

NSW Maths K-10 Syllabus for the Australian Curriculum

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Unit	Focus	Topic	Content	NSW Outcome
Number and Algebra				
1	Addition	Bonding to 20	<ul style="list-style-type: none"> Solve addition questions to the value of 20 Identify and use terms other than addition Solve addition word problems involving whole numbers 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers
2	Addition	Adding on multiples of 10	<ul style="list-style-type: none"> Select and apply efficient mental strategies to add numbers that are multiples of 10 Identify and use terms other than addition Solve addition word problems involving whole numbers 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers
3	Addition	Adding on 1-9	<ul style="list-style-type: none"> Select and apply efficient mental strategies to calculate addition for 2-digit and 1-digit numbers Identify and use terms other than addition Solve addition word problems involving whole numbers 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers
4	Subtraction	Subtracting from 20	<ul style="list-style-type: none"> Solve subtraction questions with 2-digit and 1-digit numbers Solve repeated subtraction questions of 1-digit numbers Identify and use terms other than subtraction Solve subtraction word problems involving whole numbers 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers
5	Subtraction	Subtracting multiples of 10	<ul style="list-style-type: none"> Select and apply efficient mental strategies to subtract numbers that are multiples of 10 Subtract 2-digit numbers from 3-digit numbers Solve repeated subtraction of 2-digit numbers Identify and use terms other than subtraction Solve subtraction word problems involving times table facts 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers

6	Subtraction	Subtracting 1-9	<ul style="list-style-type: none"> Select and apply efficient mental strategies to recall subtracting numbers 1-9 Identify and use terms other than subtraction Solve subtraction word problems involving numbers 1-9 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers
7	Addition	Doubling and near doubling	<ul style="list-style-type: none"> Select and apply efficient mental strategies to double 1 and 2-digit numbers Solve word problems involving doubling. 	(MA2-6NA) uses mental and informal written strategies for multiplication and division
8	Subtraction	Halving and near halving	<ul style="list-style-type: none"> Select and apply efficient mental strategies to halve 2 and 3-digit numbers Solve word problems involving halving 	(MA2-6NA) uses mental and informal written strategies for multiplication and division
9	Multiplication	The 6 times and 12 times tables	<ul style="list-style-type: none"> Recall and use the 6 and 12 times tables Calculate mixed operation number sentences using addition and multiplication Identify multiples of 6 and 12 Identify and use terms other than multiply Solve multiplication word problems involving times table facts 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers (MA2-6NA) uses mental and informal written strategies for multiplication and division
10	Multiplication	The 7 times and 8 times tables	<ul style="list-style-type: none"> Recall and use the 7 and 8 times tables Calculate mixed operation number sentences using addition and multiplication Identify multiples of 7 and 8 Identify and use terms other than multiply Solve multiplication word problems involving times table facts 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers (MA2-6NA) uses mental and informal written strategies for multiplication and division
11	Multiplication	The 9 times and 11 times tables	<ul style="list-style-type: none"> Recall and use the 9 and 11 times tables Calculate mixed operation number sentences using addition and multiplication Identify multiples of 9 and 11 Identify and use terms other than multiply Solve multiplication word problems involving times table facts 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers (MA2-6NA) uses mental and informal written strategies for multiplication and division
12	Division	Dividing by 6 and 12	<ul style="list-style-type: none"> Identify multiples of 6 and 12 Select and apply efficient mental strategies to divide numbers by 6 and 12 Calculate remainder when a number is divided by 6 and 12 Solve division word problems involving division facts 	(MA2-6NA) uses mental and informal written strategies for multiplication and division
13	Division	Dividing by 7 and 8	<ul style="list-style-type: none"> Identify multiples of 7 and 8 Select and apply efficient mental strategies to divide numbers by 7 and 8 Identify and use terms other than divide Calculate remainder when a number is divided by 7 and 8 Solve division word problems involving division facts 	(MA2-6NA) uses mental and informal written strategies for multiplication and division
14	Division	Dividing by 9 and 11	<ul style="list-style-type: none"> Identify multiples of 9 and 11 	(MA2-6NA) uses mental and informal written strategies for multiplication and division

			<ul style="list-style-type: none"> • Select and apply efficient mental strategies to divide numbers by 9 and 11 • Identify and use terms other than divide • Calculate remainder when a number is divided by 9 and 11 • Solve division word problems involving division facts 	
15	Multiplication and Division	Mixed multiplication and division	<ul style="list-style-type: none"> • Select and apply efficient mental strategies to divide and multiply 1 or 2-digit numbers • Calculate multiplication strings • Identify and use terms other than multiply and divide • Solve division and multiplication word problems 	(MA2-6NA) uses mental and informal written strategies for multiplication and division
16	Place Value	Odd and even numbers	<ul style="list-style-type: none"> • Investigate and use the properties of even and odd numbers • Identify even or odd numbers of up to four digits • Calculate and identify odd or even numbers • Solve word problems based on odd and even numbers 	(MA2-8NA) generalises properties of odd and even numbers, generates number patterns, and completes simple number sentences by calculating missing values
17	Place value	Digit recognition	<ul style="list-style-type: none"> • Apply an understanding of place value to read and write numbers of up to four digits • State the place value of digits in numbers of up to four digits • Use place value to partition numbers of up to four digits and recognise this as 'expanded notation' • Calculate the values of multiple units, tens, hundreds and thousands • Calculate the relationship between 10/100/1000/10 000 • Solve word problems involving place value 	(MA2-4NA) applies place value to order, read and represent numbers of up to five digits
18	Rounding off	Nearest 10, 100 and 1000	<ul style="list-style-type: none"> • Calculate the halfway numeral between numbers based on multiples of 100, 1000 and 10 000 • Round numbers to the nearest 100 and 1000 	(MA2-4NA) applies place value to order, read and represent numbers of up to five digits
19	Sequences	Finding terms and rules	<ul style="list-style-type: none"> • Identify and continue number patterns involving addition and subtraction • Identify missing terms using whole numbers • Identify the rule for a sequence • Find the missing term in sequences other than numbers 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers (MA2-8NA) generalises properties of odd and even numbers, generates number patterns, and completes simple number sentences by calculating missing values
20	Equations	Number strings	<ul style="list-style-type: none"> • Investigate and establish the order of operations • Apply the order of operations to perform calculations involving mixed operations • Solve problems involving four basic operations of one- or two-digit numbers using efficient mental and written strategies • Solve word problems involving number strings 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers (MA2-6NA) uses mental and informal written strategies for multiplication and division
21	Fractions and Decimals	Fractions and Decimals	<ul style="list-style-type: none"> • Select and apply efficient mental strategies to find the half, quarter and tenth of a whole number • Identify what number is a fraction of another 	(MA2-7NA) represents, models and compares commonly used fractions and decimals

			<ul style="list-style-type: none"> whole number Calculate the number of halves, quarters and tenths in multiple of whole numbers Identify the relationship between fraction and decimal Calculate a decimal of a multiple of 10 Solve word problems involving fractions and decimals 	
29	Money	Economical ways of making amounts	<ul style="list-style-type: none"> Identify coins and bank notes needed to create a set amount of money in dollars or cents Calculate the amount of coins needed to match a dollar amount with the fewest number of coins Calculate the amount of notes needed to match a dollar amount with the fewest number of notes Solve word problems involving money 	(MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers
Measurement and Geometry				
22	Length	Units and Conversions	<ul style="list-style-type: none"> Convert between millimetres, centimetres, metres and kilometres. Calculate addition of multiple lengths and convert answer to another unit Choose correct measurement unit to calculate the length Solve word problems involving units of length 	(MA2-9MG) measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres, and measures, compares and records temperatures (MA2-5NA) uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers
23	Perimeter	Concept and missing sides	<ul style="list-style-type: none"> Calculate perimeter of squares with a given value Calculate the side of a square given the perimeter Calculate perimeter of a rectangle with given values Investigate combinations of lengths and widths to reach the perimeter of a rectangle Calculate the perimeter of regular shapes given the side value Solve word problems involving perimeter 	(MA2-9MG) measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres, and measures, compares and records temperatures
24	Area	Concept and application	<ul style="list-style-type: none"> Calculate the areas of rectangles using familiar metric units Calculate the area of squares when given one side Select appropriate measurement unit of area (square centimetre/square metre) Calculate the width of rectangles using area Solve word problems involving area 	(MA2-10MG) measures, records, compares and estimates areas using square centimetres and square metres
25	Mass	Units and conversions	<ul style="list-style-type: none"> Convert between kilograms and grams Convert between grams and kilograms Subtract grams from a kilogram Choose the correct weight Select appropriate measurement unit of mass (gram/kilogram) Solve word problems involving different units of mass 	(MA2-12MG) measures, records, compares and estimates the masses of objects using kilograms and grams

26	Capacity and volume	Units and conversions	<ul style="list-style-type: none"> Convert between millilitres and litres Convert between litres and millilitres Select appropriate measurement unit of capacity (mL/L) Calculate weight of volumes of water Solve word problems involving different units of capacity 	(MA2-11MG) measures, records, compares and estimates volumes and capacities using litres, millilitres and cubic centimetres
27	Time	Digital and analogue conversions	<ul style="list-style-type: none"> Convert between digital and analogue time Convert between analogue and digital time Calculate time difference in minutes Solve word problems based on time 	(MA2-13MG) reads and records time in one-minute intervals and converts between hours, minutes and seconds
28	Time	Unit equivalences	<ul style="list-style-type: none"> Convert between seconds/minutes/hours/day Convert between days/weeks/months/years Calculate days in months of the year Identify seasons and special days that occur with particular months Solve word problems based on time. 	(MA2-13MG) reads and records time in one-minute intervals and converts between hours, minutes and seconds
30	2D and 3D	Properties and directions	<ul style="list-style-type: none"> Calculate sides on multiple 2D shapes Calculate faces, edges, vertices on 3D shapes Calculate direction based on instructions Solve word problems based on 2D, 3D shapes and direction 	<p>(MA2-15MG) manipulates, identifies and sketches two-dimensional shapes, including special quadrilaterals, and describes their features</p> <p>(MA2-14MG) makes, compares, sketches and names three-dimensional objects, including prisms, pyramids, cylinders, cones and spheres, and describes their features</p> <p>(MA2-17MG) uses simple maps and grids to represent position and follow routes, including using compass directions</p>
Statistics and Probability				
31	Chance	Concepts of likelihood	<ul style="list-style-type: none"> Describe the likelihood of a variety of events as being certain, likely, 50/50, unlikely or impossible. Identify best chance of an event happening Express likelihood of an event as a fraction Solve word problems based on chance 	(MA2-19SP) describes and compares chance events in social and experimental contexts
32	Revision			

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