

Year 9 Curriculum

Science

Physics

- Forces and Motion – Moving things, forces and movement, energy for movement, speed, turning forces, more machines, supplying the energy
- Force Fields and Electromagnets – force fields, static electricity, current electricity, resistance, electromagnets, humans in space
- Physics Revision – Models in science, energy, forces, waves and fields, machines

Chemistry

- Making materials – About ceramics, polymers, composite materials, problems with materials, recycling materials, material failures
- Reactivity – Demolition, types of explosion, reactivity, energy and reactions, displacement, extracting metals, Alfred Nobel
- Chemistry Revision – Separating substances, chemical reactions, physical and chemical, the periodic table, earth and atmosphere.

Biology

- Genetics and Evolution – Environmental variation, inherited variation, probability, dna, genes and extinction, natural selection, recreating animals
- Plant Growth – Reactions in plants, plant adaptations, plant products, growing crops, farming problems, organic farming
- Biology Revision – Cells, systems and movement, other organ systems, reproduction and health, energy in ecosystems, genetics and evolution.



Year 9 Curriculum

English

Literature

Fiction Texts - Reading & Writing

Descriptive/Narrative writing

Non-fiction reading

Non-fiction transactional writing

Poetry Spelling, Punctuation & Grammar

Spoken English

Shakespeare study



Year 9 Curriculum

Math

Number

- Indices
- Standard form
- Significant figures

Algebra

- Expanding quadratics
- Plotting quadratic graphs
- $y=mx+c$

Ratio, Proportion & rates of change

- Direct and inverse proportion

Geometry and measure

- Volume and surface area of cylinders
- Congruence
- Interior/exterior angle
- Pythagoras' Theorem
- Trigonometry



Year 9 Curriculum

Math

Angles and Polygons

- Calculating missing angles (angle facts)
- Measuring, drawing and estimating angles
- Bearings
- Angles in parallel lines
- Special triangles and quadrilaterals
- Interior and exterior angles of polygons
- Congruence and similarity

Probability topics

- Theoretical probability
- Experimental probability
- Sample space diagrams
- Venn diagrams

Statistics

- Averages from a frequency table
- Correlation

