

YEAR 11 A - F – PHYSICS (GCSE)

WEEK 4 (20th Sept to 24th Sept)

Work Sent to the students through Google classroom

Topic:– SP 9. Forces doing work and their effects, SP 11. Static electricity

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

Date	Lesson	Topic	Mode of Teaching	
21 st Sept Mon (Boys)	4	Learning Objective : Explain how levers and gears transmit the rotational effects of forces.	Zoom	Teacher uses power point presentation that contains interactive questions. HW- Answer text book questions Page: 137
20 th Sept. Sunday (Girls)	3	Learning outcome : Explain how levers are used to transfer a force. Recall what gears are Identify where they are found. Describe the working of a gear, Explain how gears transmit the rotational effects of forces.		
22 nd Sept. Tuesday – (boys)	1	Learning Objective: Apply the knowledge of levers and gears in everyday life Learning outcome : Work out the gear ratio. Apply the gear ratio to calculate	zoom	Instruction will be given to the students to complete the worksheet SP9C.2 in breakout section and discuss the answers
21 st Sept. Monday – (girls)	1	<ul style="list-style-type: none"> • Number of turns of driven gear • Speed of rotation of driven gear compared with driving gear. • Moment about the center of the gear 		

22 nd Sept. Tuesday – (boys)	2	<p>Learning Objective : Explain how an insulator can be charged by friction, through the transfer of electrons.</p> <p>Recall that like charges repel and unlike charges attract.</p> <p>Learning outcome Recall the charged particles found in an atom.</p>	Zoom	Teacher uses power point presentation that contains interactive questions
21 st Sept. Monday – (girls)	2	<p>Explain how rubbing an insulator transfers electrons.</p> <p>Explain why, when certain materials are rubbed together, they end up with opposite charges.</p> <p>Recall the rules of attraction and repulsion between charges.</p>		Complete the text book questions
23 rd Sept. Wednesday – (boys)	7	<p>Learning Objective : Explain common electrostatic phenomena in terms of movement of electrons, including</p> <p>a shocks from everyday objects b lightning c attraction by induction such as a charged balloon attracted to a wall and a charged comb picking up small pieces of paper.</p>	Zoom	Teacher uses power point presentation that contains interactive questions
23 rd Sept. Wednesday – (girls)	1	<p>Explain how earthing removes excess charge by movement of electrons</p> <p>Learning outcome Explain how attraction by induction occurs. Demonstrate how spark is produced Explain how lightning occurs and why we sometimes get shocks from everyday objects. Describe what earthing is Explain how earthing works.</p>		
24 th Sept. Thursday – (boys)	7	<p>Learning Objective : Explain some of the uses of electrostatic charges in everyday situations, including insecticide sprayers.</p>	GC	Instruction will be given in the Google class room to do the research work and complete the worksheet
24 th Sept. Thursday – (girls)	3	<p>Describe some of the dangers of sparking in everyday situations, including fuelling cars, and explain the use of earthing to prevent dangerous build-up of charge.</p>		

		Learning outcome : Explain how electrostatic sprayers work Describe some hazards caused by charged objects discharging, and how earthing can be used to reduce risks.		static electricity
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YEAR 11 G/H – PHYSICS (IGCSE)

WEEK 4 (20th Sept to 24th Sept)

Work sent to the students through Google classroom

Topic: Unit 2.7 current and voltage in circuits

Lesson Objective: Explain the terms current, voltage and electrical circuits.

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

Date	Lesson	Learning objective and Success Criteria	Mode of teaching	
21 st Sept Monday (boys & girls)	8	LO- Explain the terms conductors, insulators , electric current and voltage Learning outcome - <ul style="list-style-type: none"> • Recollect the knowledge about the terms conductors and insulators. • Define the terms current, voltage and use the equations of current and voltage 	Zoom	Teacher uses power point presentation to explain the terms conductors, insulators , electric current and voltage.

		<ul style="list-style-type: none"> Describe how to measure current and voltage. 		
22 nd Sept Tuesday (boys & girls)	7	<p>LO- Describe electrical circuits</p> <p>Learning outcome -</p> <ul style="list-style-type: none"> Identify the circuit symbols Differentiate open and closed circuit. Analyse parallel and series circuit Explain why a series and parallel circuit is more appropriate for particular applications, including domestic lighting. 	Zoom	Teacher will use the power point presentation that contains the description of electrical circuits.
22 nd Sept Tuesday (boys & girls)	8	<p>LO- Solve questions by applying the concept of current and voltage.</p> <p>Learning outcome-</p> <ul style="list-style-type: none"> Recollect the knowledge about the concepts current, voltage and electrical circuits Use and apply that concepts by solving questions. 	GC	Instructions will be given to solve the exam style questions. H.W- Text book questions (Page no.73 and 74)
23 rd Sept Wednesday (boys & girls)	8	<p>LO- Calculate current and voltage in series and parallel circuits</p> <p>Learning outcome-</p> <ul style="list-style-type: none"> Realize that current in series circuit is same and voltage in parallel circuit is same. Calculate current and voltage in series and parallel circuits 	Zoom	Teacher uses power point presentation to discuss how to calculate current and voltage in series and parallel circuit.
24 th Sept Thursday (boys & girls)	2	<p>LO- Explain ohm's law</p> <p>Learning outcome-</p> <ul style="list-style-type: none"> Define resistance. State and explain ohm's law. Use the equation of ohm's law. 	Zoom	Teacher uses power point presentation to explain ohm's law. H.W- Worksheet file (page no.22 and 25)

H.W- Text book questions (Page no.73 and 74)-Tuesday

Worksheet file (page no.22 and 25) - Thursday