

Triple Physics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7 8 9	Prior to year 10, students study all sciences in a blended approach. The route below is only for those students who select to study the triple science route.					
10	Energy Stores & transfers Work & Power Specific heat capacity Latent heat	Atomic Structure Types of radiation Half-life Nuclear equations	Electrical circuits Ohm's Law Series & parallel circuits	Domestic electricity Static electricity Electric fields	Resultant forces Weight & gravity Pressure	Vectors & scalars Speed & velocity Distance-time graphs
11	Acceleration Newton's Laws of Motion Stopping distance	The Solar System Red shift Transverse & longitudinal waves	Refraction Electromagnetic spectrum Black body radiation	Magnetic fields Electromagnetic induction The national grid	Exam Preparation	
12	Particle physics Anti-matter Superposition Interference	Classification of particles Moments Diffraction The photoelectric effect	Kinematics Newton's Laws of Motion Energy levels Wave-particle duality	Momentum Work, energy & power Resistivity Electric circuits	Bulk properties of solids Young modulus Potential dividers	Circular motion EMF & internal resistance
13	Simple harmonic motion Coulomb's Law Capacitance	Newton's Law of Gravitation Gravitational potential Moving charges in magnetic fields Magnetic flux linkage	Radioactive decay Nuclear instability Alternating currents Operation of Transformers	Telescopes Ideal gas laws Molecular kinetic theory	Classification of stars Supernovae & black holes Hertzsprung-Russel diagrams	
	Curriculum Rationale: In science at Barr Beacon School, we intend to send pupils out into the world knowing how it works. Our science curriculum provides pupils with the scientific knowledge and experiences which will interest them in the scientific world. We aim to empower them to thrive in a scientific workplace or work outside of science with a greater understanding of the world around them. A greater knowledge of how the world around them works will also allow them to make more informed contributions to our democratic society during their life at Barr Beacon and beyond.					