

Curriculum Overview (Sept 2023 to July 2024) RAAC



SUBJECT - Science

Year Group	Autumn 1 (8 weeks)	Autumn 2 (7 weeks)	Spring 1 (5 weeks)	Spring 2 (5 weeks)	Summer 1 (5 weeks)	Summer 2 (5 weeks)
7	Getting prepared for Secondary Science		The science of where we are and how we work		Other living things and important chemicals	
Biology	Cells.	Body Systems -staying alive.	Body Systems – movement.	Animal Reproduction.	Plant Reproduction.	Biology Summary
Chemistry	Particles	Elements	Basic Reactions	Advanced reactions	Acids and Alkalis	Chemistry Summary
Physics	Lab equipment	Forces	Space	Sound	Light	Physics Summary
Assessment Week	6	12	16	21	26	32
Vocabulary	Safety Microscope Density	Friction Organisation Compound	Skeleton Product Eclipse	Adolescence Oxidation Frequency	Dispersal Neutralisation Reflection	
8	Humans and their homes		Other living things and their homes		The effect humans have	
Biology	Health and Lifestyle	Biological processes	Ecosystems	Adaptation	Inheritance	Genetics
Chemistry	The Periodic Table	Separation Techniques	Metals	Artificial materials	The Earth	Human effect
Physics	Electricity	Magnetism	Energy	Heat transfer	Motion	Pressure
Assessment Week	6	12	16	21	26	32
Vocabulary	Lifestyle Group Potential Difference	Electromagnet Respiration Filtration	Conservation Food webs Reactivity	Convection Competition Polymers	Natural Selection Rock cycle Motion graph	Climate change Air pressure

New Gateway Core Y9	The basic building blocks		How the building blocks work together		Introducing harder concepts	
Biology	Cells	Transport in and out of cells	Cell Systems	Circulation	Healthy Choices	Introduction to Plants
Chemistry	Atoms	Periodic Table	Chemical Bonds	Material Properties	Small and large molecules	Polymers, metals and Carbon
Physics	Energy	Work, power and efficiency	Earth's energy resources	Simple Circuits	Series and Parallel Circuits	Mains electricity
Assessment Week	6	12	16	21	26	32
Vocabulary	Specialisation Subatomic Nuclear Conservation	Diffusion Periodicity Efficiency	Tissue, organs Ionic and covalent Sustainable	Digestion, Circulation Intermolecular Open circuit	Cardiovascular Lattice Potential Difference	Xylem and Phloem Nanomaterials National Grid
Sep Sci Gateway Y9	How to design a science experiment		How to make use of data we collect		How to make science experiments better	
Biology	Introduction to experimental science	Introduction to Mathematical Science	Microscopes	Food tests	Enzyme RP	Osmosis RP
Chemistry	Introduction to experimental science	Introduction to Mathematical Science	Transition metals	Transition metals	Nanoparticles	New materials
Physics	Introduction to experimental science	Introduction to Mathematical Science	Insulation RP	Electric fields	Resistance of Wires	I-C curves
Assessment Week	Weekly low stakes	Weekly low stakes	Weekly low stakes	Weekly low stakes	Weekly low stakes	Weekly low stakes
Vocabulary	Variables Peer review Collecting Data Displaying data Analysing Data	Estimating Standard form Significant figures Means and uncertainty % and % increase	Coarse Enzymes Thermal conductivity	Transition Electric field	Carbohydrase Semipermeable Nanoparticles	Ohmic Contact resistance Best fit curves Tangent and Gradients

Legacy Y10	People on this planet		How we use our environment		What it is to be human	
Biology	Infection and Response Microorganisms, monoclonal antibodies	Bioenergetics	Homeostasis The brain, body control systems	Nervous System Control and coordination	Genetics DNA structure	Inheritance
	Chemical Changes Fuel Cells	Energy Changes	Rates of reaction	Chemistry of Carbon Organic compounds	Chemical Tests Ion and flame tests	Atmospheric Chemistry Pollutants
	Particles Atmospheric Pressure	Nuclear Physics Fission and Fusion	Forces Moments	Motion Momentum	Vehicle Physics	Electromagnetic Spectrum Black Body Radiation
Assessment Week	6	12	16	21	Paper 1 Exams	32
Vocabulary	Vaccination Protist Alkali, displacement Internal energy Monoclonal	Respiration and photosynthesis Exo and endothermic Isotope and decay Electrostatic repulsion, fusion	Diabetes Tangent and catalysis Scalar and Vectors Thermoregulation	Reflex and Endocrine Fractional Distillation Velocity and Acceleration	Chromosomes Formulation Braking and Stopping distance	Allele and variation Particulates Longitudinal and transverse
Legacy Y11	Humans impact on the World		Sustainability and Ingenuity		Making sense of it all.	
Biology	Evolution	Classification Speciation	Adaptation Decomposition, trophic levels, pyramids	Biodiversity and global issues	Revision	Revision
	Human impact on the environment	Earth's precious resources	Extracting resources Haber process	Life-cycle assessment Ceramics, NPK fertilisers		
	Useful waves Lenses, waves for exploration and detection	Magnets and the Earth's magnetic field	Electromagnetism Induction	Motors Microphones and generators		

Assessment Week	6	November Paper 1	16	February paper 2	External Exams	External Exams
Vocabulary	Variation Greenhouse effect Ionisation	Taxonomy Potable water Permanent and Induced	Biotic and abiotic Sustainability Electromagnetic forces	Biodiversity Life-cycle assessment Commutator (HT)		