Year 11 Curriculum Implementation: Science (Physics)

	Autumn	Spring	Summer
	Forces	Waves	Space (SS only)
	Scalar, vector, contact & non-contact forces	Types of waves	Birth of solar system
	Mass, weight & centre of mass	Properties of waves	The star cycle
	Resultant forces	Waves required practical	Orbits (circular motion)
	Work done with force	• Sound	The expanding universe
	Energy changes by doing work	Reflection & refraction required practical	
	Hooke's law required practical	Electromagnetic spectrum – uses & dangers	
	Calculating speed	Infrared radiation required practical	
	Distance/time graph	Communication	
Knowledge &	Acceleration and velocity time graphs	• Lenses	
Skills	Terminal velocity	Visible Light	
	Newton's laws of motion	Black bodies	
	Acceleration required practical		
	Stopping distances	Magnetism	
	Reaction & thinking	Magnetic fields	
	Energy transfers & stopping	Electromagnets & solenoids	
	Momentum	Electromagnetic induction	
	Conservation of momentum (SS only)	Motor effect	
	Moments, levers & gears (SS only)	Microphones & loudspeakers	
	Pressure in solids & liquids (SS only)	Transformers	
	Year 7 Forces	Year 8 Light & Sound	Year 9 Astronomy
Links to prior	Year 8 Energy, Heat & Insulation	Year 9 Astronomy	1 Cut 3 / Stronomy
learning	Year 8 Pressure	- Teal 3 / Sciolionity	
icariiig	Year 9 Forces & Motion		
		formative assessment	formative assessment
	assessment     formative assessment		• Iormative assessment
Assessment	• formative assessment	• assessment	
	Year 11 mock exam		
	• Educake	• Educake	Educake
Home	• GCSEpod	GCSEpod	GCSEpod
learning	Past paper exam questions	Past paper exam questions	Past paper exam questions
	Reading comprehensions	Reading comprehensions	Reading comprehensions
Cultural	Targeted Intervention	Targeted Intervention	Targeted Intervention
Capital and			
extra-			
curricular			
opportunities			
Literacy	Key words & definitions	Key words & definitions	Use and mastery of command words in 6 mark Questions
Literaty	Etymology of keywords	Etymology of keywords	
	Calculations for work done, resultant forces, acceleration	Calculating frequency and time	Distances in space
	Drawing and using distance time graphs	Wave speed equations	Reinforcing the layout of scientific equations to maximise mark gaining
Numeracy	Drawing and interpreting velocity time graphs		and the state of t
	Newton's second law		
C		- Outiliza	- Astronomous
Careers	Traffic officer	Optician	Astronomer
Information,	• Car design	Communication engineer	Astrophysicist
Education, Advice and	Car mechanic		
Guidance			
(CEIAG)			
(CEIAG)	Despect for Scientists such as Hooke and Naturan and their contributions to the field of Science	Understand the implications for all life on Earth without light.	Eactor curiosity of our place in the universe
	Respect for Scientists such as Hooke and Netwon and their contributions to the field of Science		Foster curiosity of our place in the universe     Consider what other life forms there may be
Spirituality		Empathy and understanding for those who live without light and sound     How counds are lighted to a protion, bounds are light and sounds.	Consider what other life forms there may be
		How sounds are linked to emotion – how do certain sounds make us feel?	
	Encourage students to frequently revisit topics covered last year and those covered earlier this term	Encourage students to frequently revisit topics covered last year and those	Encourage students into a healthy work/sleep routine in preparation for GCSEs
How can	Help students establish a revision routine/timetable on the months before mock exams	covered earlier this term	
parents		Help students establish a revision routine/timetable on the months before the	
support the		GCSEs commence	
curriculum?			