



# STUDY GUIDE

## Year 7 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>Number 3</b> Chapter 11 (2 weeks)	Number and Algebra <b>Number &amp; Place Value</b>	<ul style="list-style-type: none"> <li>★ Investigate index notation.</li> <li>★ Represent whole numbers as products of powers of prime numbers.</li> <li>★ Define and compare prime and composite numbers.</li> <li>★ Express whole numbers as products of powers of prime factors (factor trees).</li> <li>★ Solve problems involving lowest common multiples and greatest common divisors (highest common factors).</li> <li>★ Investigate square numbers such as 25 and 36 and developing square-root notation.</li> <li>★ Investigate between which two whole numbers a square root lies.</li> </ul>
<b>Linear Equations</b> Chapter 12 (2 weeks)	Number and Algebra <b>Linear &amp; Non-linear Relationships</b>	<ul style="list-style-type: none"> <li>★ Solve equations (use the balance model and explain the need to do the same thing to each side of the equation).</li> <li>★ Use strategies such as backtracking and guess, check and improve to solve equations.</li> <li>★ Use substitution to check solutions.</li> <li>★ Solve real life problems.</li> <li>★ Create linear relationships to represent realistic situations.</li> </ul>
<b>Geometry</b> Chapter 13 (2 weeks)	Measurement & Geometry <b>Geometric Reasoning</b>	<ul style="list-style-type: none"> <li>★ Define and classifying angles such as acute, right, obtuse, straight, reflex and revolution, and pairs of angles such as complementary, supplementary, adjacent and vertically opposite.</li> <li>★ Construct parallel and perpendicular lines.</li> <li>★ Define and identify alternate, corresponding and allied angles and the relationships between them for a pair of parallel lines.</li> <li>★ Identify side and angle properties of scalene, isosceles, right-angled and obtuse-angled triangles.</li> <li>★ Describe squares, rectangles, rhombuses, parallelograms, kites and trapeziums.</li> <li>★ Use concrete materials and digital technologies to investigate the angle sum of a triangle and quadrilateral.</li> </ul>
<b>Data 1</b> Chapter 14 (2 weeks)	Statistics & Probability <b>Data Representation &amp; Interpretation</b>	<ul style="list-style-type: none"> <li>★ Calculate mean, median, mode and range for sets of data.</li> <li>★ Use ordered stem-and-leaf plots to record and display numerical data.</li> <li>★ Use mean and median to compare data sets and explain how outliers may affect the comparison.</li> <li>★ Locate mean, median and range on graphs and connect them to real life.</li> </ul>
<b>Review</b> Chapter 15 (2 weeks)	All of above	All of above