

The Science department at Wexham School

Science Curriculum Map – Key stage 3 - Core science, Key stage 4 Combined Science, Key stage 4 Separate Science

Term	Year 7	Year 8	Year 9	Year 10	Year 11
<b>Autumn 1</b>	Standard Skills in Science: Lab safety Lab equipment Identification and use Scientific enquiry Plant and Animal Cells Movement in animals	Standard Skills in Science: Lab safety Lab equipment Identification and use Scientific enquiry Sound and Light as waves	Key concept Introduction Microscopy and cells	B1 Cell biology, microscopy and osmosis B2 Organisation, Food tests and Enzymes	B7 Ecology and investigating the environment B6 Inheritance C6 Rate of reactions and measurements
<b>Autumn 2</b>	Particle Model in solids liquids and gases Separating Mixtures Speed of objects Gravity as a non-contact force	Breathing in humans Digestion in humans Contact Forces Pressure around us	Making salts from metal oxides Resistance in components	B3 Infection and response, understanding spread of disease in populations B4 Bioenergetics and effect of factors on photosynthesis	C7 Organic chemistry C8 Chemical analysis and chromatography C9 Chemistry of the atmosphere
<b>Spring 1</b>	Interdependence in ecology Plant reproduction	Periodic table Elements and their uses Respiration and Photosynthesis as reactions	Specific heat capacity and heat energy Rates of reaction and limiting factors	C1 Atomic structure and Periodic table C2 Bonding structure and matter	C10 Using resources and water purification P5 Forces, extension and acceleration P6 Waves, sound and light
<b>Spring 2</b>	Metals and non-metals in reactions Acids and Alkalis and their use Voltage and resistance Current in a circuit	Climate change Earth resources and their use Work and its effects Heating and Cooling	Chromatography in separating mixtures	C3 Quantitative Chemistry - calculations C4 Chemical Changes – making salts and electrolysis C5 Energy Changes and measuring temperature changes	P7 Magnets and electromagnets P8 Space Physics (separate only) Revision for summer exams
<b>Summer 1</b>	Energy costs Energy transfer Variation in animals and plants Human Reproduction	Evolution of organisms Inheritance in organisms  Wave effects  Wave properties	Force and extension – non-contact forces Photosynthesis and limiting factor	P1 Energy and measuring specific heat capacity P2 Electricity, resistance and IV characteristics of components P3 Particle Model and density P4 Atomic structure	
<b>Summer 2</b>	Earth structure Universe	Electromagnets and their uses Magnetism around us  Types of reactions  Chemical Energy	Field Investigations and organism interactions Key concepts in preparation for: Combined Science, Separate Science and Entry Level Certificate	B5 Homeostasis and response, measuring human responses B7 Ecology and investigating the environment – Field work	