



# STUDY GUIDE

## Year 8 Mathematics

## TERM 3

### 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>Ratio &amp; Rate</b> Chapter 11 (2 weeks)	Number and Algebra <b>Real Numbers</b>	<ul style="list-style-type: none"> <li>★ Use percentages to solve problems, including those involving mark-ups, discounts, profit and loss and GST.</li> <li>★ Express profit and loss as a percentage of cost or selling price, compare the difference.</li> <li>★ Investigate the methods used in retail stores to express discounts.</li> <li>★ Solve a range of problems involving rates and ratios, with and without digital technologies</li> <li>★ Understand that rate and ratio problems can be solved using fractions or percentages and choosing the most efficient form to solve a particular problem.</li> <li>★ Calculate population rates in Australia and Asia and explain their difference.</li> </ul>
<b>Linear Equations</b> Chapter 12 (2 weeks)	Number and Algebra <b>Linear and Non-linear Relationships</b>	<ul style="list-style-type: none"> <li>★ Solve linear equations using algebraic and graphical techniques.</li> <li>★ Use variables to symbolise simple linear equations and use a variety of strategies to solve them.</li> <li>★ Solve equations using concrete materials, such as the balance model, and explain the need to do the same thing to each side of the equation.</li> </ul>
<b>Data</b> Chapter 13 (2 weeks)	Statistics and Probability <b>Data Representation and Interpretation</b>	<ul style="list-style-type: none"> <li>★ Explore the practicalities and implications of obtaining representative data.</li> <li>★ Understand that making decisions and drawing conclusions based on data may differ from those based on preferences and beliefs.</li> <li>★ Explore the variation of means and proportions in representative data.</li> <li>★ Investigate an international issue where media reporting and the use of data reflects different cultural or social emphases.</li> <li>★ Use sample properties to predict characteristics of the population.</li> </ul>
<b>Time</b> Chapter 14 (2 weeks)	Measurement & Geometry <b>Using Units of Measurement</b>	<ul style="list-style-type: none"> <li>★ Solve problems involving duration, including using 12-hour and 24-hour time within a single time zone.</li> <li>★ Calculate travel times given the start and finish time in 12-hour and 24-hour time including where the start and end time are in different time zones.</li> <li>★ Identify regions in Australia and countries in Asia that are in the same time zone.</li> </ul>
<b>Review</b> Chapter 15 (2 weeks)	All of above	All of above