



Subject	Year	Term										
Physics	11	2										
Topic												
Electromagnetism and Space Physics												
Content (Intent)												
Prior Learning (Topic)	Waves											
Unit 7: Electromagnetism A recap of basic magnetism and magnetic forces which leads on to learning about the function of the compass and how they demonstrate magnetic fields. The magnetic effect of a wire and thus a solenoid leading into the action of electromagnets allows students to be able to calculate the force on a conductor. This means electric motors and loudspeakers can be further understood. The generator effect and the link between electricity and magnetism gives rise to using the generator effect and ultimately learning about how the transformer operates, which links back to Unit 2: Electricity.												
Unit 8: Space Physics Learning more in-depth about the nature of the Solar System, orbits of planets, moons, and artificial satellites builds upon the Unit 5: Forces. Learning about the role of the Sun and other stars and how main sequence stars exist further reinforces Unit 4: Radioactivity as explanations to how elements are formed are given. Red-shift is introduced for the first time and links to Unit 6: Waves as an explanation to how the Universe is evolving												
Future Learning (Topic)	Exam Preparation and Final Exams											
What Knowledge and Skills will be taught (Implementation)		How will your understanding be assessed & recorded (Impact)										
Understanding <ul style="list-style-type: none">Electricity and magnetism are linked – use of Flemings Left hand and Right-hand rules to explain motors and generatorsThe life cycle of stars in the context of fusion and elemental formation – explaining why stars come to the end of their life – relating to the Hertzsprung-Russel diagram.Centripetal force can explain why we have orbiting bodies		Key Piece of work (Homework) Pupils given a percentage and formative feedback provided. End of topic test Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. Walking talking Mocks (WTM) Formative feedback provided. Yr 11 Mock Exams Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.										
Maths Skills <ul style="list-style-type: none">Applying new formula in familiar and unfamiliar contexts.The application of collected data into graphs and for analysis.		Interleaving Topic: Unit 2: Electricity – this relates well to the topic of Electromagnetism, bringing in key concepts from both.										
Practical Skills <ul style="list-style-type: none">Reading measuring equipment with accuracy and precision, taking repeats, following methods.												
How can parents help at home?												
Ensure all class booklets are complete and homework submitted on time Assist in ensuring the active use of the EDUCAPE online learning platform where each pupil is given a personal log on from their teachers. Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters. Ensure all pupils have all their resources required for science lessons, including Knowledge organisers, pens and calculators												
Helpful further reading/discussion (including Reading and Vocabulary Lists)												
Reading AQA revision guides AQA revision cards EDUCAPE online learning platform. GCSE POD BHHS Knowledge organisers		Vocabulary Lists: <table><tr><td>Elliptical</td><td>Magnetic Flux Density</td></tr><tr><td>Supernova</td><td>Generator</td></tr><tr><td>Black holes</td><td>Solenoid</td></tr><tr><td>Main sequence</td><td>Poles</td></tr><tr><td>Redshift</td><td>Dipoles</td></tr></table>	Elliptical	Magnetic Flux Density	Supernova	Generator	Black holes	Solenoid	Main sequence	Poles	Redshift	Dipoles
Elliptical	Magnetic Flux Density											
Supernova	Generator											
Black holes	Solenoid											
Main sequence	Poles											
Redshift	Dipoles											