



Curriculum Journey 2025-2025

Subject: Science

Year 9	Half Term 1	Half term 2	Half Term 3	Half Term 4	Half term 5	Half Term 6
Topic	Biology B6: Photosynthesis Study photosynthesis and leaf structure Biology B7: Respiration Study aerobic and anaerobic respiration Biology B8: Ecosystems Study food chains, food webs and interdependence. Students will also study insect pollination and food security Biology B9: Inheritance Study DNA and chromosomes, variation, competition and natural selection and biodiversity	Chemistry C6: The periodic table Study properties of metals and non-metals, groups, periods and metals and non-metals. Chemistry C7: Materials Study metal reactivity, metal extraction with carbon and ceramics, polymers and composites Chemistry C8: The earth and its atmosphere Study the composition and structure of the Earth, the rock cycle, composition of the atmosphere, the carbon cycle and recycling.	Physics P7: Electricity in circuit Study conductors, insulators, circuits, current and PD and resistance. Series and parallel circuits will also be covered Physics P8: Static electricity (Part 1) Study static charges and electric fields	Physics P8: Static electricity (Part 2) Study static charges and electric fields Physics P9: Magnets Study magnets and magnetic fields, the earths magnetism and electromagnets and motors	Physics P9: Space Study stars, planets, galaxies, seasons and weight. B1 Cells Students will study: Cell structures, specialised cells, microscopy, cell division, stem cells,	C1 Atomic structure and the periodic table Students will study: Atoms, elements and compounds, mixtures, relative electrical charges of sub-atomic structure, size and mass of atoms, relative atomic mass, electronic structure, the periodic table, metals and non-metals, groups and properties
Vocabulary	Photosynthesis, aerobic and anaerobic respiration, interdependence, chromosomes, DNA, alleles, biodiversity, pollination	Conductor, Insulator, oxide, malleable, ductile, reactivity, polymers, composites, composition, periods, electrons, halogens, alkali, noble	Current, voltage, potential difference, amperes, resistance, static, electrons, parallel, series, electric fields, ohms, repel, electrostatic forces,	Magnetic fields, contact, non-contact, electric fields, permanent resultant, temporary	Waves, galaxies, weight, mass, hemisphere, density, mass, newtons, gravitational field strength Biology: microscopy, micrometres, eukaryotic, prokaryotic, flagellum, viral, bacterial, ribosomes, plasmids, mitosis, stem cells,	Atomic, mass, proton, electron, neutron, orbits, nucleus, isotope, reactivity, relative, hydroxide, chloride, oxide
Assessment	End of unit tests B6, B7, B8, B9 Recall rallies	End of unit tests C6, C7, C8 Recall rallies	Mid-term summative assessment	End of unit tests P8 Recall rallies	Mid-term summative assessment Recall rallies	End of unit tests B1, C1 Recall rallies



Links to prior learning	Year 7 + 8 B1 – Plant cells, principles of organization B4 – Gas exchange systems KS2 – Food chains, food webs, living things and their habitats, evolution and inheritance	Year 7 C2 – Atoms, elements and compounds, Year 8 C4 – Chemical reactions KS2 – recycling Y3 - Rocks	Year 7 – P1 – Energy Y6 - Electricity	Year 3 – forces and magnets	Year 5- Space Year 7 - Cells	Year 7 – C2 – Atoms, elements and compounds
Catholic Social Teaching	Care for God's Creation Solidarity Option for the Poor and Vulnerable	Care for God's Creation Rights and Responsibilities Solidarity Sustainable Development Option for the Poor and Vulnerable Dignity of work	Rights and Responsibilities Solidarity Sustainable Development Option for the Poor and Vulnerable Dignity of work	Care for God's Creation Option for the Poor and Vulnerable Dignity of workers Solidarity	Care for God's Creation Solidarity Sustainable Development Option for the Poor and Vulnerable Dignity of work	Life and Dignity of the Human Person Care for God's Creation Option for the Poor and Vulnerable Solidarity Dignity of Work



Careers and Personal Development links	Botanist Brewer Conservation scientist Genetic counsellor	Cosmetic chemist Metallurgist Mining geologist	Electrical engineer Material scientist	Radiographer	pH students Microbiologist Histologist Virologist Astronaut Space program innovation and technology,	Pharmaceuticals Chemist Analytics Forensics Biochemistry
--	---	--	---	--------------	---	--