



# STUDY GUIDE

## Year 9 Mathematics

## TERM 2

### Assessment

A task  
Mental computation  
End of Term Test

7th week of Term  
Last week of Term  
Last week of Term

Chapter	Strand Sub-Strand	Content Description
<b>Proportion</b> Chapter 6 (2 weeks)	<b>Number and Algebra</b> Real Numbers	<ul style="list-style-type: none"><li>★ Solve problems involving direct proportion.</li><li>★ Explore the relationship between graphs and equations corresponding to simple rate problems.</li><li>★ Understand the difference between direct and inverse proportion, identifying these in real-life contexts and using these relationships to solve problems.</li></ul>
<b>Pythagoras' Theorem</b> Chapter 7 (2 weeks)	<b>Measurement &amp; Geometry</b> Pythagoras & trigonometry	<ul style="list-style-type: none"><li>★ Investigate Pythagoras' Theorem and its application to solving simple problems involving right-angled triangles.</li><li>★ Understand that Pythagoras' Theorem is a useful tool in determining unknown lengths in right-angled triangles and has widespread applications.</li><li>★ Recognise that right-angled triangle calculations may generate results that can be integral, fractional or irrational numbers known as surds.</li></ul>
<b>Geometry</b> Chapter 8 (2 weeks)	<b>Measurement and Geometry</b> Geometric Reasoning	<ul style="list-style-type: none"><li>★ Use the enlargement transformation to explain similarity and develop the conditions for triangles to be similar.</li><li>★ Solve problems using ratio and scale factors in similar figures.</li></ul>
<b>Statistics</b> Chapter 9 (2 weeks)	<b>Statistics and Probability</b> Data Representation and Interpretation	<ul style="list-style-type: none"><li>★ Identify everyday questions and issues involving at least one numerical and at least one categorical variable, and collect data directly from secondary sources.</li><li>★ Construct back-to-back stem-and-leaf plots and histograms and describe data, using terms including 'skewed', 'symmetric' and 'bi modal'.</li><li>★ Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread.</li></ul>
<b>Review</b> <b>Chapter 10</b> (2 weeks)	All of above	All of above