

The logo for iMaths is displayed on a silver, brushed-metal rectangular plate with four screws at the corners. The letter 'i' is black with a red dot above it. The letters 'M', 'a', 't', 'h', and 's' are black and in a bold, sans-serif font. A small 'TM' trademark symbol is located at the top right of the 's'.

**iMaths™**

iMaths 7 Topics and  
Australian Curriculum Match



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# iMaths 7 Australian Curriculum Match

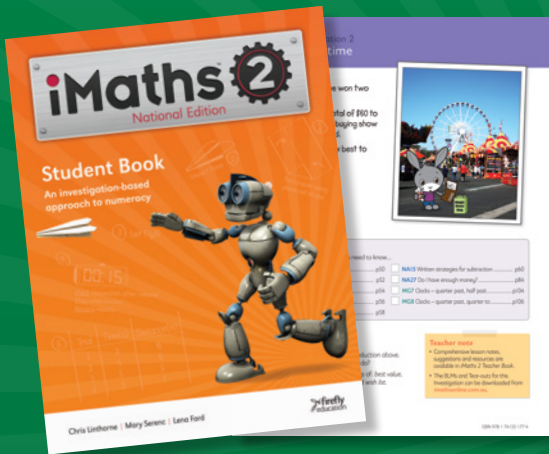
The tables on these pages list the three content strands, their associated sub-strands and content descriptions from the Australian Curriculum, and the Topics from *iMaths 7 Student Book* that match these descriptions.

Strand	Sub-strand	Student Book Topics	
<b>Number and Algebra</b>	<b>Number and place value</b> Investigate index notation and represent whole numbers as products of powers of prime numbers. (ACMNA149)	<b>NA17</b> Index notation <b>NA16</b> Factor trees	
	Investigate and use square roots of perfect square numbers. (ACMNA150)	<b>NA18</b> Square roots	
	Apply the associative, commutative and distributive laws to aid mental and written computation. (ACMNA151)	<b>NA19</b> The distributive law	
	Compare, order, add and subtract integers. (ACMNA280)	<b>NA1</b> Positive and negative integers <b>NA2</b> Add and subtract integers	
	<b>Real numbers</b> Compare fractions using equivalence. Locate and represent fractions and mixed numerals on a number line. (ACMNA152)	<b>NA22</b> Equivalent fractions <b>NA23</b> Improper fractions	
	Solve problems involving addition and subtraction of fractions, including those with unrelated denominators. (ACMNA153)	<b>NA24</b> Fraction addition <b>NA25</b> Fraction subtraction	
	Multiply and divide fractions and decimals using efficient written strategies and digital technologies. (ACMNA154)	<b>NA3</b> Decimal multiplication <b>NA4</b> Decimal division <b>NA5</b> Decimals – the four operations	<b>NA26</b> Multiply fractions <b>NA27</b> Divide fractions
	Express one quantity as a fraction of another, with and without the use of digital technologies. (ACMNA155)	<b>NA10</b> Expressing percentages	
	Round decimals to a specified number of decimal places. (ACMNA156)	<b>NA6</b> Rounding decimals	
	Connect fractions, decimals and percentages and carry out simple conversions. (ACMNA157)	<b>NA28</b> Renaming percentages as fractions	
	Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies. (ACMNA158)	<b>NA10</b> Expressing percentages	
	Recognise and solve problems involving simple ratios. (ACMNA173)	<b>NA7</b> Ratio and proportion <b>NA8</b> Rates	
	<b>Money and financial mathematics</b> Investigate and calculate ‘best buys’, with and without digital technologies. (ACMNA174)	<b>NA9</b> Best buys	
	<b>Patterns and algebra</b> Introduce the concept of variables as a way of representing numbers using letters. (ACMNA175)	<b>NA13</b> Patterns and general rules <b>NA14</b> General trends <b>NA15</b> Extrapolation	

Strand	Sub-strand	Student Book Topics
<b>Number and Algebra</b>	Create algebraic expressions and evaluate them by substituting a given value for each variable. (ACMNA176)	<b>NA13</b> Patterns and general rules <b>NA14</b> General trends <b>NA15</b> Extrapolation <b>MG12</b> Area of combination shapes <b>MG3</b> Area of composite rectangles <b>MG4</b> Volume of rectangular prisms <b>MG11</b> Area of triangles
	Extend and apply the laws and properties of arithmetic to algebraic terms and expressions. (ACMNA177)	<b>NA20</b> Order of operations
	<b>Linear and non-linear relationships</b> Given coordinates, plot points on the Cartesian plane, and find coordinates for a given point. (ACMNA178)	<b>NA11</b> Line Graphs <b>NA12</b> Ordered pairs <b>NA15</b> Extrapolation <b>MG10</b> Transformations with coordinates
	Solve simple linear equations. (ACMNA179)	<b>NA21</b> Backtracking <b>NA29</b> Balancing equations <b>NA30</b> Equations solve problems
	Investigate, interpret and analyse graphs from authentic data. (ACMNA180)	<b>NA11</b> Line graphs
<b>Measurement and Geometry</b>	<b>Using units of measurement</b> Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving. (ACMMG159)	<b>MG11</b> Area of triangles <b>MG12</b> Area of combination shapes
	Calculate volumes of rectangular prisms. (ACMMG160)	<b>MG4</b> Volume of rectangular prisms <b>MG5</b> Volume of composite prisms
	<b>Shape</b> Draw different views of prisms and solids formed from combinations of prisms. (ACMMG161)	<b>MG6</b> Views of 3D objects <b>MG7</b> Face, edge, vertex
	<b>Location and transformation</b> Describe translations, reflections in an axis, and rotations of multiples of 90° on the Cartesian plane using coordinates. Identify line and rotational symmetries. (ACMMG181)	<b>MG9</b> Reflection, translation, rotation <b>MG10</b> Transformations with coordinates
	<b>Geometric reasoning</b> Identify corresponding, alternate and co-interior angles when two parallel straight lines are crossed by a transversal. (ACMMG163)	<b>MG2</b> Angles and parallel lines
	Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning. (ACMMG164)	<b>MG2</b> Angles and parallel lines
	Demonstrate that the angle sum of a triangle is 180° and use this to find the angle sum of a quadrilateral. (ACMMG166)	<b>MG1</b> Angle sum of 2D shapes
	Classify triangles according to their side and angle properties and describe quadrilaterals. (ACMMG165)	<b>MG8</b> Classify quadrilaterals <b>MG13</b> Classify triangles

Strand	Sub-strand	Student Book Topics
Statistics and Probability	<b>Chance</b> Construct sample spaces for single-step experiments with equally likely outcomes. (ACMSP167)	<b>SP8</b> Theoretical probability
	Assign probabilities to the outcomes of events and determine probabilities for events. (ACMSP168)	<b>SP8</b> Theoretical probability <b>SP9</b> Experimental probability
	<b>Data representation and interpretation</b> Identify and investigate issues involving numeral data collected from primary and secondary sources. (ACMSP169)	<b>SP1</b> Discrete and continuous data <b>SP4</b> Histograms
	Construct and compare a range of data displays including stem-and-leaf plots and dot plots. (ACMSP170)	<b>SP2</b> Dot plots <b>SP3</b> Stem and leaf plots
	Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data. (ACMSP171)	<b>SP5</b> Average – the mean <b>SP6</b> Mean, median and mode
	Describe and interpret data displays and the relationship between the median and mean. (ACMSP172)	<b>SP7</b> Mean vs median

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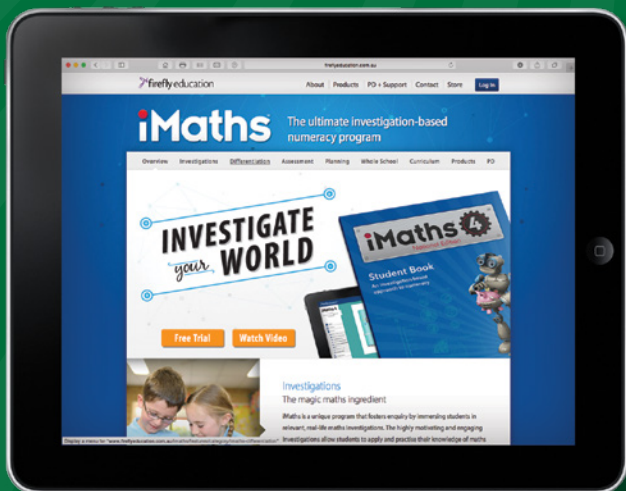


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