

Year 7 Science Curriculum Overview

Year 7	Term 1 Rotation 1	Term 2 & Term 3 Rotation 2	Term 4 & Term 5 Rotation 3	Term 6 Rotation 4
Skills	Scientific enquiry skills Naming and using equipment Making accurate measurements Plotting and analysing graphs Making conclusions Evaluating claims	Using newton meters Using microscopes and preparing specimens Conducting simple chemical reactions Making key observations	Identifying false claims and making well informed choices Performing simple chromatography and distillation Constructing simple circuits and making key measurements	Discrete vs continuous variables Random sampling Testing for acidity Planning an investigation Writing risk assessments
Knowledge	Scientific literacy Energy stores and transfers The particle model of matter	Forces and motion Cells, tissues & organs Atoms, elements & compounds	Sexual reproduction Mixtures & Separation Electrical circuits	Organisms The human body Acids and alkalis
Alive and British Values	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute
Assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment
Careers	Civil engineer Chemical engineer Alternative fuel production	Product designer NHS careers Metallurgy Mechanical engineering	NHS careers Midwifery Water companies/ Water purification Electrical engineer/electrician	NHS careers Pharmaceuticals Chemical engineer Chemical analysis

Year 8 Science Curriculum Overview

Year 8	Term 1 Rotation 1	Term 2 & Term 3 Rotation 2	Term 4 & Term 5 Rotation 3	Term 6 Rotation 4
Skills	Food testing; chemical analysis Testing properties of substances Designing an investigation from a hypothesis	Collecting and evaluating results Measurements and timing Evaluating control variables Handling mathematical equations	Accurate measurements Formulating predictions Researching using credible sources Using specialist apparatus	
Knowledge	Nutrition The periodic table of elements Energy transfers in materials	Breathing and respiration Motion Our Earth	Plants, pollination and growth Fuels and combustion Space and gravity Sound and light	
Alive and British Values	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute
Assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment	
Careers	Civil engineer Chemical engineer Personal training Physiotherapist Nutritionist	Product designer NHS careers Mechanical engineering Renewable energy Geologist	Botanist Rocket science Optometrist/eye surgery Electrical engineer/electrician Alternative fuels	Mechanical engineer Astronomer

Year 9 Science Curriculum Overview

Year 9	Term 1 Rotation 1	Term 2 & Term 3 Rotation 2	Term 4 & Term 5 Rotation 3	Term 6 Rotation 4
Skills	Sampling methods Preparing specimens for microscopy Testing material strength Force calculations	Questionnaires & histograms Writing chemical equations Writing risk assessments Building circuits & measuring electrical properties	Using microscopes and producing specimens Preparing solutions of different concentrations Conducting various separation techniques Making measurements of energy	
Knowledge	Unicellular organisms & pathogens Material structures Forces and materials	Genetics Reactivity Electromagnetism	SB1 – Cell Biology SC1 & 2 – States of matter & separating mixtures SP3 – Energy transfers & efficiency	
Alive and British Values	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute	We Can Question We Can Research We Can Contribute
Assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment	Topic based multiple choice questions Assessment task Summative assessment
Careers	Civil engineer Chemical engineer Infection response/ public health Pharmaceuticals Development of drugs	Chemical engineer Metallurgy Mechanical engineering Electrical engineer Genealogist	Botanist/Cell biologist Water companies Alternative energy/product design	