

Subject	Year 10 Physics Content Autumn Term	How to support students' learning
Conservation and Dissipation of Energy (Part 1)	Summary of concepts taught: ➤ Changes in Energy Stores ➤ Conservation of Energy ➤ Energy Dissipation ➤ Energy and Efficiency	This should extend your knowledge from KS3 science. Review the work covered in lesson by reviewing the content found on the BBC Bitesize: Types of energy store - Changes in energy stores - AQA - GCSE Physics (Single Science) Revision - AQA - BBC Bitesize Have ago at calculating the efficiency of items: Efficiency Calculator (omnicalculator.com)
Conservation and dissipation of energy (Part 2)	Summary of Concepts Covered: ➤ Energy and Work ➤ Gravitational Potential Energy ➤ Kinetic and Elastic Stores ➤ Work Done and Power ➤ Specific Heat Capacity – Required Practical Task	This topic is the second section of conservation and dissipating of energy from year 9. The second half has been moved to year 10 as there are a variety of complex equations. Review the idea of energy transferred and work done by reading through the BBC bitesize website: Work, power and efficiency - Work, power and efficiency - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize Calculating gravitational potential and kinetic energy can be confusing, so watch this video here for some worked examples: P1 GPE and KE Multi step Calculations - YouTube You will revisit elastic potential energy later on in the year with Hooke's law. Review your knowledge by reading about elastic potential energy here: Elastic Potential Energy (1.1.5) AQA GCSE Physics Revision Notes 2018 Save My Exams

		Energy and power is an important calculation, you would have covered this briefly in year 8 but now in GCSE you need to be able to use it in a variety of examples. Watch this video here: Work, Energy, and Power: Crash Course Physics #9 - YouTube You will have completed the required practical in lesson to determine the specific heat capacity of a material. Go through the key content again by watching this video: Specific Heat Capacity - GCSE Science Required Practical - YouTube
Forces In Balance	Summary of Concepts Covered: ➤ Vectors and Scalars ➤ Forces between Objects ➤ Resultant Forces ➤ The Parallelogram of Forces ➤ Resolution of Forces ➤ Centre of Mass	Vectors and scalars is a fundamental topic that is revisited again and again. Review them by reading through this website: Scalars and Vectors (physicsclassroom.com) You need to know about different types of forces, watch this video here: GCSE Physics - Contact and Non-Contact Forces #40 - YouTube Resultant forces link in with motion, to understand the basics reading through the BBC Bitesize website here where you will find loads of examples: Contact forces - Forces - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize Don't forget to do the test at the end! : Forces test questions - Edexcel - GCSE Combined Science Revision - BBC Bitesize