



مدرسة القديسة مريم الكاثوليكية الثانوية - دبي  
ST. MARY'S CATHOLIC HIGH SCHOOL, DUBAI

**YEAR 13 – MATHEMATICS (Week 5)-2021-2022**

<b>Subject</b>	<b>Mathematics</b>
<b>Class/ Section</b>	<b>Year 13 – Batch A, B and C</b>
<b>Week</b>	<b>26<sup>th</sup> September to 30<sup>th</sup> September</b>
<b>Work send to students by</b>	<b>Google classroom</b>
<b>Total number of lessons per week</b>	<b>3</b>
<b>Unit/Topic</b>	<b>– Forces and Motion (Chapter 9) (Continuation)</b>
<b>Key Vocabulary</b>	<b>Resultant force, equation of motion, Newton's third law</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>	<b><u>Specific Learning objectives</u></b> -To use $F = ma$ to solve problems involving vector forces on particles -Apply $F = ma$ for connected particles and find the common acceleration.

<p><b>Tasks/Activities</b></p> <p><b>Assessment Criteria/ Essential questions</b></p> <p><b>Resources</b></p>	<p><b><u>Specific Intended Learning Outcomes</u></b></p> <ul style="list-style-type: none"><li>- Students will be able to use the concept of vectors to add forces and find resultant force magnitude and direction and apply <math>F=ma</math> In solving problems on dynamics.</li><li>- Students will be able to consider the equation of each particle when particles are connected through a string or placed on the floor of the lift to find common acceleration and force exerted by one particle on another.</li></ul> <p>The Teacher would involve the students in understanding a resultant force of a number of forces acting on a particle. The teacher would then model how to use <math>F= ma</math> in the context of connected particles and use this in solving problems on dynamics Complete the questions assigned from the Mechanics 1 text book Ex 10D-10E in the notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.</p> <p>Essential Question that are according to the Pearson edexcel specification</p> <p>Mixed Ex chapter 10 question 9, 10 and 11,.</p> <p>For example, assessment objectives expected by the board with respect to the above question is listed below.</p> <p>AO1: select and correctly carry out routine procedures AO2: use mathematical language and notation correctly AO3: translate problems in mathematical and non-mathematical contexts into mathematical processes.</p> <ol style="list-style-type: none"><li>1. Edexcel Statistics&amp; Mechanics book 1 textbook</li><li>2. Ppt on the topic</li><li>3. <a href="https://www.physicsandmathstutor.com">https://www.physicsandmathstutor.com</a></li></ol>
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