 Stage 1 mathematics scope and sequence

This scope and sequence is an example only, schools will need to make modifications as necessary dependent on school context and student needs. The same scope and sequence can be used in Year 1 and Year 2. Each term is organised into two parts – Early Term (the first half of term) and Later Term (second half of term) to provide opportunities to develop deep knowledge and understanding.

| Term | Number and Algebra | Measurement and Geometry | Statistics and Probability |
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| Early Term 1 | Whole Numbers  Addition and Subtraction  Multiplication and Division  Fractions and Decimals (relate to Length)  Patterns and Algebra | Length  Time  3D Space |  |
| Later Term 1 | Whole Numbers  Addition and Subtraction  Multiplication and Division  Fractions and Decimals (relate to Area)  Patterns and Algebra (relate to 2D Space) | Area (relate to 2D Space)  Time  2D Space | Data (relate to Whole Numbers)  Chance |
| Early Term 2 | Whole Numbers (relate to Time)  Addition and Subtraction  Multiplication and Division  Fractions and Decimals (relate to Length and Time)  Patterns and Algebra (relate to Whole Numbers) | Length  Volume and Capacity  Time (relate to Whole Number)  Position | Chance |
| Later Term 2 | Whole Numbers  Addition and Subtraction  Multiplication and Division  Fractions and Decimals | Volume and Capacity  Mass (relate to 3D Space)  3D Space  2D Space | Data (relate to 2D Space) |
| Early Term 3 | Whole Numbers  Addition and Subtraction (relate to Length)  Multiplication and Division (relate to Addition and Subtraction)  Fractions and Decimals  Patterns and Algebra (relate to Addition and Subtraction) | Length  3D Space  Position (relate to 3D Space) | Chance |
| Later Term 3 | Whole Numbers (relate to Multiplication and Division)  Addition and Subtraction  Multiplication and Division  Fractions and Decimals (relate to Time)  Patterns and Algebra (relate to Multiplication and Division) | Area (relate to Multiplication)  Time (relate to Whole Numbers)  2D Space | Data |
| Early Term 4 | Whole Numbers  Addition and Subtraction  Multiplication and Division  Patterns and Algebra (relate to Multiplication and Division) | Volume and Capacity (relate to Multiplication and Division)  Mass  Time  Position | Chance |
| Later Term 4 | Whole Numbers  Addition and Subtraction  Multiplication and Division  Fractions and Decimals | Length  3D Space (relate to 2D Space)  2D Space (relate to Fractions) | Data |

Stage 1 mathematics scope and sequence of key ideas

Early Term 1

Number and Algebra

* Whole Numbers – Count forwards and backwards by ones from a two-digit number. Partition two-digit numbers using place value. Recognise, describe and order Australian coins according to their value.
* Addition and Subtraction – Model addition and subtraction using concrete materials. Recognise and recall combinations of numbers that add to numbers up to 20.
* Multiplication and Division – Rhythmic and skip count by twos, fives and tens from zero. Model and use equal ‘groups of’ objects as a strategy for multiplication.
* Fractions and Decimals (relate to Length) – Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections.
* Patterns and Algebra – Recognise, copy, create, continue and describe repeating patterns of objects or symbols.

Measurement and Geometry

* Length – Use uniform informal units to measure, compare and estimate lengths.
* Time – Name and order months and seasons. Use a calendar to identify the date and determine the number of days in each month.
* 3D Space – Distinguish between flat and curved surfaces. Use the term ‘faces’ to describe flat surfaces with straight edges. Identify cones, cubes, cylinders, spheres and prisms presented in different orientations, in pictures and the environment.

Later Term 1

Number and Algebra

* Whole Numbers – Partition two-digit numbers using place value. Read, write and order two-digit numbers. Read and use ordinal names to at least ‘thirty-first’.
* Addition and Subtraction – Model addition and subtraction using concrete materials. Recognise and recall combinations of numbers that add to numbers up to 20. Model and apply the commutative property for addition. Make connections between addition and subtraction.
* Multiplication and Division – Rhythmic and skip count by twos, fives and tens from zero. Model and use equal ‘groups of’ objects as a strategy for multiplication. Model division by sharing a collection equally into a given number of groups to determine the number in each group.
* Fractions and Decimals (relate to Area) – Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections.
* Patterns and Algebra (relate to 2D Space) – Recognise, copy, create, continue and describe repeating patterns of objects or symbols.

Measurement and Geometry

* Area (relate to 2D Space) – Use uniform informal units to measure and estimate areas
* Time (relate to Whole Numbers) – Name and order months and seasons. Use a calendar to identify the date and determine the number of days in each month.
* 2D Space – Identify and name triangles, quadrilaterals, pentagons, hexagons and octagons presented in different orientations, in pictures and the environment

Statistics and Probability

* Data (relate to Whole Numbers) – Collect data and track what has been counted. Create data displays using objects and pictures (one-to-one correspondence) and interpret them.
* Chance – Recognise the element of chance in familiar situations.

Early Term 2

Number and Algebra

* Whole Numbers (relate to Time) – Count forwards and backwards by ones from a two-digit number. Read, write and order two-digit numbers. Read and use ordinal names to at least ‘thirty-first’.
* Addition and Subtraction – Recognise and recall combinations of numbers that add to numbers up to 20. Model and apply the commutative property for addition.
* Multiplication and Division – Rhythmic and skip count by twos, fives and tens from zero. Model and use equal ‘groups of’ objects as a strategy for multiplication.
* Fractions and Decimals (relate to Length and Time) – Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections. Use fraction notation 1 over 2.
* Patterns and Algebra (relate to Whole Numbers) – Recognise, copy, continue, create and describe increasing and decreasing number patterns

Measurement and Geometry

* Length – Use uniform informal units to measure, compare and estimate lengths. Record lengths by referring to the number and type of uniform informal unit used.
* Volume and Capacity – Use uniform informal units to measure, compare and estimate capacities. Record capacities and volumes by referring to the number and type of uniform informal unit used.
* Time (relate to Whole Numbers) – Name and order months and seasons. Use a calendar to identify the date and determine the number of days in each month. Tell time to the half-hour.
* Position – Give and follow directions to move to familiar locations and to position objects. Use the terms ‘left’ and ‘right’ to describe position in relation to self and from the perspective of a person facing in the opposite direction.

Statistics and Probability

* Chance – Recognise the element of chance in familiar situations. Describe chance events using everyday language.

Later Term 2

Number and Algebra

* Whole Numbers – Partition two-digit numbers using place value. Read, write and order two-digit numbers. Recognise, describe and order Australian coins and notes according to their value.
* Addition and Subtraction – Record number sentences using drawings, words, numerals and the symbols +, – and =. Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers. Use the equals sign to record equivalent number sentences.
* Multiplication and Division – Rhythmic and skip count by twos, fives and tens from zero. Model division by sharing a collection equally into a given number of groups to determine the number in each group. Model division by sharing a collection equally into groups of a given size to determine the number of groups.
* Fractions and Decimals – Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections. Use fraction notation 1 over 2.

Measurement and Geometry

* Volume and Capacity – Use uniform informal units to measure and estimate volumes. Record capacities and volumes by referring to the number and type of uniform informal unit used.
* Mass (relate to 3D Space) – Place objects on either side of a pan balance to obtain a level balance. Use a pan balance to compare two objects based on mass.
* 3D Space – Use the terms ‘flat surface’, ‘curved surface’, ‘face’, ‘edge’ and ‘vertex’ appropriately to describe three-dimensional objects.
* 2D Space – Use the terms ‘side’ and ‘vertex’ to describe and compare two-dimensional shapes. Identify horizontal, vertical and parallel lines.

Statistics and Probability

* Data (relate to 2D Space) – Collect data and track what has been counted. Create data displays using objects and pictures (one-to-one correspondence) and interpret them.

Early Term 3

Number and Algebra

* Whole Numbers – Count forwards and backwards by twos, threes, fives and tens from any starting point. Partition two-digit numbers using place value. Read and use ordinal names to at least ‘thirty-first’.
* Addition and Subtraction (relate to Length) – Recognise and recall combinations of numbers that add to numbers up to 20. Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers. Solve word problems involving addition and subtraction.
* Multiplication and Division (relate to Addition and Subtraction) – Rhythmic and skip count by twos, fives and tens from zero. Model and use repeated addition as a strategy for multiplication.
* Fractions and Decimals – Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections.
* Patterns and Algebra (relate to Addition and Subtraction) – Find missing numbers in number sentences involving one operation of addition or subtraction.

Measurement and Geometry

* Length – Record lengths by referring to the number and type of uniform informal unit used. Compare and order shapes/objects based on length measured using uniform informal units.
* 3D Space – Recognise that three-dimensional objects look different from different vantage-points. Recognise faces of three-dimensional objects as two-dimensional shapes.
* Position (relate to 3D Space) – Give and follow directions to move to familiar locations and to position objects. Describe a path from one location to another.

Statistics and Probability

* Chance – Identify practical activities and everyday events that involve chance. Describe events as ‘likely’ or ‘unlikely’.

Later Term 3

Number and Algebra

* Whole Numbers (relate to Multiplication and Division) – Count forwards and backwards by twos, threes, fives and tens from any starting point. Partition numbers of up to three digits using place value.
* Addition and Subtraction – Make connections between addition and subtraction. Use the equals sign to record equivalent number sentences. Use and record a range of mental strategies for addition and subtraction of two-digit numbers.
* Multiplication and Division – Model and use repeated addition as a strategy for multiplication. Model and use arrays described in terms of ‘rows’ and ‘columns’ as a strategy for multiplication.
* Fractions and Decimals (related to Time) – Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections. Use fraction notation 1 over 4 and 1 over 8.
* Patterns and Algebra (relate to Multiplication and Division) – Describe patterns with numbers and identify missing elements.

Measurement and Geometry

* Area (relate to Multiplication and Division) – Record areas by referring to the number and type of uniform informal unit used. Compare and order surfaces based on area measured using uniform informal units.
* Time (relate to Whole Numbers) – Use a calendar to determine duration in months, weeks and days. Tell time to the half-hour. Tell time to the quarter-hour, using the language of ‘past’ and ‘to’.
* 2D Space – Use the terms ‘side’ and ‘vertex’ to describe and compare two-dimensional shapes. Make and draw two-dimensional shapes in different orientations. Identify, perform and record the result of one-step ‘slides’ and ‘flips’.

Statistics and Probability

* Data – Pose questions and collect categorical data. Create data displays using lists, tables and picture graphs (one-to-one correspondence) and interpret them.

Early Term 4

Number and Algebra

* Whole Numbers – Read, write and order three-digit numbers. Partition numbers of up to three digits using place value. Read, write and order three-digit numbers.
* Addition and Subtraction – Use and record a range of mental strategies for addition and subtraction of two-digit numbers. Solve word problems involving addition and subtraction. Record number sentences using drawings, words, numerals and the symbols +, – and =.
* Multiplication and Division – Model and use arrays described in terms of ‘rows’ and ‘columns’ as a strategy for multiplication. Model and use groups, arrays and repeated subtraction as strategies for division. Record using drawings, words and numerals.
* Patterns and Algebra (related to Multiplication and Division) – Recognise, copy, create, continue and describe repeating patterns of objects or symbols. Model and describe odd and even numbers. Describe patterns with numbers and identify missing elements.

Measurement and Geometry

* Volume and Capacity (relate Volume to Multiplication and Division) – Compare and order objects based on capacity and volume measured using uniform informal units.
* Mass – Use uniform informal units to measure, compare and estimate the masses of objects. Record masses by referring to the number and type of uniform informal unit used.
* Time – Use informal units to measure and compare the durations of events. Experience activities with duration of one hour, half/quarter of an hour, one minute and a few seconds.
* Position – Interpret simple maps of familiar locations. Represent the position of objects in models, photographs and drawings.

Statistics and Probability

* Chance – Distinguish between ‘possible’ and ‘impossible’ events. Identify some events as ‘certain’ or ‘impossible’.

Later Term 4

Number and Algebra

* Whole Numbers – Read, write and order three-digit numbers. Recognise, count and order Australian coins and notes according to their value.
* Addition and Subtraction – Use and record a range of mental strategies for addition and subtraction of two-digit numbers. Solve word problems involving addition and subtraction. Record number sentences using drawings, words, numerals and the symbols +, – and =.
* Multiplication and Division – Model and use arrays described in terms of ‘rows’ and ‘columns’ as a strategy for multiplication. Model and use groups, arrays and repeated subtraction as strategies for division. Record using drawings, words and numerals.
* Fractions and Decimals – Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections. Use fraction notation 1 over 4 and 1 over 8.

Measurement and Geometry

* Length – Recognise the need for formal units to measure length. Use metres and centimetres to measure and estimate lengths and distances. Record lengths using the abbreviations m and cm.
* 3D Space (relate to 2D Space) – Distinguish between three-dimensional objects and two-dimensional shapes. Represent three-dimensional objects in models and drawings.
* 2D Space (relate to Fractions) – Make symmetrical designs with a variety of materials. Identify, perform, describe and record the result of full, half and quarter ‘turns’.

Statistics and Probability

* Data – Pose questions and collect categorical data. Create data displays using lists, tables and picture graphs (one-to-one correspondence) and interpret them.