Key Stage 3 Outline Plan

Year 7 2020-2021

The KS3 curriculum in Science is linked to Technology and Maths wherever possible to enable students to apply knowledge obtained in one subject to work being carried out in another. The idea of a STEM curriculum is very important in developing cross-curricular links and soft skills that will help students develop in all of their studies, not just in Science.

Topic	Key words	Working Scientifically links
Chemistry in Detail Featuring: The particle model; Atoms, Elements & Compounds; Combustion	States of Matter Brownian Motion Diffusion Elements Compounds Chemical Reactions Oxidation Pollution	Writing hypotheses Using Data Fair tests
Biology in Detail Featuring: Cells, tissues, organs and systems; Food and nutrition; Breathing and respiration	Life Processes Nutrients Digestion Aerobic Respiration Gas Exchange Anaerobic Respiration	Using Microscopes Surface Area Means and Ranges
Biology in Action: Featuring: Sexual reproduction in animals; Muscles and bones; Ecosystems	Fertilisation Gestation Gas exchange Circulation Variation Adaptation Environment	The Scientific Method Scientific Questions Charts and Graphs
Physics in Detail: Featuring: Energy; Current electricity; Forces	Transfers Stores Resources Current Series and Parallel Friction Pressure	Fair Comparisons Models in Science SI units
Physics in Action: Featuring: Sound; Fluids; Light	Pressure waves Energy transfer Particles Density Drag Reflection Refraction	Line graphs Scatter graphs Calculations with density Drawings and conventions
Chemistry in Action: Featuring: Mixtures and separation; Acids and alkalis; Metals and their uses	Solution Evaporation Chromatography Distillation Indicators Neutralisation Corrosion Reactivity Alloys	Safety when heating Controlling risk Quality Evidence