Curriculum Content Map			Term 1 Term 2										
Mont	th		September  Chapter 9 - Motion Chapter 10 - Force and motion	October  Chapter 10 - Force and motion Chapter 11 - Force and pressure	November Chapter 12 - Wave properties	December  Revision and mocks Chapter 12 - Wave properties	January Chapter 12 - Wave properties	February  Chapter 13 - Electromagnetic waves Chapter 14 - Light	March Chapter 14 - Light Revision	April Chapter 15 - Electromagnetism	May Revision Biology Revision Chemistry	June Revision Biology Revision Chemistry	July Revision Biology Revision Chemistry
	Units of Work					*amolitude.wavelength.freouency.relating	*amplitude, wavelength, frequency, relating	*amolitude.wavelength.frequency.relating		forces and fields: electrostatic, magnetic,	Revision Physics  Teachers will plan individual lessons	Revision Physics	Revision Physics
Cultural Transmission	National Curriculum area – KS4		accelerations in everyday contexts  interpreting qualitatively graphs of  distance, time, and speed  graphs of	Forces and motion  - speed of sound, estimating speeds and accelerators in everyday contexts  - interpreting quantitudevy graphs of distance, time, and speed  first Law  - weight and gravitational field strength  - decelerations and braking distances  involved on roads, safety.  - Force and pressure  - Pressure and surfaces  - Atmospherick pressure  - Upthrust and flotation	velocity to frequency and wavelength	*amplitude, waveningsh, religionsh, reasons workcolly to frequency and waveningsh * transverse and fongloudinal waves	-ainplaude, wweenigh, requestly, reaming wholenly to frequency and wavelength working to frequency and wavelength and the second to the second waves -sound wavelength of the second -second	*angitusus, www.energin, retrigentity, reaming volicity for frequency and wavelength versions of the control of	The normal and laws of reflection including specular reflection and diffuse reflection with reflection and diffuse reflections and diffuse reflections.  The difference between transparent and translucent  Convex and concave lenses and calculating application  Images in cameras and magnifying glasses Teachers will pain inclividual legal pain inclividual seriors dependent on the strengths and weaknesses of individual groups	*Indica and needs executosians, magnetic, graymetim and electromagnetism experience and electromagnetism executors that the second executors are also an executors and individent magnetic fields of premanent and individent magnetics, and the Earth's magnetic fields of currents, how solenoids enhance the effect "Ampetic fields of currents, how solenoids enhance the effect "Electromagnetis in devices" **He generator effect and alternating current **Transformers and their uses	reactives wite just individual excelors dependent on the internights and weaknesses of individual groups		
	Substantive Knowledge	The What!	The difference between scalars and vectors followed resultant forces and their connection to acceleration     acceleration     Interpreting velocity time graphs and the use of yemset.     how to calculate acceleration from a velocity time graph     HT:     VMbat the area under a velocity time graph shows     Calculating speed and distance from a velocity time graph	*The difference between sclain and vectors followed resultant forces and their connection forces and their connection acceleration *Newtork's three laws of motion, inertia mass and equations of motion undergoing uniform acceleration and conservation of momentum *The concept of momentum and detailed conservation of momentum -calculations *Plastic deformation of materials, using experimentation to take accurate and precise measurements.  Wave properties: Transverse and longitudinal waves Amplitude, wavespeed, frequency reflection and refraction	Wave properties and how these relate to sound waves. Students will explain the uses of ultrasound.	Wave proporties and how these relate to sound waves.	Wine propertiseand how these relate to sound waves. Students will discover the was of ultractional and explain how elsenic waves are used as a warming system for earthquakes. Students will explain the nature of S and P waves	How to calculate frequency of electromagnetic waves	Sudents will use on boxes and glass block in investigate the relaction of a light origin glass. Some students may demonstrate the refraction in a light one produce a special management of the produce a special management of surfaces to investigate their effect. Students will use different colour and fellow the surface to investigate their effect. Students will use different colour and surface to surfaces to investigate their effect. Students will construct any disparams with focal lengths for both concave and convex lenses an disvestigat images formaded by a convex lens.	The force rule for two magnetic poles near such other.  * The pattern of magnetic field lines around a bar magnet.  * what induced magnetism is a bar magnet.  * what induced magnetism is two parts of the pattern of a magnetic field around a wire carrying a current and in and around a solenoid  * how the strength and direction of the field wireless with position and with the current  * what a uniform magnetic field is  * whose a simple motors works and what is meant by magnetic flat density, including how to calculate the force on a current carrying wire			
	Disciplinary knowledge	The How!	graphs and use data collected from the graphs in calculations, including examples where speed is changing. Students have analysed the motion of objects in depth starting from a necap of the concept of speed and this relationship to distance travelled and time taken. The representation of motion using distance-time graphs representing	using distance-time graphs representing single and multiple objects has been analysed to give detailed descriptions of the movement of the objects. The students have defined acceleration in terms of changes in velocity before analysing it graphically and mathematically. Higher tier students have also outlined circular motion in constant speed. All students have also untiled distributant motion in constant speed. All students have then investigated acceleration caused by an unbalanced force on ramp, linking acceleration to the gradient of a line on a velocity-time graph. Students will carry out a required practical relating to the extension of a spring		Students will complete a range of activities such as long answer examination questions, multiple choice questions and short answer questions	Students will complete a range of activities such as long answer examination questions, multiplie choice questions and short ariswer questions.	Students will complete a range of activities such as long answer examination questions, multiple choice questions and short answer questions	Students will complete a range of activities such as long answer examination questions, multiuple choice questions and short answer questions	Students will investigate magnetic fields around bur magnets and current carriers when programmers are first when appropriate the first equation to calculate magnetic magnetic fields and the control of the first equation to demonstrate Flemming's left hand mule			
	Sequencing (Row)	Retrieval & Extension	KS3: 1.1 Speed 1.1 Crawity 1.3 Contact forces 3.4 Energy transfer 1.1 upend 1.2 gravity 1.3 gravity forces	Wave properties: IS3: 1.1 Speed 1.1 Corawly 1.2 Contact forces 1.4 Energy transfer 1.5 speed 1.5 speed 1.5 speed 1.4 Sound 4.2 Sound 4.5 Sound 8.6 Speed 8.6		KS3: 3.4 Energy transfer 4.3 Wave Effect 4.4 Wave Properties	KS3: 3.4 Energy transfer 4.3 Wave Effect 4.4 Wave Properties	KS3: 3.4 Energy transfer 4.3 Wave Effect 4.4 Wave Properties	of corrective lenses for eye defects	2.1 potential difference and resistance 2.2 current 2.1 Potential difference and resistance 2.2 current 2.4 Electromagnets			
	Summative Assessment				API		AP2-Paper 1		Mock examinations (papers 1 and 2)	GCSE Papers	GCSE Papers	GCSE Papers	GCSE Papers
Personal Empowerment	Virtue	eflect, think deeply and critically bout an issue.	Friendliness and Civility	Justice & Truthfulness	Courage	Generosity	Gratitude	Good Speech	Good Temper & Humour	Self-Mastery	Self-Mastery	Compassion	Good Sense
	Link to Virtue	The opportunity to refi	Students will need to demonstrate friendliness and civility as they work in groups to complete a variety of different practical. They will need to demonstrate civility as they work towards a method to ensure they are civil with each other to achieve a common goal.	Students will demonstrate truthfulness within their work as they reflect on their finding within an investigation. Students will look at the justice on each results and determine if they are reaching their full potential.	their learning. Students will need to demonstrate their understanding of the	Students will need to demonstrate generosity of as they work with groups and demonstrate their understanding of their learning. They will need to be generous with their time and comments towards each other	Student will demonstrate good speech within their lessons by demonstrating their key words within lessons and their work	As students work within group they will need to demonstrate, good temper as they work towards a partical to achieve the independent practice. Students will need to demonstrate good humour as they can work together and laugh as each other learn	Students will need to demonstrate good humour as they complete the last sections of the physics course while also revising for their	Students will need to behave in anexemplary manner in lessons in order to investigate the properties of light waves.	Students will need to aim high for their up and coming exams. Students will need to revise in their own time and ensure they are fully prepared for their GCSES	Students will need to aim high for their up and coming exams. Students will need to revise in their own time and ensure they are fully prepared for their GCSES	Students will need to aim high for their up and coming exams. Students will need to revise in their own time and ensure they are fully prepared for their GCSES
Preparation for Work	Skill	skilk	Listening	Leadership	Problem-Solving	Creativity	Staying Positive	Speaking	Staying Positive	Aiming High	Aiming High	Speaking	Teamwork
	Link to Skill	Transferable:		Students will lead their learning to ensure they are secure in building on previous knowledge.	Students will need to use their problem- solving skills to be able to draw conclusions from data.	Students will need to be creative when using their notes to revise for the mock examinations and use active learning techniques.	Students will need to stay positive as they learn new key words and definitions. Building on their previous knowledge	Students will need to demonstrate good speaking when working with others and demonstrate what knowledge they understand and what they need help with in prepare.	complete all of the tasks set and providing evidence for the experiment	Students will need to aim high for their up and coming exams. Students will need to revise in their own time and ensure they are fully prepared for their GCSES	Students will need to aim high for their up and coming exams. Students will need to revise in their own time and ensure they are fully prepared for their GCSES		
Preparation for Citizenship	SMSC & British Values	g opinions on nt issues											
Prepa for Cit	Link to SMSC& British Values	Developin											