

YEAR 10 A-F -PHYSICS

WEEK 12 (15th November to 19th November)

Topic: Radioactivity
Core Practical 2

Lesson Objective: SP 6m Nuclear fusion

Resources: Student text book, worksheet file, interactive power point from Board works and Online animations

Worksheets and Zoom link will be posted in google classroom

Date	Lesson	Lesson objectives & Learning outcome	Mode of Teaching	
15th Nov Sunday (Boys)	1	L.O: To recall the properties of waves and wave equation	Zoom/ GM	Teacher uses a video to introduce ripple tank and to explain how it can be used to find the speed of water waves by measuring wavelength and frequency. Works out few questions to calculate wavelength from the wavefront diagram and also to calculate frequency from the data given, hence find out the speed of wave.
15th Nov Sunday (girls)	2	Learning outcome: The students will be able to recall the different methods to find the speed of water waves. Uses the appropriate equation to calculate the speed of waves		
17th Nov Tuesday (Boys)	5	L O. CP2 : Investigating speed, frequency and wavelength of waves	Zoom/ GM	Teacher presents the video of the practical conducted and explains the various measuring techniques used and the steps taken to ensure accuracy of the measured quantities. Students will be able to identify the measuring technique involved and comment on the accuracy obtained by using these techniques
18th Nov Wednesday (girls)	5	Learning outcome: Students will be able to understand the techniques used <ul style="list-style-type: none"> • To measure waves in different ways and evaluate the suitability of the equipment. • To measure the speed of sound through a metal rod 		

17th Nov Tuesday (Boys)	6	L.O: CP2 : Investigating speed, frequency and wavelength of waves		
18th Nov Wednesday (girls)	6	Learning outcome: Students will complete the practical sheet	GC	Students will complete the practical sheet assigned for them in GC and turn in after completion
19th Nov Thursday (Boys)	4	L.O: Describe nuclear fusion as the creation of larger nuclei resulting in a loss of mass from smaller nuclei, accompanied by a release of energy, and recognise fusion as the energy source for stars.		
19th Nov Thursday (Girls)	1	<p>Explain why nuclear fusion does not happen at low temperatures and pressures, due to electrostatic repulsion of protons.</p> <p>Relate the conditions for fusion to the difficulty of making a practical and economic form of power station</p> <p>Learning outcome: Students will be able to</p> <ul style="list-style-type: none"> • Recall electrostatic repulsion of like charges. • Explain why high temperatures and pressures are needed to make fusion happen. • Explain why fusion happens at a low temperature in the sun. • Relate the conditions of fusion to the difficulty of making a practical and economic fusion power station. 	Zoom/ GM	Teacher uses a powerpoint presentation to discuss nuclear fusion and the condition required to achieve it. Compares and contrasts fission and fusion reaction Also compare the fusion in Sun and the practical difficulty of making it possible on earth.

