Physics year 10 Spring 1

Chapter and Topic	Lesson	Outcomes
P7 Radioactivity	P7 Atoms and radiation	I can define what a radioactive substance is I can describe the types of radiation I can evaluate when radioactive decay occurs
	P7 Discovery of the nucleus	Describe how the nuclear model was established Explain why the plum pudding was rejected Evaluate why the nuclear model was accepted
	P7 Changes in the nucleus	describe what happens to the nucleus after alpha and beta emission represent the emission of an alpha and beta particle
	P7 More alpha, beta, gamma	describe the range of alpha, beta and gamma radiation state the ionising power of alpha, beta and gamma radiation evaluate the dangers of an alpha, beta and gamma radiation
	P7 Activity and half life	Describe what is meant by a half life State what is meant by count rate Evaluate what happens to the count rate during decay
Physics only	P7 Nuclear radiation in medicine	. State the radioactive isotopes used in medicine (4) Describe how to choose a specific radioactive isotope Explain what radioactive isotope can be used for medical imaging Explain how radioactivity is used in treating cancer
Physics only	P7 Nuclear Fission	State what nuclear fission is Describe the difference between spontaneous and induced fission Explain what a chain reaction is Explain how a chain reaction is controlled in a nuclear reactor
Physics only	P7 Nuclear Fusion	State what nuclear fusion is Describe how nuclei can fuse together Explain where the Sun's energy comes from Evaluate the difficulties in making a nuclear fusion reactor
Physics only	P7 Nuclear issues	State what radon gas is and how it is dangerous Assess how safe nuclear reactors are Explain why nuclear waste is dangerous

		Evaluate what happens to nuclear waste