<table>
<thead>
<tr>
<th>Week</th>
<th>Content Statement</th>
<th>Elaborations and Teaching Points</th>
<th>Resources</th>
<th>Assessments</th>
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</thead>
<tbody>
<tr>
<td><strong>Term 1</strong></td>
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<tr>
<td>1 - 4</td>
<td><strong>Numbers and Powers</strong>&lt;br&gt;Patterns and Algebra&lt;br&gt;(ACMNA231)</td>
<td>• Index notation and index laws 1 and 2&lt;br&gt;• More index laws and the zero power&lt;br&gt;• Scientific notation&lt;br&gt;• Exponential growth and decay</td>
<td>6M p218&lt;br&gt;6N p219&lt;br&gt;6O p221 q1-6&lt;br&gt;6P p224 q1-3</td>
<td>Investigation 1&lt;br&gt;Week 3&lt;br&gt;(Number)</td>
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<tr>
<td>5 - 6</td>
<td><strong>Algebra</strong>&lt;br&gt;Patterns and Algebra&lt;br&gt;(ACMNA230)&lt;br&gt;(ACMNA231)&lt;br&gt;(ACMNA232)</td>
<td>• Algebraic expressions&lt;br&gt;• Simplifying algebraic expressions&lt;br&gt;• Expanding algebraic expressions&lt;br&gt;• Factorising simple algebraic expressions</td>
<td>6A p192&lt;br&gt;6C p197 q1-5</td>
<td>Test 1&lt;br&gt;Week 5</td>
</tr>
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<td>7 - 9</td>
<td><strong>Equations</strong>&lt;br&gt;Patterns and Algebra&lt;br&gt;(ACMNA234)&lt;br&gt;Linear relationships&lt;br&gt;(ACMNA235)&lt;br&gt;(ACMNA236)&lt;br&gt;(ACMNA240)</td>
<td>• Solving linear equations&lt;br&gt;• Using formulas</td>
<td>6H p206&lt;br&gt;6I p208&lt;br&gt;6J p211 q1-3&lt;br&gt;6L p215 q1-6</td>
<td>Test 2&lt;br&gt;Week 8</td>
</tr>
</tbody>
</table>
| Term 2 | Number and Algebra - Straight line graphs (ACMNA239) (ACMNA238) | Interpretation of straight line graphs  
| 1 – 3 | | Distance-time graphs  
| | | Plotting straight lines  
| | | Midpoint and length of segment  
| | | Exploring gradient  
| | | Rates from graphs  
| | | y=mx+c and special lines  
| | | Sketching with x-and y-intercepts  
| | | Linear modelling)  
| | | 7A p238 –7D p243  
| | | 7J p253  
| | Investigation 2  
| | | (Algebra)  
| | | Week 2  
| 4 - 5 | Number and Algebra – Simultaneous Equations (ACMNA237) | Solving simultaneous equations graphically  
| | | Solving simultaneous equations with substitution  
| | | Solving simultaneous equations with elimination  
| | | 7G p249  
| | | 7H p250  
| | | 7I p252  
| | Test 3  
| | | Week 4  
| 6 | EXAM REVISION  
| 7 | EXAM  
| | Measurement and Geometry - Pythagoras’ theorem and trigonometry (ACMMG245) | Reviewing Pythagoras’ theorem  
| 8 - 11 | | Finding the length of the shorter side  
| | | Applications of Pythagoras’ theorem  
| | | Trigonometric ratios  
| | | Finding side lengths  
| | | Finding more side lengths  
| | | Finding angles  
| | | Elevation angles  
| | | Bearings  
| | | 3J p97  
| | | 5A p152 – 5I p166  
| | | 5J p168  
| | | 5M p173  
| | Test 5  
| | | Week 8  

<table>
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<tr>
<th>Term 3</th>
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<tbody>
<tr>
<td><strong>Number and Algebra – Financial Maths (ACMNA229)</strong></td>
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<tr>
<td><strong>1 - 4</strong></td>
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</tbody>
</table>
| • Review of percentages  
• Application of percentages  
• Income (not Tax)  
• Budgeting  
• Simple interest and applications  
• Compound interest  
• Investments and loans  
• Comparing interest using technology |
| **2B p53**  
**2C p55**  
**2D p57**  
**2E p59**  
**2F p61**  
**2G p62**  
**2H p65** |
| **Test 6**  
**Week 5** |
| **Measurement and Geometry – Surface Area and Volume (ACMMG242)** |
| **5 – 7** |
| • Conversion of units  
• Perimeter  
• Area  
• Surface area of prisms  
• Surface area of a cylinder  
• Volume of solids (include composite solids) |
| **3A p80**  
**3B p82**  
**3E p87**  
**3F p89 q1**  
**3H p94 q1,4,5** |
| **Investigation 3 (Measurement)**  
**Week 7** |
| **Statistics and Probability – Statistics (ACMSP248)**  
(ACMSP249)  
(ACMSP250)  
(ACMSP251)  
(ACMSP252)  
(ACMSP253)** |
| **8 - 10** |
| • Sorting data: frequency tables, column graphs and histograms  
• Graphical forms: dot plots and stem-and-leaf plots  
• Range and measures of centre  
• Quartiles and outliers  
• Boxplots  
• Time series data  
• Bivariate data and scatter plots  
• Line of best fit |
| **10A p355**  
**10B p357**  
**10C p361 q2 &4**  
**10D p365**  
**10E p368**  
**10Gp372 bivariate data. No correlation coefficient** |
| **Test 7**  
**Week 10** |
<table>
<thead>
<tr>
<th>Week</th>
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<tbody>
<tr>
<td>1 - 2</td>
<td><strong>Statistics and Probability</strong>&lt;br&gt;(ACMSP246)&lt;br&gt;(ACMSP247)</td>
<td>• Review of probability&lt;br&gt;• Venn diagrams&lt;br&gt;• Two way tables&lt;br&gt;• Conditional probability&lt;br&gt;• Multiple events using tables&lt;br&gt;Using tree diagrams</td>
<td>Chapter 9 p318</td>
<td><strong>Investigation 4</strong>&lt;br&gt;(stats &amp; prob)&lt;br&gt;Week 2</td>
</tr>
<tr>
<td>3 - 4</td>
<td><strong>Measurement and Geometry</strong>&lt;br&gt;(ACMMG243)&lt;br&gt;(ACMMG244)</td>
<td>• Parallel lines&lt;br&gt;• Triangles&lt;br&gt;• Quadrilaterals&lt;br&gt;• Polygons&lt;br&gt;• Congruent triangles&lt;br&gt;• Similar triangles&lt;br&gt;• Applying similar triangles&lt;br&gt;• Applications of similarity in measurement</td>
<td>4A p112&lt;br&gt;4B p116&lt;br&gt;4E p127&lt;br&gt;4F p131 q1, q3&lt;br&gt;4G p136 q 1 - 4</td>
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<tr>
<td>5</td>
<td>EXAM REVISION</td>
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<td>EXAM</td>
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<tr>
<td>7- 10</td>
<td></td>
<td>• Preparation for year 11&lt;br&gt;• Networks</td>
<td>4H p138</td>
<td>Other texts</td>
</tr>
</tbody>
</table>
**Resources**
Text Books for this Year Group:

- **Maths for WA 3** (used only in class and provided by the school)

Additional Resources include but are not restricted to:

Terry Dwyer Mathematics 10

All students will be issued with a log-on for [www.mymathsonline.com.au](http://www.mymathsonline.com.au)
At times this interactive website will be accessed in class, and all students will have free access to the site from home.

### Year 10 Assessments

<table>
<thead>
<tr>
<th>Term</th>
<th>Assessment</th>
<th>Weighting</th>
<th>When</th>
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<td>Exam</td>
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<td>Week 6</td>
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This programme and assessment outline may be subject to minor changes as the year progresses.