

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	HALF TERM
Topic	P7 Magnetism and Electromagnetism				P6 – Waves				
Challenge Objective and Content (for all learners)	P7 Explain how electromagnetic effects are used in a variety of devices. -Describe the differences between permanent and induced magnetism. -Draw the magnetic field pattern of a bar magnet. -Describe how the magnetic effect of a current can be demonstrated.				Show how changes in velocity, frequency and wavelength, in transmission of sound waves from one medium to another, are inter-related -Provide examples of transfers of energy by electromagnetic waves - Explain the uses and dangers of electromagnetic waves.				
Inspire Opportunities	P7 - Show that Fleming's left-hand rule represents the relative orientation of the force, the current in the conductor and the magnetic field.				Explain that a perfect black body is an object that absorbs all of the radiation that hits it. No radiation is reflected or transmitted.				
Assessment Opportunities	End of Topic Tests and Exam Questions								

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	CHRISTMAS
Topic	P6 – Waves		Physics Paper 1 Revision		Year 11 Mock Exams		
Challenge Objective and Content (for all learners)	Show how changes in velocity, frequency and wavelength, in transmission of sound waves from one medium to another, are inter-related -Provide examples of transfers of energy by electromagnetic waves - Explain the uses and dangers of electromagnetic waves.		P1 Energy P2 Electricity P3 Particle Model of Matter P4 Atomic Structure				
Inspire Opportunities	Explain that a perfect black body is an object that absorbs all of the radiation that hits it. No radiation is reflected or transmitted.		Grade 7-9 questions.				
Assessment Opportunities	End of Topic Tests and Year 11 Mock Exams						

Spring Term

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	HALF TERM
Topic	P8 - Space Physics			Physics Paper 2 Revision		Year 11 Mock Exams	
Challenge Objective and Content (for all learners)	-Explain the evidence for the expanding universe and the life cycle of a star -Describe and explain the life cycle of stars, including the idea of fusion -Explain how the size of the orbit depends on the objects speed. -Explain the red shift and how it provides evidence for the Big Bang model			P5 Forces P6 Waves P7 Magnetism and Electromagnetism P8 Space			
Inspire Opportunities	Explain the red shift and how evidence suggests the whole universe appears to be expanding			Grade 7-9 questions.			

Assessment Opportunities	End of Topic Tests and Year 11 Mock Exams	
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	Week 1	Week 2	Week 3	Week 4	Week 5	EASTER
Topic	P1 Energy Revision		P2 Electricity Revision		P3 Particle Model of Matter Revision	
Challenge Objective and Content (for all learners)	P1 - There are changes in the way energy is stored when a system changes. Students should be able to describe all the changes involved in the way energy is stored when a system changes, for common situations. For example: - an object projected upwards - a moving object hitting an obstacle - an object accelerated by a constant force - a vehicle slowing down bringing water to a boil in an electric kettle.		P2-Describe how to calculate resistance and the factors which can alter it. Describe how electricity is delivered to our homes and businesses. -Recognise standard circuit symbols. -Draw and interpret resistance graphs for lamps, diodes, thermistors and LDRs.		P3 – Use the particle model to predict the behaviour in solids, liquids and gases. -Students should be able to explain the differences in density between the different states of matter in terms of the arrangement of atoms or molecules.	
Inspire Opportunities	Grade 7-9 questions.					
Assessment Opportunities	Exam Questions					

Summer Term

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	HALF TERM	
Topic	P3 Particle Model of Matter Revision	P4 Atomic Structure Revision		Science Skills		GCSE Exams		
Challenge Objective and Content (for all learners)	P3 – Use the particle model to predict the behaviour in solids, liquids and gases. -Students should be able to explain the differences in density between the different states of matter in terms of the arrangement of atoms or molecules.	P4 – Describe the structure of the atom, the nuclear forces and atom stability. -Describe the structure of the atom, with reference to atomic number and mass number. -Describe the discovery of the electron led to the plum pudding model of the atom. The plum pudding model suggested that the atom is a ball of positive charge with negative electrons embedded in it. -Describe the properties of alpha, beta and gamma radiation. -Use nuclear equations to represent radioactive decay. -Calculate half-life. -Describe the sources of radiation and their dangers and uses.		- Graphs - Variables - Evaluations - Calculations - Uncertainty				
Inspire Opportunities	Grade 7-9 questions.							
Assessment Opportunities	Exam Questions							

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	SUMMER
Topic	GCSE Exams and Study Leave						
Challenge Objective and Content (for all learners)							
Inspire Opportunities							
Assessment Opportunities	GCSE Exams						