

YEAR 12 A/ B –PHYSICS

WEEK 4 (20th Sept to 24th Sept) 3 lessons for both batches

Work sent to the students through: Google classroom / Zoom Learning Platform

Topic: _Solid Materials

Resources: Student text book, worksheet file, interactive power point from Board works and Online animations

Date	Class	Lesson	Lesson objectives & Learning outcomes	Mode of teaching	
20 th Sept Sunday	12 A	8	Learning objective Test conducted to assess their knowledge on Fluid Mechanics	zoom	Teacher uses Google forms to conduct test
22 nd Sept Tuesday	12 B	6	Applying the principle of upthrust, floatation, laminar-turbulent flow and stokes law to calculate terminal velocity in fluids.		
21 st Sept Monday	12 A	1	Learning objectives: Understand Hooke's law and be able to make calculations using it	Zoom	Teacher uses interactive power point presentation and breakout sessions for students to collaborate and attain the objectives. HW VIRTUAL EXPT On Hooke's law Collect data and draw graph
24 th Sept Thursday	12 B	3	Learning Outcomes : Use $F = kx$ for numerical calculations Describe the behaviour of springs and wires in terms of force, extension, elastic limit, Hooke's law and the force constant (ie force per unit extension or compression) Plan an experiment to determine the force constant of a spring.		
21 st Sept	12 A	2	Learning objectives:		

Monday 24th Sept Thursday	12 B	4	<p>Identify the features of F-e graph</p> <p>Learning Outcomes : Identify the gradient of F-graph as force constant.</p> <p>Estimate as well as Calculate the elastic strain energy stored from a force–extension graph for a sample.</p> <p>Use the given worksheet to solve numerical problems.</p>	Zoom	Teacher uses interactive power point presentation and breakout sessions for students to collaborate and attain the objectives.
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YEAR 12 A/ B – PHYSICS

WEEK 4 (20th Sept to 24th Sept) - 3 lessons for both batches

Work sent to the students through: Whatsapp group / Google classroom / Zoom Learning Platform

Topic: 2.12 Motion graphs

Resources: Student text book, worksheet file, interactive power point from Board works and Online animations

Date	Class	Lesson	Lesson objectives & Learning outcomes	Mode of teaching	
20th Sept Sunday	12 B	6	<p>L.O – Use graphical methods to represent distance, displacement, speed, velocity and acceleration</p> <p>Learning outcomes-</p> <ul style="list-style-type: none"> • Recognise the shape of displacement-time graphs for objects which are: <ul style="list-style-type: none"> o stationary o moving with constant speed/velocity o accelerating. 	Zoom	Teacher uses power point presentation to explain the concepts and guide students to predict the motion of objects from the graphs. Revise how to calculate gradient.
22nd Sept Tuesday	12 A	4			

			<ul style="list-style-type: none"> Determine velocity using the gradient of a displacement-time graph 		
<p>20th Sept Sunday</p> <p>24th Sept Thursday</p>	<p>12 B</p> <p>12 A</p>	<p>7</p> <p>1</p>	<p>L.O – Draw and interpret velocity/ time and acceleration/ time graphs for uniformly accelerated motion.</p> <p>Learning outcomes-</p> <ul style="list-style-type: none"> Determine acceleration using gradient of velocity-time graph Determine displacement from the area under a velocity-time graph Recognise the shapes of velocity-time graph sections for objects which are: <ul style="list-style-type: none"> stationary moving with constant speed/velocity accelerating. 	Zoom	<p>Teacher uses interactive power point presentation to explain the concepts. Students must practise and appreciate that displacement-time and velocity-time graphs which look the same shape, represent completely different kinds of motion.</p>
<p>23rd Sept Wednesday</p> <p>24th Sept Thursday</p>	<p>12 B</p> <p>12 A</p>	<p>3</p> <p>2</p>	<p>L.O: Use the worksheet given to distinguish between distance-time graphs, displacement-time graphs, speed-time, velocity-time and acceleration-time graphs.</p> <p>Learning outcome: Students will be able to identify and use the physical quantities derived from the slopes and areas of the graphs, including cases of non-uniform acceleration and make calculations from these graphs.</p> <p>Home work will be assigned</p>	GC	<p>AFL – MCQ in google form</p> <p>Teacher will post the worksheet in the GC. Students will solve the worksheet and turn in by the end of the lesson</p> <p>Students discuss and solve textbook questions – Pg 20</p>

