Baines Science Year 10 Curriculum – Sept 2023

Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Biology					
Cells and control	Genetics	Natural selection and genetic modification	Health, Disease and development of medicines	Plant structures and their functions	Plant structures and their functions / Animal coordination, cells and control
Investigate biological specimens using microscopes, including magnification calculations and labelled scientific drawings from observations *Investigate the effect of pH on enzyme activity* *Investigate osmosis in potatoes*				*Investigate the effect of light intensity on the rate of photosynthesis*	*Investigate the rate of respiration in living organisms*
					End of year assessment
Chemistry					
Overarching concepts of chemistry	Chemical changes - Acids and Alkalis	Calculations using masses	Electrolysis, obtaining and using metals / Transition metals (separate only)	Electrolysis, obtaining and using metals / Quantitative chemistry (separate only)	Groups in the periodic table
	Investigate the change in pH on adding powdered calcium hydroxide/calcium oxide to a fixed volume of dilute hydrochloric acid *Investigate the preparation of pure, dry hydrated copper sulfate crystals starting from copper oxide including the use of a water bath*		*Investigate the electrolysis of copper sulfate solution with inert electrodes and copper electrodes*		
					End of year assessment

Physics								
Waves	Light and EM Spectrum	Motion and forces	Motion and forces	Radioactivity	Astronomy (separate only)	Energy & Forces Doing Work	Electricity	Static electricity (Separate only)
Investigate the suitability of equipment to measure the speed, frequency and wavelength of a wave in a solid and a fluid	*Investigate refraction in rectangular glass blocks in terms of the interaction of electromagnetic waves with matter*		*Investigate the relationship between force, mass and acceleration by varying the masses added to trolleys*				*Construct electrical circuits to: a investigate the relationship between potential difference, current and resistance for a resistor and a filament lamp b test series and parallel circuits using resistors and filament lamps*	
							End of year assessment	