

Whole School Curriculum Map

Teachers review the sequence of teaching throughout the year and use their discretion to adapt, revisit or reteach content when necessary to support the learning of our students.

| English | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 |
|------------|--------|--------|--------|---------|---------|---------|---------|
| Language | | | | | | | |
| Literature | | | | | | | |



Whole School Curriculum Map

Teachers review the sequence of teaching throughout the year and use their discretion to adapt, revisit or reteach content when necessary to support the learning of our students.

| Mathematics | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 |
|-------------|--------|--------|--------|---------|---------|---------|---------|
| Higher | | | | | | | |
| Foundation | | | | | | | |



Science Curriculum Map

Teachers review the sequence of teaching throughout the year and use their discretion to adapt, revisit or reteach content when necessary to support the learning of our students.

| Science | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 |
|---------|---|--|---------------------------------|---|---|---|--|
| Biology | Introduction to Science | Genes 1 Organisms 2 | Ecosystems 2 Genes 2 | Cell Biology | Homeostasis | Introduction to Biology | Respiration |
| | Organisms 1 Ecosystems 1 | Types of variation- inherited, environmental, continuous and discontinuous | Aerobic respiration | Cell division | The human nervous system [The brain, The eye, and Control of body temperature - Triple only] | Cell Structure | Communication and homeostasis |
| | Movement, muscles and the skeleton | Variation and adaptations | Anaerobic respiration | Transport in cells | Hormonal coordination in humans [Maintaining water and nitrogen balance in the body—Triple only] | Biological membranes | Excretion as an example of homeostatic control |
| | Body systems | Human reproduction | Structure of leaves | Principles of organisation | Plant hormones and their uses[Triple only] | Cell division, cell diversity and cellular organisation | Neuronal control |
| | Cells and organisation | Pregnancy | Photosynthesis | Animal tissues, organs and organ systems | Reproduction [Advantages and disadvantages of sexual and asexual reproduction, DNA structure – Triple only] | Biological molecules | Hormonal control (to be completed) |
| | Specialised cells and Unicellular organisms | Factors affecting pregnancy and reproductive systems | Plant minerals | Plant tissues, organs and systems | Variation and evolution [Cloning – Triple only] | Nucleotides and nucleic acids | Plant and animal responses |
| | Plant reproduction and seed dispersal | The breathing system | Natural selection and evolution | Non communicable diseases | The development of understanding of genetics and evolution [Theory of evolution, Speciation, The understanding of genetics – Triple only] | Enzymes | Cellular control |
| | Plant adaptations | Gas exchange in humans | Biodiversity | Communicable diseases | Classification of living organisms | Exchange Surfaces | Patterns of inheritance |
| | Food chains and webs | Factors affecting breathing system | DNA | Aseptic techniques and monoclonal antibodies (Triple only) | Adaptations, interdependence and competition | Transport in animals | Manipulating genomes |
| | Interdependence and food security | Healthy diet and linked diseases | Inheritance | Plant disease [Triple only] | Organisation of an ecosystem [Decomposition and Impact of environmental change – Triple only] | Transport in Plants | Cloning and biotechnology |

| | Bioaccumulation | Structure of the digestive system | GCSE Transition | Photosynthesis | Biodiversity and the effect of human interaction on ecosystems | Communicable diseases, disease factoprevention and the immune system | Ecosystems |
|-----------|----------------------------------|--|---|---|--|--|---|
| | Ecology sampling | Food molecules and respiration | GCSE: Cell structure [Culturing microorganisms Sets 1 and 2 only] | Respiration | Trophic levels in an ecosystem [Triple only] | Biodiversity | Populations and sustainability |
| | Predator and prey relationships | Enzymes and bacteria in the digestive system | Cell division | | Food production [Triple only] | Classification and evolution | Maths in Biology |
| | | | Transport in cells | | | Photosynthesis | Exam Practice and Revision |
| | | | | | | Hormonal control | |
| Chemistry | Introduction to Science | Reactions 1 Earth 2 | Matter 2 Reactions 2 | Atomic structure | Rates of reaction | Atomic Structure & Isotopes | How Fast – The rate equation, orders & mechanisms |
| | Matter 1 Earth 1 | Metals | The Periodic Table | The history and the structure of the periodic table | Reversible reactions (Altering conditions and dynamic equilibrium (Higher and Triple only) | Compounds, formulae and equations | How Far – Chemical equilibrium |
| | States of matter | Chemical changes | Elements and compounds | Bonding and their properties | Crude oil, hydrocarbons, and alkanes | Amount of Substance | Acids, Bases and Buffers |
| | Reversible changes | Combustion | Models | Nanoparticles (Triple only) | Fractional Distillation and cracking | Acids and Redox | Enthalpy and entropy |
| | Dissolving | Properties of metals and non-metals | Ceramics, polymers and composites | Quantitative chemistry (Moles, reacting masses, masses to equations and limiting reactants – Higher and Triple only) | Properties of Hydrocarbons | Electron Structure | Redox and electrode potentials |
| | Solubility and factors affecting | Types of chemical reactions | Reaction energy | Percentage yield, Atom economy, Molar concentrations, Titrations, Volumes of gases (Triple only) | Chemistry of Combustion (Higher and Triple only) | Bonding and Structure | Transition Elements |
| | Properties of materials | Acids alkalis and indicators | Combustion and fuels | The reactivity of metals and displacement reactions | Alkenes, Alcohols, Carboxylic Acids and Esters (Triple only) | Periodicity | Qualitative Analysis |
| | Separating mixtures | Reactions of acids and alkalis | Thermal decomposition | Extracting metals | Polymerisation (Triple only) | Group 2 and Halogens | Aromatic compounds |
| | Structure of the earth | Thermal decomposition | Catalysts | Producing salts | Chemical analysis | Qualitative Analysis | Carbonyl compounds |
| | Rock cycle | Reactions and conservation of mass | GCSE Transition | Neutralisation reactions | Tests for Positive and for Negative Ions Identifying Ionic Compounds | Enthalpy Changes | Carboxylic acids and esters |

| | | | | | Instrumental Analysis (Triple only) | | |
|---------|--|-----------------------------|--|--|--|--|---|
| | Rock types and formation | Carbon cycle | Atomic structure (sets 1 and 2 only) | Titration (Triple only) | | Reaction Rates | Amines |
| | The earth in space | Earth's atmosphere | The history and structure of the periodic table (sets 1 and 2 only) | Acids and the pH scale | Chemistry of the atmosphere past and present | Chemical Equilibrium | Amino Acids, Amides and Chirality |
| | The galaxy | Earth's Resources | | Electrolysis | Finite and renewable resources | Basic Concepts of Organic Chemistry | Polyesters and Polyamides |
| | Movement of objects in space-reflection of sunlight, eclipses, day and seasons | | | Exothermic and endothermic reactions | Making water fit to drink | Alkenes & alkenes | Carbon-carbon Bond Formation |
| | · | | | Reaction profiles | Extracting metals (Higher and Triple only) | Alcohols and Haloalkanes | Organic Synthesis |
| | | | | Bond energy calculations and energy from fuels (Higher and Triple only) | Life cycle assessments | Organic Synthesis | Chromatography and Qualitative Analysis |
| | | | | Chemical cells and batteries and fuel cells (Triple only) | Rusting and alloys (Triple only) | Analytical Techniques | Spectroscopy |
| | | | | | Properties of Polymers Ceramics and Composites (Triple only) | | |
| | | | | | The Haber Process and making Fertilisers (Triple only) | | |
| Physics | Introduction to Science | Energy 1 Waves 1 | Forces 2 Electromagnets 2 Energy 2 Waves 2 | Energy | Forces | Measurements & Errors | Fields (Gravitational, Electric, Magnetic) |
| | Forces 1 Electromagnets 1 | Energy stores and transfers | Forces and their effects | Insulation and specific heat capacity | Free Body Diagrams and Resolving Forces using Vector Diagrams (Higher and Triple only) | Particles and Radiation | Nuclear Physics |
| | Forces | Fuels | Friction and drag | Renewable sources of energy | Moments (Triple only) | Waves & Optics | Astrophysics |
| | Gravity | Energy in the home | Pressure, floating and sinking | Electricity | Circular Motion and momentum (Higher and Triple only) Changes in Momentum (Triple only) | Mechanics & Materials | |

| Speed | Energy models | Forces and equilibrium | Circuits | Pressure in Fluids and Atmospheric Pressure (Triple only) | Electricity | |
|----------------------|-------------------------|---------------------------------------|---|---|-------------------------------------|--|
| Acceleration | Sound and its behaviour | Magnetic fields | Particle model of matter | Waves | Further mechanics & thermal physics | |
| Resultant forces | Light and its behaviour | Magnetic attraction and repulsion | Density | Reflection of Waves ,Hearing Sounds, Ultrasound and Seismic Waves (Triple only) | | |
| Circuit components | Waves and energy | Electromagnets | Latent heat of fusion and evaporation | Electromagnetic Spectrum and it's uses | | |
| Current | Effects of waves | Work, Levers and turning forces | Gas pressure and volume (Triple only) | Ray Diagrams | | |
| Potential difference | Modelling waves | Thermal energy and transfer | Atomic structure | Visible Light and Reflection and Refraction of Light (Triple only) | | |
| Types of circuit | | Effects of waves | Radioactivity | Convex Lenses and Concave Lenses (Triple only | | |
| Electrostatic forces | | Modelling waves | Hazards of Radioactive Emissions and Nuclear Radiation in Medicine (Triple only) | Black Body Radiation and Infrared Radiation (Triple only) | | |
| | | Energy and waves | Nuclear Fission and Nuclear Fusion (Triple only) | Magnets and Electromagnets | | |
| | | GCSE Transition | | The Motor Effect and Electric Motors (Higher and Triple only) | | |
| | | Energy | | Generators, Dynamos, Loudspeakers and Microphones and Transformers (Triple only) | | |
| | | Insulation and specific heat capacity | | Space (Triple only) | | |
| | | Renewable sources of energy | | | | |