

CIBS II Mathematics: Correlations to the Australian Curriculum F–8

Year Level	Content code	Australian Curriculum content descriptions	Relevant lessons
FOUNDATION YEAR	ACMNA001	Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point	N-1 N-7
	ACMNA002	Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond	N-2 N-3
	ACMNA003	Subitise small collections of objects	N-18
	ACMNA289	Compare, order and make correspondences between collections, initially to 20, and explain reasoning	M-1 N-4
	ACMNA004	Represent practical situations to model addition and sharing	M-1 N-11 N-13 O-1 O-2
	ACMNA005	Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings	M-1 O-6 Q-1 Q-2 R-1
	ACMMG006	Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language	M-1 Q-1 Q-2 Q-3 Q-4 Q-5 Q-6 Q-7 Q-8 Q-9 Q-10 Q-11 Q-12
	ACMMG007	Compare and order the duration of events using the everyday language of time	Q-16
	ACMMG009	Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment	M-1 P-1 P-2 P-3 P-4 P-10 P-12 P-13 R-1 R-2
	ACMMG010	Describe position and movement	M-1 N-6
YEAR 1	ACMNA012	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	N-7
	ACMNA013	Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line	N-1 N-2 N-3 N-5 N-7
	ACMNA014	Count collections to 100 by partitioning numbers using place value	M-2 N-3
	ACMNA015	Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts	M-2 N-11 N-12 N-13 N-14 N-15 N-16 N-17 O-1 O-2 O-3 O-4 O-5 O-8 O-9
	ACMNA016	Recognise and describe one-half as one of two equal parts of a whole.	N-10
	ACMNA017	Recognise, describe and order Australian coins according to their value	N-20 N-21
	ACMNA018	Investigate and describe number patterns formed by skip counting and patterns with objects	O-6 O-7 O-8
	ACMMG019	Measure and compare the lengths and capacities of pairs of objects using uniform informal units	M-2 Q-2 Q-6 Q-7
	ACMMG020	Tell time to the half-hour	Q-17
	ACMMG021	Describe duration using months, weeks, days and hours	Q-18
	ACMMG022	Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features	M-2 P-1 P-2 P-3 P-4 P-5 P-6 P-10 P-11 P-12 P-13 P-14 Q-1 Q-2 Q-3 R-1
	ACMSP024	Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'	R-6
	ACMSP263	Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays	R-2 R-3

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YEAR 2	ACMNA026	Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences.	M-3
	ACMNA027	Recognise, model, represent and order numbers to at least 1000	N-1 N-2 N-3 N-5 N-7
	ACMNA028	Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting	M-3 N-3
	ACMNA030	Solve simple addition and subtraction problems using a range of efficient mental and written strategies	M-3 N-11 N-12 N-13 N-14 N-15 N-16 N-17 O-1 O-2 O-3 O-4 O-5 O-8 O-9
	ACMNA034	Count and order small collections of Australian coins and notes according to their value	N-22
	ACMNA035	Describe patterns with numbers and identify missing elements	M-3 O-7 O-8
	ACMNA036	Solve problems by using number sentences for addition or subtraction	N-12 N-13 N-14 N-15 N-16 N-17 O-1 O-2 O-3 O-4 O-5
	ACMMG037	Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units	M-3 Q-1 Q-2 Q-3 Q-6 Q-7
	ACMMG038	Compare masses of objects using balance scales	Q-10
	ACMMG041	Use a calendar to identify the date and determine the number of days in each month	Q-18
	ACMMG042	Describe and draw two-dimensional shapes, with and without digital technologies	P-2 P-3 P-4 P-5 P-6 P-7
	ACMMG043	Describe the features of three-dimensional objects	P-12
	ACMSP048	Identify a question of interest based on one categorical variable. Gather data relevant to the question	R-3 R-4 R-5
	ACMSP049	Collect, check and classify data	R-2 R-3 R-4 R-5
	ACMSP050	Create displays of data using lists, table and picture graphs and interpret them	R-2 R-4

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YEAR 3	ACMNA051	Investigate the conditions required for a number to be odd or even and identify odd and even numbers	N-57
	ACMNA055	Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation	N-34 N-35 N-36 N-37 N-38 N-39 N-40 N-41 N-42 N-53 N-55 N-56 O-10 O-12 O-15 O-16 O-17
	ACMNA056	Recall multiplication facts of two, three, five and ten and related division facts	M-4 N-43 N-46 N-47 N-48 N-49 N-50 N-51 N-52 N-54 N-56 O-10 O-13 O-14 O-15 O-16 O-17
	ACMNA057	Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies	M-4 N-43 N-44 N-45 N-48 N-49 N-50 N-52 N-54 N-56 O-10 O-13 O-14 O-15 O-16 O-17
	ACMNA060	Describe, continue, and create number patterns resulting from performing addition or subtraction	O-12
	ACMMG061	Measure, order and compare objects using familiar metric units of length, mass and capacity	Q-20 Q-26 Q-28
	ACMMG062	Tell time to the minute and investigate the relationship between units of time	Q-31
	ACMMG063	Make models of three-dimensional objects and describe key features	P-27 P-28
	ACMMG066	Identify symmetry in the environment	P-24 P-25
	ACMSP067	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results	R-27 R-28
	ACMSP069	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	R-7 R-9 R-10 R-11 R-13 R-14 R-15
ACMSP070	Interpret and compare data displays	R-18 R-19 R-20 R-21 R-22 R-23 R-24 R-25	

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YEAR 4	ACMNA071	Investigate and use the properties of odd and even numbers	N-57
	ACMNA073	Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems	N-34
	ACMNA074	Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9	O-13
	ACMNA075	Recall multiplication facts up to 10×10 and related division facts	N-43 N-44 N-45 N-46 N-47 N-48 N-49 N-50 N-51 N-5 N-54 N-56 O-10 O-13 O-14 O-15 O-16 O-17
	ACMNA076	Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder	N-43 N-44 N-45 N-46 N-47 N-48 N-49 N-50 N-51 N-52 N-54 N-56 O-10 O-13 O-14 O-15 O-16 O-17
	ACMNA077	Investigate equivalent fractions used in contexts	N-25 N-37 N-38 N-39
	ACMNA079	Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation	M-5 N-26 N-27 N-40 N-41 N-42
	ACMNA081	Explore and describe number patterns resulting from performing multiplication	O-13
	ACMNA082	Solve word problems by using number sentences involving multiplication or division where there is no remainder	M-5 O-14 O-15 O-16 O-17
	ACMNA083	Use equivalent number sentences involving addition and subtraction to find unknown quantities	O-10
	ACMMG084	Use scaled instruments to measure and compare lengths, masses, capacities and temperatures	Q-19 Q-20 Q-29
	ACMMG085	Convert between units of time	Q-31
	ACMMG086	Use am and pm notation and solve simple time problems	Q-31
	ACMMN089	Compare angles and classify them as equal to, greater than or less than a right angle	P-16
	ACMSP092	Describe possible everyday events and order their chances of occurring	R-27 R-28
	ACMSP093	Identify everyday events where one cannot happen if the other happens	R-27 R-28
	ACMSP094	Identify events where the chance of one will not be affected by the occurrence of the other	R-27 R-28
	ACMSP096	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	R-9 R-10 R-11 R-12 R-13 R-14 R-15 R-16 R-17
ACMSP097	Evaluate the effectiveness of different displays in illustrating data features including variability	R-18 R-19 R-20 R-21 R-22 R-23 R-24 R-25	

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YEAR 5	ACMNA098	Identify and describe factors and multiples of whole numbers and use them to solve problems	N-58 O-10
	ACMNA099	Use estimation and rounding to check the reasonableness of answers to calculations	N-33 N-53 N-54 N-55 N-56
	ACMNA100	Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies	N-45 N-54
	ACMNA101	Solve problems involving division by a one digit number, including those that result in a remainder	M-6 N-43 N-46 N-48 N-54 O-13 O-14 O-15 O-16 O-17
	ACMNA291	Use efficient mental and written strategies and apply appropriate digital technologies to solve problems	M-6 N-34 N-43 N-44 N-45 N-47 N-48 N-49 N-50 N-51 N-52 N-53 N-54 N-55 N-56
	ACMNA103	Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator	M-6 N-37 N-38 N-39
	ACMNA104	Recognise that the place value system can be extended beyond hundredths	N-26 N-27 N-40 N-41 N-42
	ACMNA105	Compare, order and represent decimals	N-26 N-27 N-31 N-32
	ACMNA107	Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction	O-12
	ACMNA121	Use equivalent number sentences involving multiplication and division to find unknown quantities	O-10
	ACMMG108	Choose appropriate units of measurement for length, area, volume, capacity and mass	M-6 Q-19 Q-20 Q-25 Q-26 Q-27 Q-28
	ACMMG109	Calculate the perimeter and area of rectangles using familiar metric units	M-6 Q-21 Q-23 Q-24
	ACMMG111	Connect three-dimensional objects with their nets and other two-dimensional representations	P-29
	ACMMG114	Describe translations, reflections and rotations of two-dimensional shapes. Identify line and rotational symmetries	P-24 P-25 P-26
	ACMMG112	Estimate, measure and compare angles using degrees. Construct angles using a protractor	P-16 P-20 P-21
	ACMSP116	List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions	R-27 R-28
	ACMSP117	Recognise that probabilities range from 0 to 1	R-28
	ACMSP119	Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies	R-9 R-10 R-11 R-12 R-13 R-14 R-15 R-16 R-17
	ACMSP120	Describe and interpret different data sets in context	R-18 R-19 R-20 R-21 R-22 R-23 R-24 R-25

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YEAR 6	ACMNA122	Identify and describe properties of prime, composite, square and triangular numbers	N-73
	ACMNA123	Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers	N-59 N-69 N-71 O-23
	ACMNA124	Investigate everyday situations that use integers. Locate and represent these numbers on a number line	N-59 N-64
	ACMNA126	Solve problems involving addition and subtraction of fractions with the same or related denominators	N-65
	ACMNA128	Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers	N-66
	ACMNA131	Make connections between equivalent fractions, decimals and percentages	N-60 N-61
	ACMNA133	Continue and create sequences involving whole numbers, fractions and decimals. Describe the rule used to create the sequence	O-26
	ACMNA134	Explore the use of brackets and order of operations to write number sentences	O-20 O-21 O-22
	ACMMG136	Convert between common metric units of length, mass and capacity	Q-34
	ACMMG137	Solve problems involving the comparison of lengths and areas using appropriate units	Q-34 Q-36
	ACMMG142	Investigate combinations of translations, reflections and rotations, with and without the use of digital technologies	P-43
	ACMMG143	Introduce the Cartesian coordinate system using all four quadrants	O-27 O-30 O-31 O-32 O-34 O-35 O-36 P-46 P-47
	ACMMG141	Investigate, with and without digital technologies, angles on a straight line, angles at a point and vertically opposite angles. Use results to find unknown angles	P-31 P-32 P-33 P-34 P-39
	ACMSP144	Describe probabilities using fractions, decimals and percentages	R-47
	ACMSP145	Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies	R-47
ACMSP147	Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables	R-30 R-39 R-40 R-41 R-42 R-43 R-44 R-45 R-46	

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YEAR 7	ACMNA149	Investigate index notation and represent whole numbers as products of powers of prime numbers	N-59 O-21 N-73
	ACMNA150	Investigate and use square roots of perfect square numbers	N-59
	ACMNA280	Compare, order, add and subtract integers	M-8 N-61 N-64
	ACMNA153	Solve problems involving addition and subtraction of fractions, including those with unrelated denominators	N-65
	ACMNA154	Multiply and divide fractions and decimals using efficient written strategies and digital technologies	N-65 N-66
	ACMNA157	Connect fractions, decimals and percentages and carry out simple conversions	N-60 N-61 N-70
	ACMNA158	Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies.	N-67
	ACMNA173	Recognise and solve problems involving simple ratios	M-8 N-60 N-68
	ACMNA175	Introduce the concept of variables as a way of representing numbers using letters	M-8 O-20 O-21 O-22 O-23 O-24 O-25 O-26 O-27 O-28 O-29 O-30 O-31 O-32 O-33 O-34 O-35 O-36
	ACMNA176	Create algebraic expressions and evaluate them by substituting a given value for each variable	O-20 O-21 O-22 O-23 O-24 O-28
	ACMNA177	Extend and apply the laws and properties of arithmetic to algebraic terms and expressions	O-20 O-21 O-22 O-23 O-24 O-25
	ACMNA178	Given coordinates, plot points on the Cartesian plane, and find coordinates for a given point	O-27 O-30 O-31 O-32 O-33 O-34 O-35 O-36 P-46 P-47
	ACMNA179	Solve simple linear equations	O-28 O-29 O-30 O-31 O-32 O-34
	ACMMG159	Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving	Q-36 Q-37
	ACMMG181	Describe translations, reflections in an axis, and rotations of multiples of 90° on the Cartesian plane using coordinates. Identify line and rotational symmetries	P-42 P-43 P-47
	ACMMG163	Identify corresponding, alternate and co-interior angles when two straight lines are crossed by a transversal	P-32 P-33 P-34
	ACMMG164	Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning	P-32 P-34
	ACMMG166	Demonstrate that the angle sum of a triangle is 180° and use this to find the angle sum of a quadrilateral	P-37 P-39
	ACMMG165	Classify triangles according to their side and angle properties and describe quadrilaterals	P-36 P-37 P-39
ACMSP167	Construct sample spaces for single-step experiments with equally likely outcomes	R-47	
ACMSP168	Assign probabilities to the outcomes of events and determine probabilities for events	R-47	
ACMSP170	Construct and compare a range of data displays including stem-and-leaf plots and dot plots	R-31 R-32 R-33 R-34 R-35 R-36 R-37 R-38	
ACMSP171	Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data	R-30	
ACMSP172	Describe and interpret data displays using median, mean and range	R-30	

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YEAR 8	ACMNA182	Use index notation with numbers to establish the index laws with positive integral indices and the zero index	N-59 O-21
	ACMNA183	Carry out the four operations with rational numbers and integers, using efficient mental and written strategies and appropriate digital technologies	N-59 N-63 N-64
	ACMNA187	Solve problems involving the use of percentages, including percentage increases and decreases, with and without digital technologies	N-67
	ACMNA188	Solve a range of problems involving rates and ratios, with and without digital technologies	N-60 N-68
	ACMNA193	Plot linear relationships on the Cartesian plane with and without the use of digital technologies	M-9 O-30
	ACMNA194	Solve linear equations using algebraic and graphical techniques. Verify solutions by substitution	M-9 O-28 O-29 O-30 O-31 O-32 O-34
	ACMMG196	Find perimeters and areas of parallelograms, trapeziums, rhombuses and kites	Q-34 Q-35
	ACMMG197	Investigate the relationship between features of circles such as circumference, area, radius and diameter. Use formulas to solve problems involving circumference and area	P-38 Q-35 Q-36
	ACMMG199	Solve problems involving duration, including using 12- and 24-hour time within a single time zone	Q-39
	ACMMG200	Define congruence of plane shapes using transformations	P-41
	ACMMG201	Develop the conditions for congruence of triangles	P-41
	ACMMG202	Establish properties of quadrilaterals using congruent triangles and angle properties, and solve related numerical problems using reasoning	P-37 P-39
	ACMSP292	Represent events in two-way tables and Venn diagrams and solve related problems	R-32
	ACMSP284	Investigate techniques for collecting data, including census, sampling and observation	R-29 R-31
	ACMSP206	Explore the practicalities and implications of obtaining data through sampling using a variety of investigative processes	R-29
ACMSP207	Investigate the effect of individual data values , including outliers, on the mean and median	M-9	

