Subject	Year 8 Physics content Summer Term	How to support students' learning
Radioactivity	<u>Atomic models</u> • Recall the plum pudding model of the atom. • Describe the experiment carried out by Rutherford • Interpret experimental results • Construct a model of the atom based on experimental results	This webpage provides a good introduction to atoms, recapping work from Chemistry in terms of the structure of the atom. Structure of the atom - Atoms - Edexcel - GCSE Physics (Single Science) Revision - Edexcel - BBC Bitesize This video shows a reconstruction of the experiment Rutherford undertook: Rutherford Gold Foil Experiment - Backstage Science - YouTube
	<u>Properties of alpha beta and gamma</u> • Recall 3 types of radiation • Recall the equipment used to measure radiation. • Describe the features of each type of radiation • Describe the properties of each type of radiation	This is a nice video to show the equipment (Geiger counter and Geiger-Muller tube) used to measure the count rate of a radioactive source. Here is it used to demonstrate the penetration power of the 3 types of radioactive emissions. Demonstrating the penetrating power of alpha, beta and gamma radiation - YouTube
	<u>Exposure to radiation (safety, risks, contamination & radiation)</u> • Describe the difference between contamination and irradiation • Describe safety features used when handling radiation in the laboratory • Apply an understanding of properties of radiation to identify an unknown radiation source	This page shows a good comparison of irradiation and contamination Contamination and irradiation - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy - BBC Bitesize These resources suggest ways to reduce risks from radiation: Reducing radiation risks - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy - BBC Bitesize Time Distance Shielding - YouTube
	<u>Uses of radiation</u> • Recall uses of radiation • Describe different uses of radiation • Explain why different types of radiation are used for different uses	This collection of pages on BBC Bitesize discusses the uses of radiation: Irradiation - Uses and dangers of radioactivity - Edexcel - GCSE Physics (Single Science) Revision - Edexcel - BBC Bitesize This video also discusses the uses of radiation: Uses Of Nuclear Radiation | Radioactivity | Physics | FuseSchool - YouTube