



Bournville School Curriculum Overview



Curriculum Intent Statement

It is essential to recognise that an education in science is integral for understanding the world. Through science, students are taught to be critical of the information that they are being presented with and how best to interpret it. It is, therefore, essential that we equip our students with the knowledge and real-life scientific skills that will help them succeed. At key stage 3 we will build upon the solid foundations laid at key stage 2 and explore some of the core concepts throughout the three scientific disciplines. Students will be taught key scientific skills through practical work, which will be essential at GCSE level, and substantive knowledge through high quality teaching and low stakes formative assessments. At key stage 4 we will use the skills that have been acquired at KS3 and will apply them to more specialized areas within the specific areas of study. Our key stage 4 provision has been tailored to suit the needs of all learners. As with the key stage 3 curriculum, there will be a particular focus on low stakes testing and formative assessment. Additionally, at key stage 4, we will focus on examination techniques and how to use specific command words.

Curriculum Overview 2022-2023 Subject: Science

Key stage 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 11 Triple Science	Rate & extent of chemical change <i>(Paper 2)</i> Organic chemistry <i>(Paper 2)</i> Ecology <i>(Paper 2)</i>	Mock exam revision. <i>(Paper 1)</i> Mock exams. <i>(Paper 1)</i> Chemical analysis <i>(Paper 2)</i> Chemistry of the atmosphere. <i>(Paper 2)</i>	Using resources. <i>(Paper 2)</i> Paper 2 revision. Paper 2 mock exams Forces. <i>(Paper 2)</i>	Forces. <i>(Paper 2)</i> Waves. <i>(Paper 2)</i> Magnetism and electromagnetism. <i>(Paper 2)</i> Space <i>(Paper 2)</i>	GCSE Revision GCSE examinations.	
Year 11 Combined Science	Ecology. <i>(Paper 2)</i> Chemical analysis. <i>(Paper 2)</i> Chemistry of the atmosphere. <i>(Paper 2)</i> Using resources. <i>(Paper 2)</i>	Forces. <i>(Paper 2)</i> Mock exam revision. <i>(Paper 1)</i> Mock exams. <i>(Paper 1)</i>	Waves. <i>(Paper 2)</i> Magnetism and electromagnetism. <i>(Paper 2)</i> Mock exam revision. <i>(Paper 2)</i>	Mock exam revision. <i>(Paper 2)</i> Mock exams. <i>(Paper 2)</i> GCSE revision <i>(Paper 1 & 2)</i>	GCSE examinations.	
Year 10 Triple Science	Organisation. <i>(Paper 1)</i> Electricity <i>(Paper 1)</i>	Bonding and structure. <i>(Paper 1)</i> Energy. <i>(Paper 1)</i> Infection and response. <i>(Paper 1)</i>	Infection and response. <i>(Paper 1)</i> Particle model of matter <i>(Paper 1)</i> Chemical changes <i>(Paper 1)</i> Bioenergetics <i>(Paper 1)</i>	Quantitative chemistry <i>(Paper 1)</i> Atomic structure <i>(Paper 1)</i> Energy changes <i>(Paper 1)</i> Homeostasis <i>(Paper 2)</i>	Mock exam revision. <i>(Paper 1)</i> Mock exams. <i>(Paper 1)</i> Homeostasis <i>(Paper 2)</i> Inheritance, variation & evolution. <i>(Paper 2)</i>	Inheritance, variation & evolution. <i>(Paper 2)</i> Rate and extent of chemical change. <i>(Paper 2)</i> Organic chemistry <i>(Paper 2)</i>
Year 10 Combined Science	Organisation. <i>(Paper 1)</i> Electricity <i>(Paper 1)</i>	Bonding and structure. <i>(Paper 1)</i> Energy. <i>(Paper 1)</i> Infection and response. <i>(Paper 1)</i>	Particle model of matter <i>(Paper 1)</i> Chemical changes <i>(Paper 1)</i> Bioenergetics <i>(Paper 1)</i> Quantitative chemistry <i>(Paper 1)</i> Atomic structure <i>(Paper 1)</i>	Energy changes <i>(Paper 1)</i> Homeostasis <i>(Paper 2)</i> Mock exam revision. <i>(Paper 1)</i>	Mock exam revision. <i>(Paper 1)</i> Mock exams. <i>(Paper 1)</i> Inheritance, variation & evolution. <i>(Paper 2)</i>	Rate and extent of chemical change. <i>(Paper 2)</i> Organic chemistry <i>(Paper 2)</i> Paper 1 mock exam reteach

Key stage 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	Electricity. Elements and the periodic table. Respiration and photosynthesis	Electromagnetism Electromagnetism. Types of reaction. Mid-year exam revision	Evolution. Uses of waves. Inheritance. Mid-year exam.	Mid-year exam reteach Recreational drugs.	GCSE transition: Cell biology. End of year exam.	GCSE transition: Atomic structure and elements.
Year 8	Heating and cooling. Acids and alkalis. Digestion.	Work. Chemical energy. Breathing and circulation. Magnetism.	Earth's resources. Interdependence. Mid-year exam.	Interdependence. Mid-year exam reteach	Pressure. Climate. Plant reproduction. End of year exam.	Waves. End of year exam
Year 7	Energy transfers. Particle model. Cells and organisms. GL assessments	Cells and organisms. Energy costs. Separating mixtures. Movement.	Speed. Metals and non-metals. Mid-year exam revision	Variation. Mid-year exam.	Human reproduction. Earth structure. Contact forces.	Gravity and the universe. End of year exam