

Year 10 (B C P = triple only)	Year 11
<p>Organisation</p> <ul style="list-style-type: none"> - Cell organisation - The digestive system - Food tests - Enzymes and their properties - Conditions for enzyme activity - Enzymes and digestion - The heart and the circulatory system including pacemakers - Blood vessels - Blood - Cardiovascular diseases - Stents and statins - Artificial hearts - The structure of the lungs and the breathing system - Health and disease - Communicable and non-communicable diseases - Cancer - Plant cell organisation - Transpiration and translocation - Transpiration and stomata - Active transport - <p>Infection</p> <ul style="list-style-type: none"> Pathogens Culturing and bacteria numbers (B) Diseases Protista Body defences Vaccination Antibiotics 	<p>Homeostasis</p> <ul style="list-style-type: none"> Nervous system Reflex actions The Brain (B) Reaction times The eye (B) Endocrine system Temperature control (B) Blood glucose Water and N balance (B) ADH (B) Kidney Failure (B) Negative feedback Reproductive hormones Contraception and fertility Plant coordination (B) Tropisms (B) Plant hormones use (B) <p>Inheritance</p> <ul style="list-style-type: none"> DNA Structure (B) Reproduction Asexual vs Sexual (B) Meiosis Protein synth (B) Inheritance Gender Genetic disorders Screening Mendel (B) GM Cloning (B) Variation Selective breeding

Painkillers Developing drugs Monoclonal antibodies (B) Plant disease Plant defences (B) Bioenergetics Photosynthesis Rate of photosynthesis Limiting factors Uses of Glucose Aerobic respiration Anaerobic respiration Exercise Metabolism Ecology Classification Communities Biotic and Abiotic factors Distribution Adaptations: animals, plants, extreme. Levels of organisation Food chains Trophic levels and pyramids (B) Nutrient cycles Decomposition (B) Biodiversity Waste Management Land use and deforestation	Extinction Mutation Natural selection Speciation (B) Darwin (B) Evolutionary trees Fossils Resistant Bacteria
Global warming Maintaining biodiversity Impact of environmental change (B) Food security (B)	Chemical Analysis Purity Formulations Chromatography Rf values

Farming (B)	Gas tests
Fisheries (B)	Flame tests (C)
Biotechnology (B)	Identifying ions (C)
Bonding and structure	Carbonates (C)
States of matter	Halides (C) Sulphates (C)
Metallic bonding	Spectroscopy (C)
Ionic bonding	CSI (C)
Covalent bonding	Organic Chemistry
Simple molecules	Crude oil
Polymers	Hydrocarbons
Giant covalent	Fractional distillation
Graphite and Graphene	Cracking
Nano particles (C)	Alkenes (C)
	Alcohols (C)
	Carboxylic acids (C)
	Esters (C)
Chemical Change	Polymers (C)
Metal oxides	Amino acids (C)
Reactivity series	DNA (C)
Purifying metals	Atmosphere & Resources
OIL RIG	Atmosphere
Metal + Acid	Algae
Crystallisation	Greenhouse effect
Making salts	Human impact on the environment
Neutralisation (C)	Climate change
Conc and weak acids	Carbon footprints
Electrolysis	Burning fuels
Aluminium	Polluting gases
Brine	Earth's resources
Half equations	Water purification
Quantitative Chemistry and energy	Sewage treatment
Conservation of mass	Bioleaching and phytomining
Equations	Life cycle analysis
Ar, Mr, Empirical formula	Recycling
	Corrosion (C)

<p>Changes in Mass</p> <p>Moles</p> <p>Calculating masses</p> <p>Moles</p> <p>Concentration</p> <p>% yield (C)</p> <p>Atom economy (C)</p> <p>Titrations (C)</p> <p>Gases and moles (C)</p> <p>Exothermic and endothermic</p> <p>Reaction profiles</p> <p>Calculating energy changes</p> <p>Cells and batteries (C)</p> <p>Fuel Cells (C)</p>	<p>Alloys</p> <p>Polymers(C)</p> <p>Haber Process (C)</p> <p>Fertilisers (C)</p>
<p>Rates</p> <p>Measuring rate</p> <p>Collision theory</p> <p>Temperature</p> <p>Concentration</p> <p>Pressure</p> <p>Surface area</p> <p>Catalysts</p> <p>Reversible reactions</p> <p>Le Chatelier's</p> <p>Equilibriums</p> <p>Electricity</p> <p>Symbols</p> <p>Charge</p> <p>Current</p> <p>Resistance</p> <p>Ohms Law</p> <p>Series and Parallel</p> <p>LDRS and thermistors</p> <p>Diodes and bulbs IV graphs</p> <p>AC DC</p> <p>Plugs</p>	<p>Waves</p> <p>Types of wave</p> <p>Wave calculations</p> <p>Measuring waves</p> <p>EM spec</p> <p>IR and surfaces</p> <p>Black Body (P)</p> <p>Refraction</p> <p>Radio</p> <p>Reflection (P)</p> <p>Sound (P)</p> <p>Ultrasound (P)</p> <p>Seismic waves (P)</p> <p>Lenses (P)</p> <p>Colour (P)</p> <p>Space (P)</p> <p>Solar System(P)</p> <p>Star Life cycle (P)</p> <p>Elements (P)</p> <p>Orbits (P)</p> <p>Red shift (P)</p> <p>Big bang (P)</p>

<p>Safety (P) Power Work done National Grid Static (P) Electrical fields (P)</p> <p>Particle Theory Density Particle Model Internal energy Changing state Specific Latent Heat Gas Pressure</p> <p>Radioactivity Atoms and Isotopes Development of atomic theory Radioactive decay Handling Isotopes Nuclear decay equations Half Life Irradiation and contamination Fission and Fusion (P) Uses (P)</p> <p>Forces and Motion Scalar and vectors Contact and non-contact Forces Resultant force Free Body diagrams Weight and Gravity Centre of mass Work done Joules Hooke's Law</p>	<p>Magnetism Magnets Fields Current Motor Effect Magnetic Flux density Generators (P) Microphones (P) Transformers (P)</p>
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Turning force (P) Levers and Gears (P) Fluid Pressure (P) Up thrust Atmospheric pressure Displacement Speed Speed of sound Velocity D-T graphs Acceleration V-T graphs Terminal velocity Newton's laws Stopping distances Momentum Safety features (P)	