

YR.10 GCSE	Science						
	Term 1 & 2	FLEX	Term 3	FLEX	Term 4	FLEX	Term 5 & 6
Biol 	Topic 4 - Natural Selection - Theory of Evolution – Darwin - Antibiotic resistance Evidence for human evolution - Selective breeding - Genetic engineering Stages of genetic engineering - Evaluation of genetic engineering Assessment preparation		Topic 5 – Health, Disease & Medicines - Describe Health – WHO - Communicable & non-communicable - Pathogens – viruses, bacteria, fungi - Spread & control of pathogens – defences of the human body - Common infections- Cholera, TB, Malaria, HIV & Chalaria - STIs – spread & prevention		Topic 5 – Health, Disease & Medicines - Immune system – how it responds - Immunisation – body response - Antibiotics - Stages in drug development - Causes of non-communicable diseases - BMI – using the equation - Evaluation of cardiovascular disease treatments Assessment preparation		Topic 6 – Plant Structure /Function - Describe photosynthetic organisms - Describe photosynthesis as an endothermic process. - Describe/explain the effects of the limiting factors of photosynthesis Explain the interactions of these limiting factors *CORE PRACTICAL – Rate of photosynthesis
Chem 	Topic 6 – Groups in the Periodic Table - Group 1 - Structure & reactivity - Group 7 – Structure & reactivity REDOX - Displacement - Group 8 – Structure, reactivity & uses Assessment preparation		Topic 7 – Reaction Rates - Variables that effect reaction rates - Graph interpretation - Catalysts *CORE PRACTICAL – Measuring rates - Exothermic & endothermic - Reaction profiles Bond energies Assessment preparation		Topic 2 – States of Matter - Particle theory - Interconversions between states. - Separation techniques - Simple distillation - Filtration - Crystallisation - Paper chromatography *CORE PRACTICAL – distillation & chromatography - Water purification Assessment preparation		Topic 8 – Fuels & Earth Science - Hydrocarbons & crude oil - Fractional distillation - Uses of crude oil - Physical properties of crude oil - Alkanes/alkenes - Combustion of fuels - Incomplete combustion - Carbon monoxide - Acid rain/causes & effects
Phys 	Topic 5 – Light & EMS - Intro to EMS waves - transverse *CORE PRACTICAL – Refraction - EMS – Structure/function/uses Absorbtion, transmission & refraction - Dangers & effects of EMS Radio wave oscillations - Changes in atom/nuclei Assessment preparation Start some of the next topic →		Topic 6 – Radioactivity - Atomic structure theory/isotopes (See CHEM) - Intro to α, β & μ including structure - Comparisons of the above - Background radiation & Geiger Muller tube - Process of decay – α & β - Nuclear equations - Radio activity – Bq - Half-life – graphs & calculations - Dangers of radiation – contamination Assessment preparation		Topic 8 – Energy Forces doing work - Energy transfer & store - Work done calculations - Gravitational PE calculations - Kinetic energy calculations - Power – calculations - Efficiency calculations Assessment preparation Integrate with Topic 9 forces and their effects		Topic 10 Electricity & Circuits - Intro - Atomic structure theory - Electrical circuit diagrams - Series/parallel - Voltage – voltmeter - Energy transfer equation - Ampere – ammeter/charge - Resistance – $V= I \times R$ *CORE PRACTICAL – Ω Ω - LDR/thermistors & diodes - Energy wastage - Use of various equation – ref - ac/dc Assessment preparation