

Curriculum Topics Studied At Springfield

Science	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	A rotation of the following topics: Introduction, cells, particles, forces and magnets, A&A and SCR, Reproduction, circuits and electromagnets, environment and biodiversity.					
Year 8	A rotation of the following topics: Earth and atmosphere, elements, compounds and mixtures, energy, inheritance, exercise and health, materials, food and digestion, 'green' farming, space, light and sound.					
Year 9	Biomimicry, then investigation and practical skills covering the following topics: Enzymes, rates of reaction, specific heat capacity, photosynthesis, density, osmosis, temperature changes in reactions, making salts and resistance. Followed by cell biology, organisation, infection and response and bioenergetics.					
Double Science Year 10	Humans – diet, immunity and sensitivity. Environment – Adaptations, reproduction and genetic engineering. Waves – Electromagnetic spectrum, waves and the Doppler effect. Earth – Structure of the earth, tectonic plates and limestone cycle. ETE – Energy transfers, power and energy sources.					
Triple Science Year 10	Chemistry – Structures. Chemistry – Reactions. Biology – Environment – Adaptations, reproduction and genetic engineering. Physics – Waves - Electromagnetic spectrum, waves and the Doppler effect. Chemistry revision.					
Double Science Year 11	M&M – Velocity, forces, work. Life – Photosynthesis, DNA and inherited disorders. Reactions – Rates of reaction, acids and alkalis and chromatography. Structures – Atomic structure, polymers and quantitative chemistry. Humans 2 – Digestive system, respiration and evolution. END – Static electricity, circuits and potential difference.					
Triple Science Year 11	Physics – Xrays, ultrasound, lenses, the eye, total internal reflection, centre of mass, pendulum, hydraulics, electromagnets, motors and transformers. Biology – Osmosis and active transport, breathing, circulation, homeostasis, diabetes, kidneys, pollution, global warming, biofuels and sustainability. Chemistry – Periodic table, transition metals, halogens, hard and soft water, energy release from fuels, alcohols and organic chemistry.					