YEAR 11 (A-F) – PHYSICS

WEEK 3 (13th September to 17th September)

Work Sent to the students through Google classroom

Topic:- SP 9. Forces doing work and their effects

Resources: Text book, Worksheets, GCSE science free lesson video& power points.

Date	Lesso n	Торіс	Mode of Teaching	
14 th Sept Mon (Boys) 13 th Sept. Sunday (Girls)	3	Learning Objective: Discussion of worksheet on moment. Learning outcome Apply the equation: moment of a force = force × distance normal to the direction of the force Eevaluate the principle of moments to calculate forces and distances in equilibrium situations.	Zoom	Teacher uses power point presentation that contains interactive questions.
15 th Sept. Tuesday – (boys) 14 th Sept. Monday – (girls)	1	Learning Objective: Draw and use free body force diagrams. Explain examples of the forces acting on an isolated solid object or a system where several forces lead to a resultant force on an object Use vector diagrams to illustrate a net force (scale drawings only). Learning outcome Draw free body diagrams to represent the forces on an object. Explain what happens in situations where several forces are acting on an object. Use scale drawings to work out the net force on an object. https://www.youtube.com/watch?v=PG8wV02 2Eu0	Zoom	Teacher uses power point presentation that contains interactive questions Complete the text book questions Complete WS SP 9b .3 Q.1-4
15 th Sept. Tuesday – (boys) 14 th Sept. Monday – (girls)	2	Learning Objective: Use vector diagrams to illustrate resolution of forces, and equilibrium situations (scale drawings only). Learning outcome Describe how to resolve forces. Draw a scale diagram to work out the horizontal and vertical components of a thrust https://www.youtube.com/watch?v=8RI2_gJy0L0	Zoom	Teacher uses power point presentation that contains interactive questions Complete WS SP9b.3 Q.5

				Home work: SP9b.4
16 th Sept. Wednesday – (boys)	7	Learning Objective: Explain how levers and gears transmit the rotational effects of forces. Learning outcome:	Zoom	Teacher uses power point presentation that contains interactive questions
16 th Sept. Wednesday – (girls)	1	Recall what gears are Identify where they are found. Describe the working of a gear, Explain how gears transmit the rotational effects of forces.		
17 th Sept. Thursday— (boys) 17 th Sept.	7	Learning Objective: Explain how levers and gears transmit the rotational effects of forces.	GC	Instruction will be given in the Google class room to complete the worksheet SP 9C.2
Thursday— (girls)	3	Learning outcome: Relate the ratio of radii of gears to speed and moment.		Weekend HW Exam style questions (sp8a, sp9a- c)

YEAR 11 G/H (IGCSE) – PHYSICS

WEEK 3 (13th September to 17th September)

Work sent to the students through Google classroom

Topic: Unit 2.9 Electric charge and 2.7 current and voltage in circuits

Lesson Objective: Explain electrostatic phenomena.

Explain the terms current and voltage

Resources: Text book, Worksheet file, interactive power point and online simulations.

Date	Lesson	Mode of	Learning objective and Success	
Dute	Lesson	teaching	Criteria	
14 th Sept Monday (boys &girls)	8	Zoom	 LO- Investigate how an insulator can be charged by friction, through the transfer of electrons. Learning outcome - Predict what happens to insulating materials when rubbed with another insulating material. Understand that atoms may lose or gain electrons to form charged particles called ions. Explain static electricity in terms of the movement of electrons by describing simple experiments to show the production and detection of electrostatic charges. Explain that when two electrically charged objects are brought together they exert a force on each other. 	Teacher uses power point presentation to explain the term static electricity.
15 th Sept			LO- Explain some uses of electrostatic charges.	
Tuesday	7	Zoom	Explain the potential dangers of electrostatic charges Learning outcome -	Teacher will use the ppt that contains the

(boys & girls)			 Discuss how static electricity can be useful in a few everyday situations such as spray painting and spraying insecticides. Identify the environmental and social effects of using static electricity. Explain the potential dangers of electrostatic charges, e.g. when fuelling aircraft and tankers. 	explanation of uses and potential dangers of electrostatic charges.
15 th Sept Tuesday (boys & girls)	8	GC	 LO- Solve questions by applying the concept of static electricity. Learning outcome- Recollect the knowledge about the concepts static electricity, it's uses and dangers. Use and apply that concepts by solving questions. 	Instructions will be given to solve the exam style questions. Worksheet will be posted in Google class room. H.W- worksheet file page no.31 and 32
16 th Sept Wednesd ay (boys & girls)	8	Zoom	 LO- Reinforce the concept of static electricity by discussing the questions and answers. Learning outcome- Recollect the knowledge about the concepts static electricity, it's uses and dangers. Reinforce the concept static electricity. 	Teacher uses power point presentation to discuss question answers. H.W- Chapter questions- text book(page no.92)
17 th Sept Thursday (boys & girls)	2	Zoom	 LO- Explain the terms conductors, insulators and electric current. Learning outcome- Recollect the knowledge about the terms conductors and insulators. Define the term current and use the equation of current. Define the term voltage and use the relation between energy transferred, charge and voltage. Describe how to measure current and voltage. Explain why metals are good conductors of electricity. 	Teacher uses power point presentation to explain the terms conductors, insulators and electric current.

H.W- worksheet file page no.31 and 32 (Tuesday)

- Chapter questions- text book(page no.92) (Wednesday)