Mathseeds Lessons and the Victorian Curriculum

FOUNDATION

				Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
Strand	**Substrands**	**Content**	**Code**	**Online Lesson, Printable Resources, & Problem Solving Tasks**	**End-of-lesson Quiz**	**Critical Thinking and Problem Solving Interactives**	**Driving Tests (DT) Mental Minute (MM)**	**Printable Achievement Standards Assessment**
Number and Algebra	Number and Place Value	Establish understanding of counting by naming numbers in sequences, initially to and from 20, moving from any starting point. Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond. Subitise small collections of objects. Compare, order and make correspondences between collections, initially to 20.	VCMNA069 VCMNA070 VCMNA071 VCMNA072	1, 2, 3, 5, 7, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 22, 25, 28, 31, 33, 41, 43, 45, 46, 48, 50		12, 19, 41	**DT** Early Number 1-25	**Kindergarten Number** Tests 1-6
		Represent practical situations to model addition and subtraction	VCMNA073	24, 30, 32, 34, 36, 40, 47, 49		30, 34, 36, 40, 43, 47	**DT** Early Operations 1-7, 9-20, 22-25 **MM** Addition Sprints **MM** Subtraction Sprints	**Kindergarten Operations** Tests 1-4
		Represent practical situations to model sharing	VCMNA074				**DT** Early Operations 8, 21	
	Patterns and Algebra	Sort and classify familiar objects and explain the basis for these classifications	VCMNA076	15, 23				
		Copy, continue and create patterns with objects and drawings	VCMNA076	8, 27, 37		6, 8, 15, 23, 27, 31, 37, 38, 40, 46	**DT** Early Patterns 1-9	**Kindergarten Number** Test 6
Measurement and Geometry	Using units of measurement	Use direct and indirect comparisons to decide which is longer, and explain reasoning in everyday language	VCMMG078	26			**DT** Early Measurement 5, 6, 9, 10	**Kindergarten Measurement** Tests 1 & 2
		Use direct and indirect comparisons to decide which is heavier, and explain reasoning in everyday language	VCMMG078	29			**DT** Early Measurement 7, 8, 11, 12	**Kindergarten Measurement** Test 4
		Use direct and indirect comparisons to decide which holds more, and explain reasoning in everyday language	VCMMG078	38			**DT** Early Measurement 15, 16, 20	**Kindergarten Measurement** Test 5
		Compare and order the duration of events using the everyday language of time; Connect days of the week to familiar events and actions	VCMMG079 VCMMG080	39, 42			**DT** Early Measurement 1, 4, 13, 14, 17-19	**Kindergarten Measurement** Tests 6 & 7
	Shape	Sort, describe and name familiar two-dimensional shapes in the environment	VCMMG081	4, 6, 9, 15, 23		6, 15, 23	**DT** Early Geometry 1-8, 12, 19, 20	**Kindergarten Geometry** Tests 1, 3 & 4
		Sort, describe and name familiar three-dimensional objects in the environment	VCMMG081	35, 44			**DT** Early Geometry 15-23	**Kindergarten Geometry** Tests 2 & 3
	Location and Transformation	Describe position and movement	VCMMG082				**DT** Early Geometry 9-11, 13, 14	**Kindergarten Geometry** Tests 5 & 6
Statistics and Probability	Data representation and interpretation	Answer yes/no questions to collect information. Organise answers to yes/no questions into simple data displays using objects and drawings. Interpret simple data displays about yes/no questions	VCMSP083 VCMSP084 VCMSP085				**DT** Early Data 1-10	**Kindergarten Data** Tests 1 & 2

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YEAR 1

Strand	Substrands	Content	Code	Mathseeds Lesson #			Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
				Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number and Algebra	Number and Place Value	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. Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line. Count collections to 100 by partitioning numbers using place value	VCMNA086 VCMNA087 VCMNA088	56, 60, 63, 67, 71, 75, 77, 79, 81, 86, 88, 90		60, 63, 67, 77, 79, 81, 88, 95, 98	**DT** Year 1 Number 1-24	**Year 1 Number and Algebra: Whole Numbers** Tests 1-9 **Year 1 Number and Algebra: Place Valu**e Tests 1-6
		Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts	VCMNA089	51, 53, 58, 65, 68, 72, 76, 85, 88, 91, 93, 95, 96, 98, 100		51, 53, 56, 65, 67, 68, 75, 76, 82, 83, 85, 88, 91, 93, 95, 96, 100	**DT** Year 1 Operations 1-20 **MM** Addition Sprints **MM** Subtraction Sprints	**Year 1 Number and Algebra: Operations** Tests 1-6
		Represent practical situations that model sharing	VCMNA090	71, 74		71, 74		
	Fractions and Decimals	Recognise and describe one-half as one of two equal parts of a whole	VCMNA091	61, 66			**DT** Year 1 Patterns and Fractions 3, 5, 6, 11, 13, 14	**Year 1 Number and Algebra: Fractions and Money** Tests 1-3
	Money and Financial Mathematics	Recognise, describe and order Australian coins according to their value	VCMNA092	64, 83, 92			**DT** Year 1 Measurement 3, 5, 6, 7, 12	**Year 1 Number and Algebra: Fractions and Money** Tests 4-8
	Patterns and Algebra	Investigate and describe number patterns formed by skip counting and patterns with objects	VCMNA093	77, 79, 90		52, 57, 62, 63, 72, 78, 82, 87, 93, 94	**DT** Year 1 Patterns and Fractions 1, 2, 4, 7-10, 12	**Year 1 Number and Algebra: Patterns** Tests 1-7
Measurement and Geometry	Using units of measurement	Measure and compare the lengths of pairs of objects using uniform informal units	VCMMG095	55, 84			**DT** Year 1 Measurement 2, 4, 13, 14	**Year 1 Measurement: Length and Capacity** Tests 1-5
		Measure and compare the masses of pairs of objects using uniform informal units	VCMMG095	73				
		Measure and compare the capacities of pairs of objects using uniform informal units	VCMMG095	89			**DT** Year 1 Measurement 11, 17-19	**Year 1 Measurement: Length and Capacity** Tests 6 & 7
		Tell time to the half-hour. Describe duration using months, weeks, days and hours.	VCMMG096 VCMMG097	54, 70, 87		87	**DT** Year 1 Measurement 1, 8-10, 15, 16	**Year 1 Measurement: Time** Tests 1-6
	Shape	Recognise and classify familiar two-dimensional shapes using obvious features	VCMMG098	52, 69		69	**DT** Year 1 Geometry 1-3, 6, 9, 10, 13	**Year 1 Geometry: Shape** Tests 1 & 2, 5 & 6
		Recognise and classify familiar three-dimensional objects using obvious features	VCMMG098	62, 99			**DT** Year 1 Geometry 7, 8, 17-19	**Year 1 Geometry: Shape** Tests 3-6
	Location and Transformation	Give and follow directions to familiar locations	VCMMG099	57, 78, 94			**DT** Year 1 Geometry 4, 5, 11, 12, 14-16	**Year 1 Geometry: Shape** Tests 7 & 8
Statistics and Probability	Chance	Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'	VCMSP100	82			**DT** Year 1 Data 5, 7, 8, 11	**Year 1 Statistics: Data** Test 6
	Data representation and interpretation	Choose simple questions and gather responses. Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays	VCMSP101 VCMSP102	80, 97			**DT** Year 1 Data 1-4, 6, 9, 10, 12-16	**Year 1 Statistics: Data** Tests 1-5

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YEAR 2

Strand	Substrands	Content	Code	Mathseeds Lesson #		Additional Mathseeds Resources	
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency	Assessment
				Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Driving Tests (DT) Mental Minute (MM)	Printable Achievement Standards Assessment
Number and Algebra	Number and Place Value	Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences	VCMNA103	117		117, 120, 133	**DT** Year 2 Patterns and Fractions 1-4, 6-10, 13	**Year 2 Number and Algebra: Number Patterns** Tests 1-8
		Recognise, model, represent and order numbers to at least 1000. Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting	VCMNA104 VCMNA105	101, 105, 106, 108, 117, 122, 129, 133, 137, 140		101, 105, 106	**DT** Year 2 Number 1-24	**Year 2 Number and Algebra: Numbers to 1000** Tests 1-7 **Year 2 Number and Algebra: Fractions and Money** Tests 5-7
		Explore the connection between addition and subtraction	VCMNA106	142, 150		142	**DT** Year 2 Operations 20, 26	**Year 2 Number and Algebra: Addition and Subtraction** Test 4
		Solve simple addition and subtraction problems using a range of efficient mental and written strategies	VCMNA107	103, 108, 110, 118, 120, 124, 125, 128, 131, 134, 139, 142, 144, 146, 147, 148, 150		105, 110, 113, 118, 120, 124, 125, 128, 130, 131, 134, 135, 137, 139, 140, 141, 142, 143, 144, 146, 147, 148, 149, 150	**DT** Year 2 Operations 1-5, 7, 13-18, 20-28 **MM** Addition Sprints **MM** Subtraction Sprints	**Year 2 Number and Algebra: Addition and Subtraction** Tests 1-3, 5-8
		Recognise and represent multiplication as repeated addition, groups and arrays	VCMNA108	111, 113, 115, 130		113, 130	**DT** Year 2 Operations 8-12, 19 **MM** Multiplication Sprints	**Year 2 Number and Algebra: Equal Groups** Tests 3-5
		Recognise and represent division as grouping into equal sets and solve simple problems using these representations	VCMNA109	136		136	**DT** Year 2 Operations 6 **MM** Division Sprints	**Year 2 Number and Algebra: Equal Groups** Tests 1, 2
	Fractions and Decimals	Recognise and interpret common uses of halves, quarters and eighths of shapes and collections	VCMNA110	132, 138			**DT** Year 2 Patterns and Fractions 5, 11, 12, 14-17	**Year 2 Number and Algebra: Fractions and Money** Tests 1-4
	Money and Financial Mathematics	Count and order small collections of Australian coins and notes according to their value	VCMNA111	125, 147		124, 125, 128, 131, 134, 139, 144, 146, 147, 148, 150	**DT** Year 2 Measurement 9, 11, 12, 23, 24	**Year 2 Number and Algebra: Fractions and Money** Test 8
	Patterns and Algebra	Describe patterns with numbers and identify missing elements	VCMNA112	117, 131, 133, 137		102, 117, 120, 132, 133, 137, 142	**DT** Year 2 Patterns and Fractions 1-4, 6-10, 13	**Year 2 Number and Algebra: Number Patterns Tests** 1-8
		Solve problems by using number sentences for addition or subtraction	VCMNA113	118, 120, 131, 139				**Year 2 Number and Algebra: Addition and Subtraction** Test 8
		Apply repetition in arithmetic operations, including multiplication as repeated addition and division as repeated subtraction	VCMNA114	111, 113, 115		118, 124, 134, 137, 139, 143, 148, 149		**Year 2 Number and Algebra: Equal Groups** Tests 1-5
Measurement and Geometry	Using units of measurement	Compare and order several shapes and objects based on length using appropriate uniform informal units	VCMMG115	104, 126, 141, 143		141	**DT** Year 2 Measurement 6, 13-15, 21, 22	**Year 2 Measurement: Informal Units** Tests 1, 2 & 8
		Compare and order several shapes and objects based on area using appropriate uniform informal units	VCMMG115	112, 149			**DT** Year 2 Measurement 6	**Year 2 Measurement: Informal Units** Tests 3 & 8
		Compare and order several shapes and objects based on volume and capacity using appropriate uniform informal units	VCMMG115	116			**DT** Year 2 Measurement 8	**Year 2 Measurement: Informal Units** Tests 4, 5 & 8
		Compare masses of objects using balance scales	VCMMG116	135			**DT** Year 2 Measurement 18, 19	**Year 2 Measurement: Informal Units** Tests 6-8
		Tell time to the quarter-hour, using the language of 'past' and 'to'. Name and order months and seasons. Use a calendar to identify the date and number of days in each month.	VCMMG117 VCMMG118 VCMMG119	109, 114, 123, 127		109	**DT** Year 2 Measurement 1-5, 7, 10, 16, 17, 20	**Year 2 Measurement: Time** Tests 1-5
	Shape	Describe and draw two-dimensional shapes, with and without digital technologies	VCMMG120	102, 119, 145		102, 104, 106, 108, 115, 119, 133, 145	**DT** Year 2 Geometry 1, 4-7, 9, 10, 12	**Year 2 Geometry: Shape and Movement** Tests 1 & 2, 5-7
		Describe the features of three-dimensional objects	VCMMG121	121		121, 140	**DT** Year 2 Geometry 3, 5-7	**Year 2 Geometry: Shape and Movement** Tests 3-5
	Location and Transformation	Interpret simple maps of familiar locations and identify the relative positions of key features	VCMMG122				**DT** Year 2 Geometry 2, 8, 13	**Year 2 Geometry: Shape and Movement** Test 8
		Investigate the effect of one-step slides and flips. Identify and describe half and quarter turns.	VCMMG123 VCMMG124	102		102	**DT** Year 2 Geometry 11	**Year 2 Geometry: Shape and Movement** Tests 6 & 7
Statistics and Probability	Chance	Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'	VCMSP125	107			**DT** Year 2 Data 2, 3, 6	**Year 2 Statistics: Data** Test 7
	Data representation and interpretation	Identify a question of interest. Gather data relevant to the question. Collect, check and classify data. Create displays of data using lists, table and picture graphs and interpret them	VCMSP126 VCMSP127 VCMSP128	137, 143			**DT** Year 2 Data 1, 4, 5, 7-14	**Year 2 Statistics: Data** Tests 1-6

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YEAR 3

Strand	Substrands	Content	Code	Mathseeds Lesson #			Additional Mathseeds Resources
				Knowledge and Skills	Assessment	Higher Order Thinking Skills	Fluency
				Online Lesson, Printable Resources, & Problem Solving Tasks	End-of-lesson Quiz	Critical Thinking and Problem Solving Interactives	Mental Minute (MM)
Number and Algebra	Number and Place Value	Investigate the conditions required for a number to be odd or even and identify odd and even numbers	VCMNA129	166			
		Recognise, model, represent and order numbers to at least 10 000. Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems	VCMNA130	151, 156, 161, 194		151, 153, 156, 161, 194, 199	
		Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems. Recognise and explain the connection between addition and subtraction. Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation	VCMNA131 VCMNA132 VCMNA133	159, 163, 170, 173, 178, 183		154, 159, 163, 170, 172, 178, 182, 183, 188, 193, 195, 196	**MM** Addition Sprints **MM** Subtraction Sprints
		Recall multiplication facts of two, three, five and ten and related division facts. Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies	VCMNA134 VCMNA135	155, 158, 165, 168, 171, 176, 181, 186, 190, 193, 196, 199		153, 168, 176, 181, 186, 188, 193, 196, 199	**MM** Multiplication Sprints **MM** Division Sprints
	Fractions and Decimals	Model and represent unit fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ and their multiples to a complete whole	VCMNA136	160, 175, 180, 191, 197		175, 180, 191, 197	
	Money and Financial Mathematics	Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents	VCMNA137	159		159, 163, 170, 183, 188	
	Patterns and Algebra	Describe, continue, and create number patterns resulting from performing addition or subtraction	VCMNA138	153, 166, 195		153, 168, 170, 173, 187, 188, 193, 194, 195, 199	
Measurement and Geometry	Using units of measurement	Measure, order and compare objects using familiar metric units of length	VCMMG140	182, 192, 198			
		Measure, order and compare objects using familiar metric units of area	VCMMG140	157, 200		200	
		Measure, order and compare objects using familiar metric units of mass	VCMMG140	172			
		Measure, order and compare objects using familiar metric units of capacity	VCMMG140	154			
		Tell time to the minute and investigate the relationship between units of time	VCMMG141	162, 179, 185, 189		179, 181, 185, 189, 200	
	Shape	Make models of three-dimensional objects and describe key features	VCMMG142	169			
	Location and Transformation	Create and interpret simple grid maps to show position and pathways	VCMMG143	164			
		Identify symmetry in the environment	VCMMG144	152			
	Geometric Reasoning	Identify angles as measures of turn and compare angle sizes in everyday situations	VCMMG146	177			
Statistics and Probability	Chance	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results	VCMSP147	167			
	Data representation and interpretation	Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording. 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. Interpret and compare data displays	VCMSP148 VCMSP149 VCMSP150	174, 187, 198			