Baines Science Year 10 Curriculum

Half term 1	Half term 2	Half term 3	Half term 4	Half term 5		Half term 6	
Biology							
Key Concepts in Biology	Cells and control	Genetics	Natural selection and genetic modification	Health, Disease and development of medicines			Plant structures and their functions
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*
						End of year assessment	
Chemistry							
Overarching concepts of chemistry	Electrolysis, obtaining and using metals	Calculations using masses	Chemical changes -Acids and Alkalis	Transition metals (separate only)	Quantitative chemistry (separate only)	Groups in the periodic table	
	Investigate the electrolysis of copper sulfate solution with inert electrodes and copper electrodes		*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*				
						End of year assessment	

Physics								
Waves	Light and EM Spectrum	Motion and forces	Motion and forces	Motion and forces	Radioactivity	Radioactivity	Radioactivity	Astronomy (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*					
							<u>End of year assessment</u>	