

## YEAR 10 (A-F) – PHYSICS

**WEEK 6 (4<sup>th</sup> October to 8<sup>th</sup> October)**

**Topic: Radioactivity**

**Lesson Objective:** SP 6c-electrons and Orbits

SP6e-Types of radiation

**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	
4 <sup>th</sup> October Sunday (Boys)	1	<b>L.O:</b> Explain that electrons change orbit when there is absorption or emission of electromagnetic radiation. Explain evidence and characteristics of the Bohr model	<b>Zoom</b>	Teacher uses a ppt to discuss what happens when electron in an atom gains energy ,and to differentiate between emission and absorption spectra And to explain how Bohr model of atom is different from Rutherford model
4 <sup>th</sup> October Sunday (girls)	2	<b>Learning outcome:</b> The students will be able to Recall that in each atom its electrons orbit the nucleus at different set distances from the nucleus  Explain that electrons change orbit when there is absorption or emission of electromagnetic radiation  Describe some of the evidence for the Bohr model of the atom.		
6 <sup>th</sup> October Tuesday (Boys)	5	<b>L O:</b> Explain how atoms may form positive ions by losing outer electrons.	<b>Zoom</b>	Teacher use a ppt to explain what is ionization and how it occurs Teacher will discuss the answers of the textbook questions
7 <sup>th</sup> October Wednesday (girls)	5	<b>Learning outcome:</b> Students will be able to <ul style="list-style-type: none"> <li>• Recall what an ion is.</li> <li>• Describe how ionisation occurs.</li> </ul>		
6 <sup>th</sup> October	6	<b>L.O:</b> Describe the different process of	<b>Zoom</b>	

Tuesday (Boys)		radioactive decay Compare alpha, beta and gamma radiations in terms of their abilities to penetrate and ionize		Teacher uses powerpoint presentation to discuss the properties of alpha, beta and gamma and explain the properties of the different types of radiation
<b>7<sup>th</sup> October</b> Wednesday (girls)	6	<p><b>Learning outcome:</b> Students will be able to</p> <ul style="list-style-type: none"> <li>• List five types of radiation that are emitted in random processes from unstable nuclei.</li> <li>• State which types of radiation are ionising radiations.</li> <li>• Describe what alpha and beta particles are and the nature of gamma radiation.</li> <li>• Compare the penetrating and ionising abilities of alpha, beta and gamma radiation.</li> </ul>		
8 <sup>th</sup> October Thursday (Boys)	4	<p><b>L.O:</b> Solving worksheet on types of radiation</p>		Teacher will post the worksheet in the google classroom.
8 <sup>th</sup> October Thursday (Girls)	1	<p><b>Learning outcome:</b> Students will be able to reinforce the concepts learned in the previous lesson by solving the worksheet</p>	<b>GC</b>	Students will solve and turn in by the end of the lesson