Long term plan

Subject: Science

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
LC1	• A balanced diet • The digestive system • The circulatory system • The effect of drugs	• Our solar system • The movement of planets • Weight and mass calculations • Phases of the Moon • The lifecycle of stars	Cells and cell division The structure of an atom and Periodic Table Energy - stores, transfers and efficiency.	Homeostasis and hormones Rate of chemical reactions and Calculations Forces	Enzymes Periodic table and calculations Energy and circuits	Biological molecules Physical chemistry 1 Measurements and error	Energy transfers Physical chemistry 2 Fields
LC2	• Energy types and transfers • Forces • Calculating speed • Interpreting distance-time graphs	• The atmosphere and how it has changed • Pollutants • Rate of chemical reactions	Movement of particles and plants Group characteristics and energy changes Electricity	Reproduction Equilibrium Movement	Particle movement Bonding Specific heat capacity	Cells Physical chemistry 2 Particles and radiation	Response to stimuli Inorganic chemistry 2 Nuclear
LC3	• Properties of the states of matter • The changes of state • Elements and compounds • Techniques for separating mixtures • Atomic structure • The Periodic Table	• Reproductive system • The menstrual cycle • Conception • Pregnancy • Natural selection and evolution	Cells, tissues and organs Bonding National Grid and atomic structure	Variation and evolution Organic chemistry and chemical testing Momentum	Immunity and disease Extraction of metals and energetics Motion and forces	Exchange surfaces Inorganic chemistry Mechanics and materials	Gene expression Organic chemistry 2 Turning points
LC4	• Cells • Photosynthesis and the structure of a leaf	• Electrical components • Electrical circuits	Diseases and immunity 1 Metals and extraction Atomic structure	Communities and adaptations The atmosphere and how it has changed	Plant tissues Rates of reaction and equilibrium Waves and magnetism	Genetic information Organic chemistry Electricity	Revision Organic chemistry 2 Revision

	● Ecological relationships ● Adaptations for survival ● Classification	● Understanding current and potential difference ● Calculating resistance ● Magnets ● Electromagnets		Waves			
LC5	● Observations of chemical reactions ● Gas tests ● Reactivity ● pH scale ● Acid reactions	Ethical issues in Science - waste disposal, AI, cloning, The human genome project, pesticides, psychological research models	Diseases and immunity 2 Reactivity and Electrolysis Particle model	Biodiversity and human impact Life cycle assessments and water treatment Magnetism		Genetics and populations Physical chemistry 3 Thermal physics	