

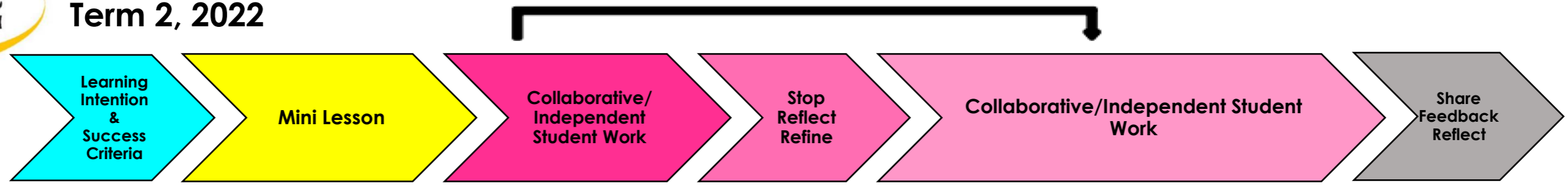


# Maths Term Overview

## Term 2, 2022

Based on research from the Workshop Model and Gradual Release of Responsibility

- Atwell, N. (1987). *In the Middle: Writing, Reading and Learning with Adolescents*, second edition. Portsmouth: Heinemann. Calkins, L. (2010). *A Guide to the Reading Workshop*. Portsmouth: Heinemann.
- Tovani, C. (2011). *So What Do They Really Know?* Portland: Stenhouse.
- Fisher, D. and Frey, N. (2014). *Better Learning Through Structured Teaching: A Framework for the Gradual Release of Responsibility, 2nd Edition*. 2nd ed. Alexandria: ASCD.



Foundat ion	<p>The proficiency strands <b>Understanding, Fluency, Problem Solving and Reasoning</b> are an integral part of the Maths curriculum across the three content strands: Number &amp; Algebra, Measurement &amp; Geometry and Statistics &amp; Probability</p> <p>The four processes will continue to be embedded across each term.</p>	<h3>Number &amp; Algebra</h3>	<h3>Measurement &amp; Geometry</h3>	<h3>Statistics &amp; Probability</h3>
		<ul style="list-style-type: none"> <li>• Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point <a href="#">(VCMNA069)</a></li> <li>• Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond <a href="#">(VCMNA070)</a></li> <li>• Subitise small collections of objects <a href="#">(VCMNA071)</a></li> <li>• Compare, order and make correspondences between collections, initially to 20, and explain reasoning <a href="#">(VCMNA072)</a></li> </ul>	<ul style="list-style-type: none"> <li>• Compare and order the duration of events using the everyday language of time <a href="#">(VCMMG079)</a></li> <li>• Connect days of the week to familiar events and actions <a href="#">(VCMMG080)</a></li> <li>• Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment <a href="#">(VCMMG081)</a></li> <li>• Describe position and movement <a href="#">(VCMMG082)</a></li> </ul>	<ul style="list-style-type: none"> <li>• Answer yes/no questions to collect information <a href="#">(VCMSP083)</a></li> <li>• Organise answers to yes/no questions into simple data displays using objects and drawings <a href="#">(VCMSP084)</a></li> <li>• Interpret simple data displays about yes/no questions <a href="#">(VCMSP085)</a></li> </ul>
Year 1		<ul style="list-style-type: none"> <li>• Develop confidence with number sequences to and from 100 by ones from any starting point. Skip count by twos, fives and tens starting from zero <a href="#">(VCMNA086)</a></li> <li>• Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line <a href="#">(VCMNA087)</a></li> <li>• Count collections to 100 by partitioning numbers using place value <a href="#">(VCMNA088)</a></li> <li>• Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts <a href="#">(VCMNA089)</a></li> <li>• Recognise, describe and order Australian coins according to their value <a href="#">(VCMNA092)</a></li> <li>• Investigate and describe number patterns formed by skip counting and patterns with objects <a href="#">(VCMNA093)</a></li> <li>• Recognise the importance of repetition of a process in solving problems <a href="#">(VCMNA094)</a></li> </ul>	<ul style="list-style-type: none"> <li>• Tell time to the half-hour <a href="#">(VCMMG096)</a></li> <li>• Describe duration using months, weeks, days and hours <a href="#">(VCMMG097)</a></li> <li>• Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features <a href="#">(VCMMG098)</a></li> <li>• Give and follow directions to familiar locations <a href="#">(VCMMG099)</a></li> </ul>	<ul style="list-style-type: none"> <li>• Choose simple questions and gather responses <a href="#">(VCMSP101)</a></li> <li>• Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays <a href="#">(VCMSP102)</a></li> <li>• Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen' <a href="#">(VCMSP100)</a></li> </ul>

Year 2		<ul style="list-style-type: none"> <li>Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences <a href="#">(VCMNA103)</a></li> <li>Recognise, model, represent and order numbers to at least 1000 <a href="#">(VCMNA104)</a></li> <li>Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting <a href="#">(VCMNA105)</a></li> <li>Explore the connection between addition and subtraction <a href="#">(VCMNA106)</a></li> <li>Solve simple addition and subtraction problems using a range of efficient mental and written strategies <a href="#">(VCMNA107)</a></li> <li>Count and order small collections of Australian coins and notes according to their value <a href="#">(VCMNA111)</a></li> <li>Describe patterns with numbers and identify missing elements <a href="#">(VCMNA112)</a></li> <li>Solve problems by using number sentences for addition or subtraction <a href="#">(VCMNA113)</a></li> </ul>	<ul style="list-style-type: none"> <li>Interpret simple maps of familiar locations and identify the relative positions of key features <a href="#">(VCMMG122)</a></li> <li>Investigate the effect of one-step slides and flips with and without digital technologies <a href="#">(VCMMG123)</a></li> <li>Identify and describe half and quarter turns <a href="#">(VCMMG124)</a></li> <li>Tell time to the quarter-hour, using the language of 'past' and 'to' <a href="#">(VCMMG117)</a></li> </ul>	<ul style="list-style-type: none"> <li>Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' <a href="#">(VCMS125)</a></li> <li>Identify a question of interest based on one categorical variable. Gather data relevant to the question <a href="#">(VCMS126)</a></li> <li>Collect, check and classify data <a href="#">(VCMS127)</a></li> <li>Create displays of data using lists, table and picture graphs and interpret them <a href="#">(VCMS128)</a></li> </ul>
Year 3		<ul style="list-style-type: none"> <li>Recognise and explain the connection between addition and subtraction <a href="#">(VCMNA132)</a></li> <li>Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation <a href="#">(VCMNA133)</a></li> <li>Recall multiplication facts of two, three, five and ten and related division facts <a href="#">(VCMNA134)</a></li> <li>Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies <a href="#">(VCMNA135)</a></li> <li>Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents <a href="#">(VCMNA137)</a></li> </ul>	<p>Tell time to the minute and investigate the relationship between units of time <a href="#">(VCMMG141)</a></p> <p>Create and interpret simple grid maps to show position and pathways <a href="#">(VCMMG143)</a></p> <p>Identify symmetry in the environment <a href="#">(VCMMG144)</a></p> <p>Identify and describe slides and turns found in the natural and built environment <a href="#">(VCMMG145)</a></p> <p>Identify angles as measures of turn and compare angle sizes in everyday situations <a href="#">(VCMMG146)</a></p>	<ul style="list-style-type: none"> <li>Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording <a href="#">(VCMS148)</a></li> <li>Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies <a href="#">(VCMS149)</a></li> <li>Interpret and compare data displays <a href="#">(VCMS150)</a></li> </ul>
Year 4		<ul style="list-style-type: none"> <li>Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 <a href="#">(VCMNA154)</a></li> <li>Recall multiplication facts up to <math>10 \times 10</math> and related division facts <a href="#">(VCMNA155)</a></li> <li>Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder <a href="#">(VCMNA156)</a></li> <li>Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies <a href="#">(VCMNA160)</a></li> <li>Use equivalent number sentences involving addition and subtraction to find unknown quantities <a href="#">(VCMNA163)</a></li> <li>Solve word problems by using number sentences involving multiplication or division where there is no remainder <a href="#">(VCMNA162)</a></li> <li>Explore and describe number patterns resulting from performing multiplication <a href="#">(VCMNA161)</a></li> </ul>	<p>Use am and pm notation and solve simple time problems <a href="#">(VCMMG168)</a></p> <p>Convert between units of time <a href="#">(VCMMG167)</a></p> <p>Use simple scales, legends and directions to interpret information contained in basic maps <a href="#">(VCMMG172)</a></p> <p>Create symmetrical patterns, pictures and shapes with and without digital technologies <a href="#">(VCMMG173)</a></p> <p>Compare angles and classify them as equal to, greater than or less than a right angle <a href="#">(VCMMG174)</a></p>	<ul style="list-style-type: none"> <li>Select and trial methods for data collection, including survey questions and recording sheets <a href="#">(VCMS178)</a></li> <li>Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values <a href="#">(VCMS179)</a></li> <li>Evaluate the effectiveness of different displays in illustrating data features including variability <a href="#">(VCMS180)</a></li> </ul>
Year 5		<ul style="list-style-type: none"> <li>Compare and order common unit fractions and locate and represent them on a number line <a href="#">(VCMNA187)</a></li> <li>Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator <a href="#">(VCMNA188)</a></li> <li>Recognise that the place value system can be extended beyond hundredths <a href="#">(VCMNA189)</a></li> <li>Use efficient mental and written strategies and apply appropriate digital technologies to solve problems <a href="#">(VCMNA185)</a></li> </ul>	<ul style="list-style-type: none"> <li>Choose appropriate units of measurement for length, area, volume, capacity and mass <a href="#">(VCMMG195)</a></li> <li>Calculate the perimeter and area of rectangles and the volume and capacity of prisms using familiar metric units <a href="#">(VCMMG196)</a></li> <li>Connect three-dimensional objects with their nets and other two-dimensional representations <a href="#">(VCMMG198)</a></li> </ul>	<ul style="list-style-type: none"> <li>List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions <a href="#">(VCMS203)</a></li> </ul>

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| Year 6 | <ul style="list-style-type: none"><li>• Identify and describe properties of prime, composite, square and triangular numbers (<a href="#">VCMNA208</a>)</li><li>• Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers and make estimates for these computations (<a href="#">VCMNA209</a>)</li><li>• Compare fractions with related denominators and locate and represent them on a number line (<a href="#">VCMNA211</a>)</li><li>• Solve problems involving addition and subtraction of fractions with the same or related denominators (<a href="#">VCMNA212</a>)</li><li>• Find a simple fraction of a quantity where the result is a whole number, with and without digital technologies (<a href="#">VCMNA213</a>)</li><li>• Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers (<a href="#">VCMNA214</a>)</li><li>• Multiply decimals by whole numbers and perform divisions by non-zero whole numbers where the results are terminating decimals, with and without digital technologies (<a href="#">VCMNA215</a>)</li><li>• Multiply and divide decimals by powers of 10 (<a href="#">VCMNA216</a>)</li><li>• Make connections between equivalent fractions, decimals and percentages (<a href="#">VCMNA217</a>)</li></ul> | <ul style="list-style-type: none"><li>• Connect decimal representations to the metric system (<a href="#">VCMMG222</a>)</li><li>• Convert between common metric units of length, mass and capacity (<a href="#">VCMMG223</a>)</li><li>• Solve problems involving the comparison of lengths and areas using appropriate units (<a href="#">VCMMG224</a>)</li><li>• Connect volume and capacity and their units of measurement (<a href="#">VCMMG225</a>)</li><li>• Interpret and use timetables (<a href="#">VCMMG226</a>)</li><li>• Measure, calculate and compare elapsed time (<a href="#">VCMMG227</a>)</li><li>• Construct simple prisms and pyramids (<a href="#">VCMMG228</a>)</li></ul> |  |
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\*\*Progression may differ slightly