

## **YEAR 13 – MATHEMATICS (Term 2Week 5)-2020-2021**

<b>Subject</b>	<b>Mathematics</b>
<b>Class/ Section</b>	<b>Year 13 – Batch A, B and C</b>
<b>Week</b>	<b>28<sup>th</sup> February to 4<sup>th</sup> March</b>
<b>Work send to students by</b>	<b>Google classroom</b>
<b>Total number of lessons per week</b>	<b>3</b>
<b>Units</b>	<b>-Chapter 8 book 2-Further Kinematics (Completion)</b>
<b>Lessons 1,2,3 –Live Zoom lesson along with face to face instruction for students present on a particular day</b>  <b>Work will be assigned in google classroom which will be matched to the students ability.</b>	<p>Learning objectives</p> <ul style="list-style-type: none"><li>- To apply vectors for displacement, velocity and acceleration when using vector equations of motion.</li><li>- To use vector methods while solving questions on projectiles .</li><li>- To use calculus to solve problems involving motion in one or two dimensions involving variable acceleration.</li></ul> <p><b><u>Intended Learning Outcomes</u></b></p> <ul style="list-style-type: none"><li>- Students will be able to split a projectile motion question given using vectors into its horizontal and vertical motion and use their knowledge of projectiles in solving them.</li><li>- Students will be able to apply differentiation and integration in solving questions involving variable acceleration in one dimension.</li><li>- Students will be able to apply differentiation and integration in solving questions involving variable acceleration in two dimensions given in <math>i</math> and <math>j</math> components.</li></ul>

**Tasks**

Complete the questions assigned from the Mechanics 2 text book on Further Kinematics involving vectors (EX 8E and Mixed Exercise) in the notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.

**Resources**

1. Edexcel Statistics& Mechanics book 2 textbook
2. <https://www.physicsandmathstutor.com>