

Year Group 11						
Term	1	2	3	4	5	Rotation
Topic Title	P8.1 Physics on the move	P8.2 Powering earth	P8.3 Beyond earth	Revision and PAGES	Revision and PAGES	Revision of Year 9/10
Rationale	During Y9 and 10 the pupils have studied motion	This topic looks at how we power our modern civilisations, what are the challenges that we face and how we are going to meet those challenges in the future. It also looks at the practicalities of how power reaches us from powerstations.	This topic allows students to better understand our place in the universe. how we know what is out there and how we are trying to find out if we are alone in the universe.	Final preparation for examinations (Completion of rotation material where necessary) - revision lessons, practice papers and review of all PAG practicals - Pupils can use this time to do practicals missed during the lockdown periods.	Final preparation for examinations (Completion of rotation material where necessary) - revision lessons, practice papers and review of all PAG practicals - Pupils can use this time to do practicals missed during the lockdown periods.	Mock and Final exam preparations
Prior knowledge	Learners should have prior understanding of forces and motion in objects. They should be able to use key forces and motion equations.	Year 6 term 2	Year 7 term 2	This is a review of all content covered at KS4	This is a review of all content covered at KS4	3 lesson recap of each module covered so far. Followed exam based question lessons assessing their knowledge.
Key knowledge/skills development	Have considered forces and motion previously in their journey the pupils apply these ideas to everyday motion including measuring speeds and accelerations, stopping of transportation and collisions.	Describe the main energy sources available on the Earth. Explain the differences between renewable and non-renewable energy and give examples of each. Describe the patterns in our use of electrical energy. Explain how the national grid provides us with our energy from power stations	Describe how astronomer use different types of telescopes to study the night sky. Describe the techniques used by astronomer to search for life. Describe how GPS can be used to work out distances and how we can use this same techniques to work out distances to different objects in space.	Review of all key content, exam practice and technique, practise of analytical skills. Review of key terminology and their use.	Review of all key content, exam practice and technique, practise of analytical skills. Review of key terminology and their use.	Review of all key content, exam practice and technique, practise of analytical skills. Review of key terminology and their use.
National Curriculum/specialisation links	P2.1a, P8.1a+	P3.1.6	P3.2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3.	N/A	N/A	N/A
Additional Literacy Opportunities	Use of keyword learning and practise of six mark questions and terminology in Going for Gold or Going Forward type tasks Research: chernobyl	Use of keyword learning and practise of six mark questions and terminology in Going for Gold or Going Forward type tasks	Use of keyword learning and practise of six mark questions and terminology in Going for Gold or Going Forward type tasks Size of the Earth by Carl Gagan - Sharepoint Edwin Hubble - Sharepoint	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision
Additional Numeracy Opportunities	Calculations of forces in collisions, braking distances and velocities.			Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision
STEM	Revision of Required Practicals	Revision of Required Practicals	Revision of Required Practicals	Revision for exams and review of Required Practicals / Skills	Revision for exams and review of Required Practicals / Skills	Revision for exams and review of Required Practicals / Skills
Cross curricular links	Design and technology, mathematics - equations of motion and braking distance.	Mathmatics skills, Geography	Mathmatics skills	N/A	N/A	N/A
Key vocabulary	Velocity, acceleration, thinking distance, braking distance, force, collisions, reaction time, stopping distance.	Energy, renewable, non-renewable, fossil fuels, powerstation, national grid.	telescope, astronomer, life, search, distance, star planet solar system	General vocabulary from all topics	General vocabulary from all topics	General vocabulary from all topics

Year Group 11						
Term	1	2	3	4	5	6 Rotation
Topic Title	P8.1 Physics on the move	P8.2 Powering earth	Revision and PAGES	Revision and PAGES	Revision and PAGES	Revision of Year 9 /10
Rationale	During Y9 and 10 the pupils have studied motion	This topic looks at how we power our modern civilisations, what are the challenges that we face and how we are going to meet those challenges in the future. It also looks at the practicalities of how power reaches us from powerstations.	Final preparation for examinations (Completion of rotation material where necessary) - revision lessons, practice papers and review of all PAG practicals - Pupils can use this time to do practicals missed during the lockdown periods.	Final preparation for examinations (Completion of rotation material where necessary) - revision lessons, practice papers and review of all PAG practicals - Pupils can use this time to do practicals missed during the lockdown periods.	Final preparation for examinations (Completion of rotation material where necessary) - revision lessons, practice papers and review of all PAG practicals - Pupils can use this time to do practicals missed during the lockdown periods.	Mock and Final exam preparations
Prior knowledge	Learners should have prior understanding of forces and motion in objects. They should be able to use key forces and motion equations.	Year 8 term 2	This is a review of all content covered at KS4	This is a review of all content covered at KS4	This is a review of all content covered at KS4	3 lesson recap of each module covered so far. Followed exam based question lessons assessing their knowledge.
Key knowledge/skills development	Have considered forces and motion previously in their journey the pupils apply these ideas to everyday motion including measuring speeds and accelerations, stopping of transportation and collisions.	Describe the main energy sources available on the Earth. Explain the differences between renewable and non-renewable energy and give examples of each. Describe the patterns in our use of electrical energy. Explain how the national grid provides us with our energy from power stations	Review of all key content, exam practice and technique, practise of analytical skills. Review of key terminology and their use.	Review of all key content, exam practice and technique, practise of analytical skills. Review of key terminology and their use.	Review of all key content, exam practice and technique, practise of analytical skills. Review of key terminology and their use.	Review of all key content, exam practice and technique, practise of analytical skills. Review of key terminology and their use.
National Curriculum/specification links	P2.1a, P8.1a-i	P3 1.6	N/A	N/A	N/A	N/A
Additional Literacy Opportunities	Use of keyword learning and practise of six mark questions and terminology in Going for Gold or Going Forward type tasks Research: chernobyl	Use of keyword learning and practise of six mark questions and terminology in Going for Gold or Going Forward type tasks	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision
Additional Numeracy Opportunities	Calculations of forces in collisions, braking distances and velocities.		Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision	Exam based questions / Seneca / Going for Gold Revision
STEM	Revision of Required Practicals	Revision of Required Practicals	Revision of Required Practicals	Revision for exams and review of Required Practicals / Skills	Revision for exams and review of Required Practicals / Skills	Revision for exams and review of Required Practicals / Skills
Cross curricular links	Design and technology, mathematics - equations of motion and braking distance.	Mathematics skills, Geography	N/A	N/A	N/A	N/A
Key vocabulary	Velocity, acceleration, thinking distance, braking distance, force, collisions, reaction time, stopping distance.	Energy, renewable, non-renewable, fossil fuels, powerstation, national grid.	General vocabulary from all topics	General vocabulary from all topics	General vocabulary from all topics	General vocabulary from all topics