

LONG TERM CURRICULUM PLANNING OVERVIEW:

SCIENCE

	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11
Autumn A Knowledge	Lab safety Cell biologist	Lab safety Reproduction and variation Acid scientist	B1- Cell structure & transport B2- Cell division	B5- Communicable diseases C5- Chemical changes P4- Electric circuits	B12- Reproduction C10- Chemical analysis C11- Earth's atmosphere P10- Force and motion P11- Wave properties
Autumn A Skills	Analysis of data (stretching a spring) Practice drawing graphs	Planning practical work (bouncy ball) Analysis of data Practice drawing graphs Practice using measurements	B1 – Literacy; microscopes. Maths; orders of magnitude; sa:vol. Required practical – planning, carrying out, observations, writing equations and analysis B2 – Literacy; constructing arguments	B5 – Literacy; changes in scientific knowledge. Required practical – planning, carrying out, observations, writing equations and analysis C5 – Literacy – making salts. Maths – calculating yield; plotting pH curve and analysing data. Required practical – carrying out, observations, writing equations and analysis P4 – maths; calculating & rearranging equations.	B12 – Maths; probability; direct proportions & ratios. C11 Literacy – greenhouse gases. Maths & literacy – atmospheric pollution. P10 – literacy; command words. Maths; calculating & rearranging equations; algebraic equations. P11 – maths; calculating & rearranging equations.
Autumn B Knowledge	Cell biologist Molecular chemist	Analytical chemist Astronomer	B3- Organisation & the digestive system B4- Organising animals and plants	B6- Preventing and treating disease C6- Electrolysis P5- Electricity in the home P6- Molecules and matter	B13- Variation & evolution B14- Genetics & evolution C12- Earth's resources P12- EM waves

Autumn B Skills	Maths – balancing equations	Maths – balancing equations Planning practical work (craters) Analysis of data Practice drawing graphs	B3 – Literacy; extremophiles. Maths; line graphs; curves of best fit; proportions & ratios; rates; % change. Required practical – carrying out, observations, writing	B6 – maths; reading data from graph; calculating risk; converting units. C6 – Literacy – electrolysis and electroplating. Maths – half equations. Required practical	B13 – Literacy; GM. Maths; histograms; continuous & discontinuous variation; calculating yield. B14 – Maths; standard form C12 – Literacy – water safe to drink. Life cycle assessments.
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