="list-style-type: none"> • Water • Carbohydrates • Lipids • Proteins • Nucleic acids 	Enzymes and Digestion <ul style="list-style-type: none"> • Structure and function • Induced fit • Inhibitors • Industrial uses • Structure, function and adaptations human digestion to include enzymes Immunity <ul style="list-style-type: none"> • Cell recognition • Immune response • HIV • Monoclonal antibodies • ELIZA 	Protein Synthesis <ul style="list-style-type: none"> • DNA, genes and chromosomes • Protein synthesis • Mutation • Meiosis Genetic Diversity <ul style="list-style-type: none"> • Genetic diversity (variation) • Adaptation and natural selection • Evolution Gas Exchange <ul style="list-style-type: none"> • SA:Vol ratios • Gas exchange in: <ul style="list-style-type: none"> • Insects • Fish • Mammals <ul style="list-style-type: none"> ○ structure, ○ function ○ adaptations 	Mass Transport <ul style="list-style-type: none"> • Surface area to volume ratios • Mass transport in: <ul style="list-style-type: none"> • Insects • Fish • Mammals • This includes structure, function and adaptation of the cardiovascular system in humans • Mass transport in plants Biodiversity <ul style="list-style-type: none"> • Taxonomy • Species richness • Simpsons index • Measuring diversity 	AS Synoptic Photosynthesis <ul style="list-style-type: none"> • Measuring photosynthesis • Photosynthetic pigments • Limiting factors Populations and ecosystems (ecology) <ul style="list-style-type: none"> • Ecosystems • Habitats • Abiotic / biotic • Estimating population size – ecological techniques • MRR • Statistical tests Conservation - Structured independent study over holidays		
Support at Home	<ul style="list-style-type: none"> • Complete text book reading and make notes prior to each topic • Complete text book questions and mark at the end of each topic • Library of support texts available in S9 • A / A* consider subscription to review magazine (some copies available in S9) • Zig Zag learning grids • Topic workbooks with answers 						
Assessments	<ul style="list-style-type: none"> - Essay style assessment for each topic - Topic Tests to allow students to focus on exam technique and give a progress check - Written assessments for each assessment point which will be synoptic and build knowledge and skills - CPAC assessment through lab books 			Careers in the Curriculum: <ul style="list-style-type: none"> Health care / medicine Animal welfare Conservation Genetics Research and lab work 			