# Mathematics K–10 Syllabus (2022): Early Stage 1 Australian Curriculum mapping (Kindergarten)

The Australian Curriculum codes are listed under each syllabus focus area and its associated content groups.

| Number and algebra:Representing whole numbers | Number and algebra:Combining and separating quantities | Number and algebra:Forming groups | Measurement and space: Geometric measure | Measurement and space: Two-dimensional spatial structure | Measurement and space: Three-dimensional spatial structure | Measurement and space: Non-spatial measure | Statistics and probability: Data |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Instantly name the number of objects within small collections**AC9MFN02 | **Model additive relations and compare quantities**AC9MFN05 | **Copy, continue and create patterns**AC9MFA01 | **Position: Describe position and movement of oneself** AC9MFSP02 | **2D shapes: Sort, describe and name familiar shapes**AC9MFSP01 | **3D objects: Explore familiar three-dimensional objects** AC9MFM01 | **Mass: Identify and compare mass using weight** AC9MFM01 | **Respond to questions, collect information and discuss possible outcomes of activities**AC9MFST01 |
| **Use the counting sequence of ones flexibly**AC9MFN01AC9MFN03 | **Identify part–whole relationships in numbers up to 10**AC9MFN04AC9MFN05 | **Investigate and form equal groups by sharing**AC9MFN06 | **Length: Use direct and indirect comparisons to decide which is longer**AC9MFM01 | **2D shapes: Represent shapes**AC9MFSP01 | **Volume: Compare internal volume by filling and packing**AC9MFM01 | **Time: Compare and order the duration of events using the language of time**AC9MFM02 | **Organise objects into simple data displays and interpret the displays**AC9MFST01 |
| **Recognise number patterns**AC9MFN01AC9MFN04 |  | **Record grouping and sharing**AC9MFN06 | **Length: Create half a length**No associated ACARA code | **Area: Identify and compare area**No associated ACARA code | **Volume: Compare volume by building**No associated ACARA code | **Time: Connect days of the week to familiar events and actions**AC9MFM02 |  |
| **Connect counting and numerals to quantities**AC9MFN01AC9MFN03AC9MFN06 |  |  |  |  |  | **Time: Tell time on the hour on analog and digital clocks**No associated ACARA code |  |

# Mathematics K–10 Syllabus (2022): Stage 1 Australian Curriculum mapping (Years 1–2)

The Australian Curriculum codes are listed under each syllabus focus area and its associated content groups.

| Number and algebra: Representing whole numbers A  | Number and algebra: Representing whole numbers B | Number and algebra: Combining and separating quantities A | Number and algebra: Combining and separating quantities B | Number and algebra: Forming groups A | Number and algebra: Forming groups B | Measurement and space: Geometric measure A | Measurement and space: Geometric measure B | Measurement and space: Two-dimensional spatial structure A |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Use counting sequences of ones with two-digit numbers and beyond**AC9M1N01 | **Use counting sequences of ones and tens flexibly**AC9M2N01 | **Use advanced count-by-one strategies to solve addition and subtraction problems**AC9M1N04AC9M1N05AC9M2N06 | **Represent and reason about additive relations**AC9M2N04AC9M2A01AC9M2A02 | **Count in multiples using rhythmic and skip counting**AC9M1A01 | **Represent and explain multiplication as the combining of equal groups**AC9M2N05AC9M2N06 | **Position: Follow directions to familiar locations**AC9M1SP02 | **Position: Explore simple maps of familiar locations**AC9M2SP02 | **2D shapes: Recognise and classify shapes using obvious features**AC9M2A01AC9M1SP01AC9M2SP01 |
| **Continue and create number patterns**AC9M2A03 | **Form, regroup, and rename three-digit numbers**AC9M2N01AC9M2N02 | **Recognise and recall number bonds up to ten**AC9M1N02AC9M2A02 | **Form multiples of ten when adding and subtracting two-digit numbers**AC9M2N04AC9M2N06 | **Use skip counting patterns**AC9M1A01AC9M1A02 | **Model doubling and halving with fractions**AC9M2N03AC9M2A03 | **Length: Measure the lengths of objects using uniform informal units**AC9M1M02 | **Length: Compare and order lengths, using appropriate uniform informal units**No associated ACARA code | **2D shapes: Transform shapes with slides and reflections**No associated ACARA code |
| **Represent numbers on a line**AC9M1N01 |  | **Use flexible strategies to solve addition and subtraction problems**AC9M2N04AC9M1N05AC9M2A02 | **Use knowledge of equality to solve related problems**AC9M2N04AC9M2N06 | **Model and use equal groups of objects to represent multiplication**AC9M1N06 | **Represent multiplication and division problems**AC9M2N05AC9M2N06 | **Length: Compare lengths using uniform informal units**AC9M1M01 | **Length: Recognise and use formal units to measure the lengths of objects**AC9M2M02 | **Area: Indirectly compare area**No associated ACARA code |
| **Represent the structure of groups of ten in whole numbers**AC9M1N01AC9M1N02AC9M1N03AC9M1N05 |  | **Represent equality**AC9M1N04AC9M1N05AC9M2A02 |  | **Recognise and represent division**AC9M1N06AC9M2N02AC9M2N06 |  | **Length: Subdivide lengths to find halves and quarters**AC9M2M02 |  | **Area: Measure areas using uniform informal units**No associated ACARA code |

| Measurement and space: Two-dimensional spatial structure B | Measurement and space: Three-dimensional spatial structure A | Measurement and space: Three-dimensional spatial structure B | Measurement and space: Non-spatial measure A | Measurement and space: Non-spatial measure B | Statistics: Data A | Statistics: Data B | Statistics: Chance A | Statistics: Chance B |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2D shapes: Represent, combine and separate two-dimensional shapes**No associated ACARA code | **3D objects: Recognise familiar three-dimensional objects**No associated ACARA code | **3D objects: Describe the features of three-dimensional objects**No associated ACARA code | **Mass: Investigate mass using an equal-arm balance**AC9M1M01 | **Mass: Compare the masses of objects using an equal-arm balance**AC9M2M01 | **Ask questions and gather data**AC9M1ST01 | **Identify a question of interest and gather relevant data**AC9M2ST01 | **Identify and describe possible outcomes**No associated ACARA code | **Identify and describe activities that involve chance**No associated ACARA code |
| **2D shapes: Identify and describe the orientation of shapes using quarter turns**AC9M2M05AC9M2SP02 | **3D objects: Sort and describe three-dimensional objects**No associated ACARA code | **Volume: Compare containers based on internal volume (capacity) by filling and packing**AC9M2M02 | **Time: Name and order the cycle of months**AC9M1M03 | **Time: Describe duration using units of time**AC9M2M03 | **Represent data with objects and drawings and describe the displays**AC9M1S02 | **Create displays of data and interpret them**AC9M2ST01AC9M2ST02 |  | **Identify when events are affected by previous events**No associated ACARA code |
| **Area: Compare rectangular areas using uniform square units of an appropriate size in rows and columns**No associated ACARA code | **Volume: Measure and compare the internal volumes (capacities) of containers by filling**AC9M1M01 | **Volume: Compare volumes using uniform informal units**No associated ACARA code | **Time: Tell time to the half-hour**AC9M2M02 | **Time: Tell time to the quarter-hour using the language of ‘past’ and ‘to’**AC9M2M04 |  |  |  |  |
|  | **Volume: Measure the internal volume (capacity) of containers by packing**No associated ACARA code |  |  |  |  |  |  |  |
|  | **Volume: Construct volumes using cubes**AC9M1SP01 |  |  |  |  |  |  |  |

# Mathematics K–10 Syllabus (2022): Stage 2 Australian Curriculum mapping (Years 3–4)

The Australian Curriculum codes are listed under each syllabus focus area and its associated content groups.

| Number and algebra: Representing numbers using place value A | Number and algebra: Representing numbers using place value B | Number and algebra: Additive relations A | Number and algebra: Additive relations B | Number and algebra: Multiplicative relations A | Number and algebra: Multiplicative relations B | Number and algebra: Partitioned fractions A | Number and algebra: Partitioned fractions B | Measurement and space: Geometric measure A | Measurement and space: Geometric measure B |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Whole numbers: Read, represent and order numbers to thousands**AC9M3N01 | **Whole numbers: Order numbers in the thousands**AC9M3N01 | **Use the principle of equality**AC9M4N06AC9M4A01 | **Partition, rearrange and regroup numbers to at least 1000 to solve additive problems**AC9M3N03AC9M4N06AC9M3N07AC9M3A01 | **Generate and describe patterns**AC9M3N06AC9M3N07AC9M4N02AC9M4N08 | **Investigate number sequences involving related multiples**AC9M4A02 | **Create fractional parts of a length using techniques other than repeated halving**AC9M3N02 | **Model equivalent fractions as lengths**AC9M4N03 | **Position: Interpret movement on a map**AC9M3SP02 | **Position: Create and interpret grid maps** AC9M4SP02 |
| **Whole numbers: Apply place value to partition and regroup numbers up to 4 digits**AC9M3N01 | **Whole numbers: Apply place value to partition, regroup and rename numbers up to 6 digits**AC9M3N01AC9M3N07 | **Recognise and explain the connection between addition and subtraction**AC9M3N05AC9M3A01AC9M4A01 AC9M3A02 | **Apply addition and subtraction to familiar contexts, including money and budgeting**AC9M4N07 | **Use arrays to establish multiplication facts from multiples of 2 and 4, 5 and 10**AC9M3N02AC9M3N04AC9M3N07AC9M4N06 | **Use known number facts and strategies**AC9M4N08AC9M4A02 | **Model and represent unit fractions, and their multiples, to a complete whole on a number line**AC9M3N02 | **Represent fractional quantities equal to and greater than one**AC9M4N04 | **Position: Locate positions on grid maps**AC9M3SP02 | **Position: Use directional language and describe routes with grid maps**AC9M4SP02  |
|  | **Whole numbers: Recognise and represent numbers that are 10, 100 or 1000 times as large**AC9M3N07 | **Select strategies flexibly to solve addition and subtraction problems of up to 3 digits**AC9M3N03AC9M3N06AC9M4N06AC9M4N08 | **Complete number sentences involving additive relations to find unknown quantities**AC9M4N09AC9M4A01 | **Recall multiplication facts of 2 and 4, 5 and 10 and related division facts**AC9M3N04AC9M3A03AC9M4A02 | **Use the structure of the area model to represent multiplication and division**AC9M4N08 |  |  | **Length: Measure and compare objects using metres, centimetres and millimetres**AC9M4M01AC9M3M02 | **Length: Use scaled instruments to measure and compare lengths**AC9M4N03 AC9M4M01AC9M4M02 |
|  | **Decimals: Extend the application of the place value system from whole numbers to tenths and hundredths**AC9M4N01 | **Represent money values in multiple ways**AC9M4N08AC9M3M06 |  | **Represent and solve problems involving multiplication fact families**AC9M3N04AC9M4N06 | **Use number properties to find related multiplication facts**AC9M4N06AC9M4N08 |  |  | **Angles: Identify angles as measures of turn**AC9M3M05 | **Angles: Compare angles to a right angle**AC9M4M04 |
|  | **Decimals: Make connections between fractions and decimal notation**AC9M4N01 |  |  |  | **Operate with multiples of 10**AC9M4N05 |  |  |  |  |
|  |  |  |  |  | **Represent and solve word problems with number sentences involving multiplication or division**AC9M4N09AC9M4A02 |  |  |  |  |

| Measurement and space: Two-dimensional spatial structure A | Measurement and space: Two-dimensional spatial structure B | Measurement and space: Three-dimensional spatial structure A | Measurement and space: Three-dimensional spatial structure B | Measurement and space: Non-spatial measure A | Measurement and space: Non-spatial measure B | Statistics and probability: Data A | Statistics and probability: Data B | Statistics and probability: Chance A | Statistics and probability: Chance B |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2D shapes: Compare and describe features of two-dimensional shapes**AC9M3M05 | **2D shapes: Create two-dimensional shapes that result from combining and splitting common shapes**No associated ACARA code | **3D objects: Make models of three-dimensional objects to compare and describe key features**AC9M3SP01 | **3D objects: Connect three-dimensional objects and two-dimensional representations**AC9M3SP01AC9M3SP02 | **Mass: Compare objects using the kilogram**AC9M3M01 | **Mass: Use scaled instruments to measure and compare masses**AC9M3A02AC9M4M01 | **Collect discrete data**AC9M3ST01 | **Select and trial methods for data collection**AC9M4ST02AC9M4ST03 | **Identify possible outcomes from chance experiments**AC9M3P01AC9M3P02 | **Describe the likelihood of outcomes of chance events** AC9M4P01 |
| **2D shapes: Transform shapes by reflecting, translating and rotating**AC9M4SP03 | **2D shapes: Create symmetrical patterns and shapes** AC9M4SP03 | **Volume: Measure and order containers using litres**AC9M3M02 | **Volume: Use scaled instruments to measure and compare capacities (internal volumes)**AC9M4M01 | **Time: Represent and read analog time**AC9M3M03AC9M3M04 | **Time: Represent and interpret digital time displays**AC9M3A03AC9M4M03 | **Organise and display data using tables and graphs**AC9M3ST01AC9M3ST02 | **Construct and interpret data displays with many-to-one scales**AC9M4ST01AC9M4ST02 |  | **Identify when events are affected by previous events**AC9M4P01AC9M4P02 |
| **Area: Use square centimetres to measure and estimate the areas of rectangles**AC9M4M02 | **Area: Measure the areas of shapes using the grid structure**AC9M4M02 | **Volume: Compare objects using familiar metric units of volume**AC9M3M01 |  |  | **Time: Use am and pm notation**AC9M4M03 | **Interpret and compare data**AC9M3ST02AC9M3ST03 |  |  |  |
| **Area: Use square metres to measure and estimate the areas of rectangles**AC9M4M02 | **Area: Compare surfaces using familiar metric units of area**AC9M4M02 |  |  |  |  |  |  |  |  |

# Mathematics K–10 Syllabus (2022): Stage 3 Australian Curriculum mapping (Years 5–6)

The Australian Curriculum codes are listed under each syllabus focus area and its associated content groups.

| Number and algebra: Represents numbers A | Number and algebra: Represents numbers B | Number and algebra: Additive relations A | Number and algebra: Additive relations B | Number and algebra: Multiplicative relations A | Number and algebra: Multiplicative relations B | Number and algebra: Representing quantity fractions A | Number and algebra: Representing quantity fractions B | Measurement and space: Geometric measure A | Measurement and space: Geometric measure B |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Whole numbers: Recognise, represent and order numbers in the millions**No associated ACARA code | **Whole numbers: Locate and represent integers on a number line**AC9M6N01 | **Apply efficient mental and written strategies to solve addition and subtraction problems**AC9M5N08 | **Choose and use efficient strategies to solve addition and subtraction problems**AC9M5N09AC9M6N09 | **Determine products and factors** AC9M5N02AC9M6N02 | **Select and apply strategies to solve problems involving multiplication and division with whole numbers**AC9M5N06 | **Recognise the role of the number 1 as representing the whole**AC9M5N03 | **Recognise that a fraction can represent a division**No associated ACARA code | **Position: Explore the Cartesian coordinate system**AC9M5M01AC9M6M01AC9M5SP02 | **Position: Use the 4 quadrants of the coordinate plane**AC9M6N01 |
| **Whole numbers: Apply place value to partition, regroup and rename numbers to 1 billion**No associated ACARA code | **Decimals and percentages: Make connections between benchmark fractions, decimals and percentages**AC9M5N04AC9M6N07 | **Use estimation and place value understanding to determine the reasonableness of solutions**AC9M5N08 | **Applies known strategies to add and subtract decimals**AC9M6N04 | **Use partitioning and place value to multiply 2-, 3- and 4-digit numbers by one-digit numbers**AC9M5N06AC9M5A02 | **Multiply and divide decimals by powers of 10** AC9M6N06 | **Compare and order common unit fractions**AC9M6N03  | **Compare common fractions with related denominators** AC9M5N03AC9M6N03 | **Length: Use metres and kilometres for length and distances**AC9M5M01AC9M5M02 | **Length: Connect decimal representations to the metric system**AC9M6M01 |
| **Decimals and percentages: Recognise that the place value system can be extended beyond hundredths**AC9M5N01 | **Decimals and percentages: Determine percentage discounts of 10%, 25% and 50%**AC9M6N07 |  |  | **Select and apply mental and written strategies to multiply 2- and 3-digit numbers by 2-digit numbers**AC9M5N02AC9M5N06 | **Use equivalent number sentences involving multiplication and division to find unknown quantities**AC9M6A02 | **Solve problems involving addition and subtraction of fractions with the same denominator**AC9M6N05 | **Build up to the whole from a given fractional part**No associated ACARA code | **Length: Measure lengths to find perimeters**AC9M5M02  | **Length: Convert between common metric units of length**AC9M6M01 |
| **Decimals and percentages: Compare, order and represent decimals**AC9M5N01AC9M6N06 |  |  |  | **Represent and solve division problems with whole number remainders**AC9M5N07AC9M5A01 | **Represent and describe number patterns formed by multiples**AC9M5N010AC9M6A01AC9M6A03 |  | **Use equivalence to add and subtract fractional quantities**AC9M6N05  | **Angles: Estimate, measure and compare angles using degrees**AC9M5M04  | **Length: Solve problems involving the comparison of lengths using appropriate units**AC9M6M02  |
|  |  |  |  | **Select and apply strategies to divide a number with 3 or more digits by a one-digit divisor**AC9M5N07AC9M5A01 | **Explore the use of brackets and the order of operations to write number sentences**AC9M6A02 |  | **Find fractional quantities of whole numbers (halves, quarters, fifths and tenths)**AC9M6N07 | **Angles: Use a protractor to measure and identify types of angles**AC9M5M04 | **Angles: Investigate angles on a straight line and angles at a point**AC9M6M04  |
|  |  |  |  | **Use estimation and rounding to check the reasonableness of answers to calculations**AC9M5N08 |  |  |  |  | **Angles: Investigate the relationships formed by the intersection of straight lines**AC9M6M04 |

| Measurement and space: Two-dimensional spatial structure A | Measurement and space: Two-dimensional spatial structure B | Measurement and space: Three-dimensional spatial structure A | Measurement and space: Three-dimensional spatial structure B | Measurement and space: Non-spatial measure A | Measurement and space: Non-spatial measure B | Statistics and probability: Data A | Statistics and probability: Data B | Statistics and probability: Chance A | Statistics and probability: Chance B |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2D shapes: Classify two-dimensional shapes and describe their properties**AC9M5M02AC9M5SP03AC9M6SP03 | **2D shapes: Dissect two-dimensional shapes and rearrange them using translations, reflections and rotations**AC9M5SP03 | **3D objects: Compare, describe and name prisms and pyramids**AC9M6SP01 | **3D objects: Construct prisms and pyramids**AC9M5SP01 | **Mass: Choose appropriate units of measurement for mass**AC9M6M01 | **Mass: Convert between common metric units of mass**AC9M6M01 | **Collect categorical and discrete numerical data by observation or survey**AC9M5ST01 | **Interpret and compare a range of data displays**AC9M6ST01 | **List outcomes of chance experiments involving equally likely outcomes and represent probabilities**AC9M5P01AC9M5P02 | **Compare observed frequencies of outcomes with expected results**AC9M6P01AC9M6P02 |
| **Area: Use hectares and square kilometres as units of measurement for area**No associated ACARA code | **Area: Find the area of composite figures** AC9M6M02 | **3D objects: Connect three-dimensional objects with two-dimensional representations**AC9M5SP01 | **Volume: Use cubic metres for measurement of volume**AC9M6M01 | **Mass: Connect decimal representations to the metric system** AC9M6M01 | **Time: Solve problems involving duration, using 12- and 24-hour time**AC9M6M03 | **Choose and use appropriate tables and graphs**AC9M5ST01AC9M5ST02 | **Interpret data presented in digital media and elsewhere**AC9M6ST02 |  | **Create random generators and describe probabilities using fractions**AC9M6P01AC9M6P02 |
| **Area: Calculate the areas of rectangles using familiar metric units**AC9M6M02 | **Area: Calculate the area of a parallelogram using subdivision and rearrangement**No associated ACARA code | **Volume: Choose appropriate units of measurement for capacity**AC9M5M01 | **Volume: Recognise the multiplicative structure for finding volume** No associated ACARA code | **Time: Compare 12- and 24-hour time systems and convert between them**AC9M5M03 |  | **Describe and interpret different datasets in context**AC9M5ST01AC9M5ST02 |  |  | **Conduct chance experiments with both small and large numbers of trials**AC9M6P01AC9M6P02 |
|  | **Area: Determine the area of a triangle**No associated ACARA code | **Volume: Use displacement to investigate volumes of irregular solids**AC9M5M01  | **Volume: Find the volumes of rectangular prisms in cubic centimetres and cubic metres**No associated ACARA code |  |  |  |  |  |  |
|  |  | **Volume: Connect decimal representations to the metric system**AC9M5M01 |  |  |  |  |  |  |  |