

YEAR 10 A - F- PHYSICS

WEEK 4 (20th Sept to 24th Sept)

Topic: Atom models

Lesson Objective: Describe the structure of the atom and the different atomic models

How do atoms become ionised

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	
20 th Sept Sunday (Boys)	1	<p>L.O: Describe an atom as a positively charged nucleus, consisting of protons and neutrons, surrounded by negatively charged electrons, with the nuclear radius much smaller than that of the atom and with almost all of the mass in the nucleus.</p> <p>Learning outcome: Students will be able to</p> <ul style="list-style-type: none"> • Describe the structure of an atom • Understand that the size of the nucleus is much smaller than the size of the atom itself. • Express symbols of isotopes in the format ${}_Z^AX^A$ <p>Home work will be assigned Textbook questions SP6b Pg 92 and 93</p>	Zoom	Teacher uses powerpoint presentation to recall the structure of an atom, explain what is meant by an isotope, how atoms of different elements are different (in terms of numbers of electrons and protons)
22 nd Sept Tuesday (Boys)	5	<p>L.O: Describe how and why the atomic model has changed over time including reference to the plum pudding model and Rutherford alpha particle scattering leading to the Bohr model</p> <p>Learning outcome: Students will be able to</p> <ul style="list-style-type: none"> • Understand that the size of the nucleus is much smaller than the size of the atom itself • Can differentiate the plum pudding model from Rutherford model 	Zoom	Teacher uses powerpoint presentation to describe an early model of the atom and describe how and why our model of the atom has changed over time, including the plum pudding model and the
23 rd Sept Wednesday (girls)	5			

		<ul style="list-style-type: none"> <i>Explain the alpha scattering experiment</i> <p>Home work will be assigned SP6a.4</p>		Rutherford alpha particle scattering.
22 nd Sept Tuesday (Boys)	6	<p>L.O: Solving worksheet on atom models</p>	GC	Teacher will post the worksheet in the google classroom. Students will solve the worksheet and turn in by the end of the lesson
23 rd Sept Wednesday (girls)	6	<p>Learning outcome: Students will be able to reinforce the concepts learned in the previous lesson by solving the worksheet</p>		
24 th Sept Thursday (Boys)	4	<p>L.O: Explain how atoms may form positive ions by losing outer electrons.</p> <p>Learning outcome: Students will be able to</p>	Zoom	Teacher uses powerpoint presentation or animation to recall what an ion is and describe how ionisation occurs.
24 th Sept Thursday (Girls)	1	<ul style="list-style-type: none"> <i>describe where electrons are found inside atoms (in terms of shells).</i> <i>describe how ionisation occurs</i> 		

Homework :

Textbook questions SP6b Page 92 and 93

SP6a.4

