

YEAR 11 GCSE (A- F) – PHYSICS

WEEK 2 (6th September to 10th September)

Work Sent to the students through Google classroom

Topic:– SP 8. Forces doing work and their effects

Resources: Text book, Worksheet, GCSE science free lesson video, power point.

Date	Lesson	Topic	Mode of Teaching	
7 th Sept Mon (Boys)	4	<p>Learning Objective : Identify the different ways that the energy of a system can be changed through work done by forces</p> <p>Recall and use the equation $W=Fx d$ and the units of each quantity.</p>	Zoom	Teacher uses power point presentation that contains interactive questions.
6 th Sept. Sunday (Girls)	3	<p>Learning outcome : Describe some ways in which the energy of a system can be changed.</p> <p>Measure the work done by a force. Apply the equation linking work done, force and distance.</p>		
8 th Sept. Tuesday – (boys)	1	<p>Learning Objective : Define power and use the equation $P= W/t$</p> <p>Learning outcome Explain what power means. Use the equation linking power, work done and time.</p>	Zoom	Teacher uses power point presentation that contains interactive questions Complete the text book questions Home work: SP 8a. 6
7 th Sept. Monday – (girls)	1	Explain why the power supplied to the motor is greater than the power calculated using measurements of the time taken to lift the masses a certain distance		
8 th Sept. Tuesday – (boys)	2	<p>Learning Objective : Describe, with examples, how objects can interact:</p> <ul style="list-style-type: none"> • at a distance without contact, • by contact • producing pairs of forces which can be represented as vectors. 	Zoom	Teacher uses power point presentation that contains interactive questions
7 th Sept. Monday – (girls)	2			

		<p>Learning outcome Describe the forces that can occur when objects are in contact with each other.</p> <p>Describe the effect of non contact forces on objects. Identify how pairs of forces occur when objects affect each other.</p> <p>Compare the diagram of electric and gravitational fields</p>		<p>Complete Worksheet SP9a.2 (main activity)</p> <p>Discuss the answers</p> <p>Homework : SP 9a .5</p>
9 th Sept. Wednesday – (boys)	7	<p>Learning Objective : Describe situations where forces can cause rotation. Recall and use the equation: moment of a force (N m) = force (N) × distance normal to the direction of the force (m). Recall and use the principle of moments in situations where rotational forces are in equilibrium</p> <p>Learning outcome Recall situations where forces can cause rotation. Apply the equation: moment of a force = force × distance normal to the direction of the force Evaluate the principle of moments to calculate forces and distances in equilibrium situations.</p>	Zoom	Teacher uses power point presentation that contains interactive questions
9 th Sept. Wednesday– (girls)	1	<p>Learning Objective : Recall and use the equation: moment of a force = force × distance normal to the direction of the force .</p> <p>Learning outcome Recall and use the principle of moments in situations where rotational forces are in equilibrium Apply the equation: moment of a force = force × distance normal to the direction of the force Evaluate the principle of moments to calculate forces and distances in equilibrium situations.</p>		
10 th Sept. Thursday– (boys)	7	<p>Learning Objective : Recall and use the equation: moment of a force = force × distance normal to the direction of the force .</p> <p>Learning outcome Recall and use the principle of moments in situations where rotational forces are in equilibrium Apply the equation: moment of a force = force × distance normal to the direction of the force Evaluate the principle of moments to calculate forces and distances in equilibrium situations.</p>	GC	Instruction will be given in the Google class room to complete the worksheet SP 9C .6 on moment
10 th Sept. Thursday– (girls)	3	<p>Learning Objective : Recall and use the equation: moment of a force = force × distance normal to the direction of the force .</p> <p>Learning outcome Recall and use the principle of moments in situations where rotational forces are in equilibrium Apply the equation: moment of a force = force × distance normal to the direction of the force Evaluate the principle of moments to calculate forces and distances in equilibrium situations.</p>		

YEAR 11 G/H (IGCSE) – PHYSICS

WEEK 2 (6th September to 10th September)

Work sent to the students through Google classroom

Topic: Unit 5.19 Solids, liquids and gases

Lesson Objective: Explain gas laws

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

Date	Lesson	Mode of teaching	Learning objective and Success Criteria	
7 th Sept Monday	8	Zoom	<p>LO- Explain the term absolute zero</p> <p>Learning outcome -</p> <ul style="list-style-type: none"> • Recognize absolute zero as the lowest possible temperature . • Realise that all movement stops at absolute zero • Explain why there is an absolute zero of temperature which is – 273 °C with the help of average kinetic energy versus temperature. • Convert between the Kelvin and Celsius scales • 	<p>Teacher uses power point presentation to explain the term absolute zero.</p> <p>H.W- Work sheet file page no. 68 and 70</p>
8 th Sept Tuesday	7	Zoom	<p>LO- Explain, for a fixed amount of gas, the qualitative relationship between pressure and Kelvin temperature at constant volume.</p> <p>Learning outcome -</p> <ul style="list-style-type: none"> • Describe, for a fixed amount of gas, the qualitative relationship between pressure and Kelvin temperature at constant volume. • Use the relationship between the pressure and Kelvin temperature of a fixed mass of gas at constant volume: $\frac{P1}{T1} = \frac{P2}{T2}$	<p>Teacher will use the ppt that contains the explanation of quantitative relationship between pressure and kelvin temperature.</p>
			LO- Explain, for a fixed amount of gas,	Teacher uses

8 th Sept Tuesday	8	Zoom	<p>the qualitative relationship between pressure and volume at constant temperature.</p> <p>Learning outcome-</p> <ul style="list-style-type: none"> Identify the inverse proportion between volume of a gas and its pressure when mass and temperature are kept constant. Sketch a graph of pressure of gas against its volume. Sketch a graph of pressure of gas against the reciprocal of its volume. Solve numerical problems involving Boyle's law ($P_1V_1 = P_2V_2$) 	<p>power point presentation that contains the explanation of Boyle's law.</p> <p>H.W- Worksheet file page no.69 and text book questions- end of unit questions qno.1 (d and e) –page no.193 and question no.5 – page no.195</p>
9 th Sept Wednesd ay	8	GC	<p>LO- Solve the questions by applying the concept of kinetic theory and gas laws.</p> <ul style="list-style-type: none"> Learning outcome- Recollect the knowledge about the concepts kinetic theory and gas laws. Use and apply that concepts by solving questions. 	<p>Instructions will be given in Google classroom.</p>
10 th Sept Thursday	2	Zoom	<p>LO- Reinforce the concepts specific heat capacity and Boyle's law.</p> <ul style="list-style-type: none"> Learning outcome- Recollect the knowledge about the concepts specific heat capacity and Boyle's law. Use and apply that concepts by solving questions. 	<p>Teacher will discuss the answers with the students.</p>