



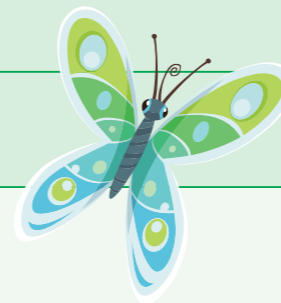
# Mathseeds Lessons and the Australian Curriculum



## FOUNDATION



Strand	Content	Code	Mathseeds Lesson #			Additional 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	Name, represent and order numbers including zero to at least 20, using physical and virtual materials and numerals. Recognise and name the number of objects within a collection up to 5 using subitising. Quantify and compare collections to at least 20 using counting and explain or demonstrate reasoning. Partition and combine collections up to 10 using part-part-whole relationships and subitising to recognise and name the parts.	AC9MFN01 AC9MFN02 AC9MFN03 AC9MFN04	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, 63		12, 19, 41, 63	DT Early Number 1-25	Kindergarten Number Tests 1-6
	Represent practical situations involving addition, subtraction and quantification with physical and virtual materials and use counting or subitising strategies.	AC9MFN05	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 Test 1-4
	Represent practical situations that involve equal sharing and grouping with physical and virtual materials and use counting or subitising strategies	AC9MFN06	71			DT Early Operations 8, 21	
Algebra	Recognise, copy and continue repeating patterns represented in different ways	AC9MFA01	8, 15, 23, 27, 37		6, 8, 15, 23, 27, 31, 37, 38, 40, 46	DT Early Patterns 1-9	Kindergarten Number Test 6
Measurement	Identify and compare attributes of objects and events, including length, using direct comparisons and communicating reasoning.	AC9MFM01	26			DT Early Measurement 5, 6, 9, 10	Kindergarten Measurement Tests 1 & 2
	Identify and compare attributes of objects and events, including capacity, using direct comparisons and communicating reasoning.	AC9MFM01	38			DT Early Measurement 15, 16, 20	Kindergarten Measurement Test 5
	Identify and compare attributes of objects and events, including mass, using direct comparisons and communicating reasoning.	AC9MFM01	29			DT Early Measurement 7, 8, 11, 12	Kindergarten Measurement Test 4
	Identify and compare attributes of objects and events, including duration, using direct comparisons and communicating reasoning. Sequence days of week, and times of the day including morning, lunchtime, afternoon and night time, and connect them to familiar events and actions.	AC9MFM01 AC9MFM02	39, 42			DT Early Measurement 1, 4, 13, 14, 17-19	Kindergarten Measurement Test 6 & 7
Space	Sort, name and create familiar shapes; recognise and describe familiar shapes within objects in the environment, giving reasons	AC9MFSP01	4, 6, 9, 15, 23, 35, 44		6, 15, 23	DT Early Geometry 1-8, 12, 15-23	Kindergarten Geometry Tests 1, 2, 3 & 4
	Describe the position and location of themselves and objects in relation to other people and objects within a familiar space	AC9MFSP02				DT Early Geometry 9-11, 13, 14	Kindergarten Geometry Tests 5 & 6
Statistics	Collect, sort and compare data represented by objects and images in response to given investigative questions that relate to familiar situations	AC9MFST01				DT Early Data 1-10	Kindergarten Data Tests 1 & 2



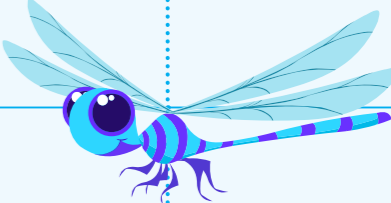


# Mathseeds Lessons and the Australian Curriculum



## YEAR 1



			Mathseeds Lesson #			Additional Resources	
Strand	Content	Code	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	Recognise, represent and order numbers to at least 120 using physical and virtual materials, numerals, number lines and charts. Partition one-and two-digit numbers in different ways using physical and virtual materials, including partitioning two-digit numbers into tens and ones. Quantify sets of objects, to at least 120, by partitioning collections into equal groups using number knowledge and skip counting.	AC9M1N01 AC9M1N02 AC9M1N03	56, 60, 67, 75, 77, 79, 81, 86, 88, 90		60, 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 Value Tests 1-6
	Add and subtract numbers within 20, using physical and virtual materials, part-part-whole knowledge to 10 and a variety of calculation strategies.	AC9M1N04	51, 53, 58, 65, 68, 72, 76, 85, 88, 91, 93, 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
	Use mathematical modelling to solve practical problems involving additive situations, including simple money transactions; represent the situations with diagrams, physical and virtual materials, and use calculation strategies to solve the problem.	AC9M1N05	64, 83, 92				
	Use mathematical modelling to solve practical problems involving equal sharing and grouping; represent the situations with diagrams, physical and virtual materials, and use calculations strategies to solve the problem.	AC9M1N06	71, 74		71, 74, 77, 79		
Algebra	Recognise, continue and create pattern sequences, with numbers, symbols, shapes and objects, formed by skip counting, initially by twos, fives and tens. Recognise, continue and create repeating patterns with numbers, symbols and objects, identifying the repeating unit.	AC9M1A01 AC9M1A02	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	Compare directly and indirectly and order objects and events using attributes of length, communicating reasoning. Measure the length of shapes and objects using informal units, recognising that units need to be uniform and used end-to-end.	AC9M1M01 AC9M1M02	55, 84			DT Year 1 Measurement 2, 4, 13,14	
	Compare directly and indirectly and order objects and events using attributes of mass, communicating reasoning.	AC9M1M01	73				Year 1 Measurement: Length and Capacity Tests 1-5
	Compare directly and indirectly and order objects and events using attributes of capacity, communicating reasoning.	AC9M1M01	89			DT Year 1 Measurement 11, 17-19	Year 1 Measurement: Length and Capacity Tests 6 & 7
	Compare directly and indirectly and order objects and events using attributes of duration, communicating reasoning. Describe the duration and sequence of events using years, months, weeks, days and hours.	AC9M1M01 AC9M1M03				DT Year 1 Measurement 16	Year 1 Measurement: Time Tests 5-6
Space	Make, compare and classify familiar shapes; recognise familiar shapes and objects in the environment, identifying the similarities and differences between them.	AC9M1SP01	52, 62, 69, 99		69	DT Year 1 Geometry 1-3, 7-10, 13, 17-19	Year 1 Geometry: Shape Tests 1-6
	Give and follow directions to move people and objects to different locations within a space.	AC9M1SP02	57, 78, 94			DT Year 1 Geometry 4, 5, 11, 12, 14-16	Year 1 Geometry: Shape Tests 7 & 8
Statistics	Acquire and record data for categorical variables in various ways including using digital tools, objects, images, drawings, lists, tally marks and symbols. Represent collected data for a categorical variable using one-to-one displays and digital tools where appropriate; compare the data using frequencies and discuss the findings.	AC9M1ST01 AC9M1ST02	80, 97		80	DT Year 1 Data 1-4, 6, 9, 10, 12-16	Year 1 Statistics: Data Tests 1-5



# Mathseeds Lessons and the Australian Curriculum



## YEAR 2



Strand	Content	Code	Mathseeds Lesson #			Additional 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	Recognise, represent and order numbers to at least 1000 using physical and virtual materials, numerals and number lines. Partition, rearrange, regroup and rename two- and three- digit numbers using standard and non-standard groupings; recognise the role of a zero digit in place value notation.	AC9M2N01 AC9M2N02	101, 105, 106, 108, 117, 122, 129, 133, 137, 140		101, 105, 106, 108	DT Year 2 Number 1-24	Year 2 Number and Algebra: Numbers to 1000 Tests 1-7
	Recognise and describe one-half as one of 2 equal parts of a whole and connect halves, quarters and eighths through repeated halving.	AC9M2N03	61, 66, 132, 138		132	DT Year 2 Patterns and Fractions 5, 11, 12, 14-17	Year 2 Number and Algebra: Fractions and Money Tests 1-4
	Add and subtract one- and two-digit numbers, representing problems using number sentences and solve using part-part-whole reasoning and a variety of calculation strategies.	AC9M2N04	95, 96, 98, 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, 150	DT Year 2 Operations 1-5, 7, 13-18, 20-28	Year 2 Number and Algebra: Addition and Subtraction Tests 1-3, 5-8
	Multiply and divide by one-digit numbers using repeated addition, equal grouping, arrays and partitioning to support a variety of calculation strategies.	AC9M2N05	111, 113, 115, 130, 136		113, 130, 136	DT Year 2 Operations 6, 8-12, 19	Year 2 Number and Algebra: Equal Groups Tests 1-5
	Use mathematical modelling to solve practical problems involving additive and multiplicative situations, including money transactions; represent situations and choose calculation strategies; interpret and communicate solutions in term of the situation.	AC9M2N06	118, 130, 131, 147		115, 124, 125, 128, 134, 139, 144, 146, 150		Year 2 Number and Algebra: Fractions and Money Tests 5-8
Algebra	Recognise, describe and create additive patterns that increase or decrease by a constant amount, using numbers, shapes and objects and identify missing elements in the pattern.	AC9M2A01	117, 137		102, 117, 132, 133, 137	DT Year 2 Patterns and Fractions 1-4, 6-10, 13	Year 2 Number and Algebra: Number Patterns Tests 1-8
	Recall and demonstrate proficiency with addition facts to 20; extend and apply facts to develop related subtraction facts.	AC9M2A02	142			DT Year 2 Operations 20, 26 MM Addition Sprints MM Subtraction Sprints	Year 2 Number and Algebra: Addition and Subtraction Test 4
	Recall and demonstrate proficiency with multiplication facts for twos; extend and apply facts to develop the related division facts using doubling and halving	AC9M2A03				MM Multiplication Sprints MM Division Sprints	
Measurement	Measure and compare objects based on length using appropriate uniform informal units and smaller units for accuracy when necessary	AC9M2M01	104, 126, 141, 143		104, 141	DT Year 2 Measurement 6, 13-15, 21, 22	Year 2 Measurement: Informal Units Tests 1, 2 & 8
	Measure and compare objects based on capacity using appropriate uniform informal units and smaller units for accuracy when necessary	AC9M2M01	116			DT Year 2 Measurement 8	Year 2 Measurement: Informal Units Tests 4, 5 & 8
	Measure and compare objects based on mass using appropriate uniform informal units and smaller units for accuracy when necessary	AC9M2M01	135			DT Year 2 Measurement 18, 19	Year 2 Measurement: Informal Units Tests 6-8
	Identify common uses and represent halves, quarters and eighths in relation to shapes, objects and events	AC9M2M02	132			DT Year 2 Patterns and Fractions 5, 11, 12, 14-17	Year 2 Number and Algebra: Fractions and Money Test 1-4
	Identify the date and determine the number of days between events using calendars. Recognise and read the time represented on an analog clock to the hour, half-hour and quarter-hour.	AC9M2M03 AC9M2M04	54, 70, 87, 109, 114,		87, 109	DT Year 2 Measurement 1-5, 7, 10, 16, 17, 20	Year 2 Measurement: Time Tests 1-5
	Identify, describe and demonstrate quarter, half, three-quarter and full measures of turn in everyday situations.	AC9M2M05	102		102	DT Year 2 Geometry 9, 11, 12	Year 2 Geometry: Shape and Movement Tests 6 & 7
Space	Recognise, compare and classify shapes, referencing the number of sides and using spatial terms such as “opposite”, “parallel”, “curved” and “straight”	AC9M2SP01	102, 119, 145, 184		102, 119, 140, 145	DT Year 2 Geometry 3-7, 10	Year 2 Geometry: Shape and Movement Tests 1-5
	Locate positions in two-dimensional representations of a familiar space; move positions by following directions and pathways	AC9M2SP02				DT Year 2 Geometry 2, 8, 13	Year 2 Geometry: Shape and Movement Test 8
Statistics	Acquire data for categorical variables through surveys, observation, experiment and using digital tools; sort data into relevant categories and display data using lists and tables. Create different graphical representations of data using software where appropriate; compare the different representations, identify and describe common and distinctive features in response to questions.	AC9M2ST01 AC9M2ST02	137, 143			DT Year 2 Data 1, 4, 5, 7-14	Year 2 Statistics: Data Tests 1-6





# Mathseeds Lessons and the Australian Curriculum



## YEAR 3



Strand	Content	Code	Mathseeds Lesson #			Additional 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	Recognise, represent and order natural numbers using naming and writing conventions for numerals beyond 10 000.	AC9M3N01	151, 156, 161		151, 153, 156, 161, 194	
	Reconise and represent unit fractions including (fractions) and their multiples in different ways; combine fractions with the same denominator to complete the whole.	AC9M3N02	160, 175, 180, 191, 197		175, 180, 191, 197	
	Add and subtract two- and three-digit numbers using place value to partition, rearrange and regroup numbers to assist in calculations without a calculator.	AC9M3N03	163, 170, 173, 178, 183		154, 159, 163, 170, 172, 173, 178, 182, 183, 188, 195	
	Multiply and divide one- and two-digit numbers, representing problems using number sentences, diagrams and arrays, and using a variety of calculation strategies.	AC9M3N04	155, 158, 165, 168, 171, 176, 181, 186, 190, 193, 196, 199		153, 168, 176, 181, 186, 188, 193, 196, 199	
	Estimate the quantity of objects in collections and make estimates when solving problems to determine the reasonableness of calculations.	AC9M3N05				
	Use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; using digital tools where appropriate; interpret and communicate solutions in terms of the situation.	AC9M3N06	155, 157, 188, 196		159, 168, 176	
	Follow and create algorithms involving a sequence of steps and decisions to investigate numbers; describe any emerging patterns.	AC9M3N07	153, 195		153, 195	
Algebra	Recognise and explain the connection between addition and subtraction as inverse operations, apply to partition numbers and find unknown values in number sentences. Extend and apply knowledge of addition and subtraction facts to 20 to develop efficient mental strategies for computation with larger numbers without a calculator.	AC9M3A01 AC9M3A02	142, 163, 195		163, 195	MM Addition Sprints MM Subtraction Sprints
	Recall and demonstrate proficiency with multiplication facts for 3, 4, 5 and 10; extend and apply facts to develop the related division facts.	AC9M3A03	155, 158, 165, 168, 171, 176, 181, 186, 190, 193, 199		153, 168, 176, 181, 186, 188, 193, 196, 199	MM Multiplication Sprints MM Division Sprints
Measurement	Identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates. Measure and compare objects using familiar metric units of length and instruments with labelled markings.	AC9M3M01 AC9M3M02	182, 192, 198			
	Identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates. Measure and compare objects using familiar metric units of mass and intruments with labelled markings.	AC9M3M01 AC9M3M02	172			
	Identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates. Measure and compare objects using familiar metric units of capacity and instruments with labelled markings.	AC9M3M01 AC9M3M02	154			
	Recognise and use the relationship between formal units of time including days, hours, minutes and seconds to estimate and compare the duration of events. Describe the relationship between the hours and minutes on analog and digital clocks, and read the time to the nearest minute.	AC9M3M03 AC9M3M04	123, 127, 162, 179, 185, 189		179, 181, 185, 189, 200	
	Identify angles as measures of turn and compare angles with right angles in everyday situations.	AC9M3M05	177			
	Recognise the relationships between dollars and cents and represent money values in different ways.	AC9M3M06	159			
Space	Make, compare and classify objects, identifying key features and explaining why these features make them suited to their uses.	AC9M3SP01	169			
	Interpret and create two-dimensional representations of familiar environments, locating key landmarks and objects relative to each other.	AC9M3SP02	121, 164			
Statistics	Acquire data for categorical and discrete numerical variables to address a question of interest or purpose by observing, collecting and accessing data sets; record the data using appropriate methods including frequency tables and spreadsheets. Create and compare different graphical representations of data sets including using software where appropriate; interpret the data in terms of the context. Conduct guided statistical investigations involving the collection, representation and interpretation of data for categorical and discrete numerical variables with respect to questions of interest.	AC9M3ST01 AC9M3ST02 AC9M3ST03	174, 187, 198		187	
Probability	Identify practical activities and everyday events that involve chance; describe possible outcomes and events as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' explaining reasoning. Conduct repeated chance experiments; identify and describe possible outcomes, record the results, recognise and discuss the variation.	AC9M3P01 AC9M3P02	82, 107, 167			

