

Content Clusters - Stage 1

Scope and sequencing by conceptual understanding

This is the scope... you create the sequence.

In this resource I provide possible ways of how groups of outcomes and their key ideas can be sequenced together based on the concepts they address. These are just examples and is not an exhaustive list of the clusters you can use to make connections across mathematics. I have used the [syllabus outcomes](#), sub strands and the mathematics [key ideas](#) document.

When teaching for conceptual understanding (not just the knowledge of each sub strand) we need to make clear how the pieces of the mathematical puzzle fit together. To do this, our planning needs to reflect this belief - that mathematics is a complex web of interrelated ideas.

The scope of what we teach is described in the syllabus (this is the constant), the sequence of what and how we teach mathematics is a decision for individual teachers (this is the variable). These clusters can be used to create meaningful sequences of learning that focus on concepts and programs that still address common sub strands (across grades or classes) but allow for individual teachers to add additional key ideas or focus on specific aspects of the cluster that students either have misconceptions around or are developing conceptual understanding in. The clusters are numbered but are not written in teaching order. These clusters may be added to or updated in the future and newer versions will be released.



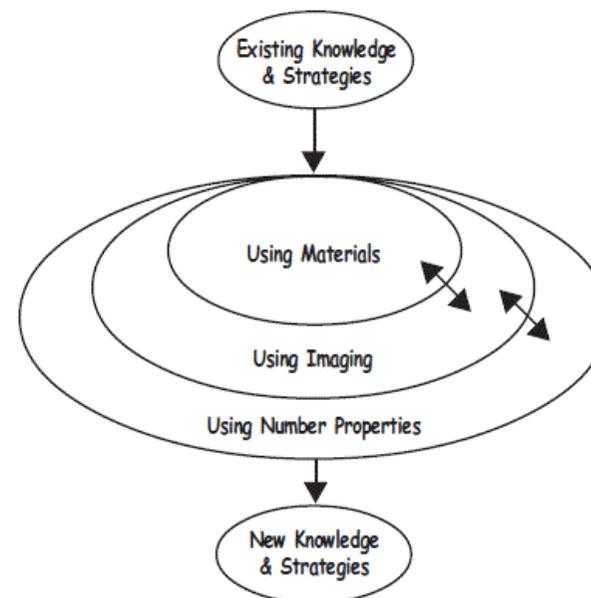
These clusters highlight the concept or main idea that ties each group of outcomes together, assisting teachers in making sense and meaning of the mathematics to students. When we think about the concepts or understandings first, we can think about what misconceptions students may have or what aspects of that concept they need next to connect their prior knowledge (the known) to create new knowledge (the unknown). The image to the right sourced from [NZMaths](#), is based on Pirie and Kieren’s growth in understanding model of the ‘back and forth’ nature of how students develop understanding from the known to the unknown.

A (scope and) sequence should:

- reflect the conceptual needs of your students at this point in time (they need to be evaluated and changed constantly)
- show evidence of connections across sub strands
- address connected content strands that deal with similar concepts within a lesson or within a sequence of lessons (e.g. over a few weeks)
- give teachers an overarching structure to guide immediate planning
- where possible, be written to address the upcoming half- term or term teaching and learning cycle

NESA states that for their [registration process](#) as evidence of compliance schools need to provide “scope and sequence of learning/units of work in relation to outcomes of NESA syllabus for each KLA for each Year” (page 10).

Note: Most schools have a set, wider grade or school-based scope and sequence, you can use the content clusters within those parameters to guide what conceptual understandings you focus on for your students. They show where you can make connections between the sub strands that are listed in the school’s scope and sequence.



References

Mathematics K-10 Syllabus outcomes © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2012.

Pirie, S., & Kieren, T. (1994). Growth in mathematical understanding: How can we characterise it and how can we represent it? *Educational Studies in Mathematics*, 26(2/3), 165-190. doi:10.1007/BF01273662

Where appropriate, clusters have been given the same or similar names as concepts from other stages to help make connections, show concepts that develop, and to assist with multi-stage planning.

Content Cluster 1: Counting numbers (follow a pattern to develop number sense and place value)

<p>Whole Numbers 1 MA1-4NA Read, write and order two-digit numbers Read and use ordinal names to at least 'thirty-first'</p>	<p>Whole Numbers 2 MA1-4NA Read, write and order three-digit numbers</p>	<p>Multiplication and Division 1 MA1-6NA Rhythmic and skip count by twos, fives and tens from zero</p>	<p>Patterns and Algebra 1 MA1-8NA Recognise, copy, continue, create and describe increasing and decreasing number patterns Patterns and Algebra 2 MA1-8NA Describe patterns with numbers and identify missing elements</p>
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Content Cluster 2: Visual representation of collections allows us to compare quantities

<p>Addition and Subtraction 1 MA1-5NA Model addition and subtraction using concrete materials Model and apply the commutative property for addition Use the equals sign to record equivalent number sentences</p>	<p>Whole Numbers 1 MA1-4NA Partition two-digit numbers using place value</p>	<p>Addition and Subtraction 2 MA1-5NA Make connections between addition and subtraction</p>	<p>Multiplication and Division 1 MA1-6NA Model and use equal 'groups of' objects as a strategy for multiplication Multiplication and Division 2 MA1-6NA 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</p>
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Content Cluster 3: Comparing quantities (using numbers, symbols and words)

Addition and Subtraction 1 MA1-5NA

Model addition and subtraction using concrete materials
Model and apply the commutative property for addition
Record number sentences using drawings, words, numerals and the symbols +, - and =

Addition and Subtraction 2 MA1-5NA

Use and record a range of mental strategies for addition and subtraction of two-digit numbers
Make connections between addition and subtraction

Multiplication and Division 1 MA1-6NA

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
Multiplication and Division 2 MA1-6NA
Record using drawings, words and numerals

Fractions and Decimals 1 MA1-7NA

Use fraction notation $\frac{1}{2}$

Fractions and Decimals 2 MA1-7NA

Use fraction notation $\frac{1}{4}$ and $\frac{1}{8}$

Content Cluster 4: Trusting the count: Counting can start from numbers other than one (as a starting point for addition and subtraction)

Whole Numbers 1 MA1-4NA

Count forwards and backwards by ones from a two-digit number

Whole Numbers 2 MA1-4NA

Count forwards and backwards by twos, threes, fives and tens from any starting point

Addition and Subtraction 1 MA1-5NA

Model addition and subtraction using concrete materials

Multiplication and Division 1 MA1-6NA

Rhythmic and skip count by twos, fives and tens from zero

Patterns and Algebra 2 MA1-8NA

Describe patterns with numbers and identify missing elements

Content Cluster 5: Number Representations: Numbers can be represented by words/language, images/drawings, numbers

<p>Whole Numbers 1 MA1-4NA Read, write and order two-digit numbers Read and use ordinal names to at least 'thirty-first'</p>	<p>Addition and Subtraction 1 MA1-5NA Model addition and subtraction using concrete materials Record number sentences using drawings, words, numerals and the symbols +, – and = Use the equals sign to record equivalent number sentences</p> <p>Addition and Subtraction 2 MA1-5NA Use and record a range of mental strategies for addition and subtraction of two-digit numbers</p>	<p>Multiplication and Division 2 MA1-6NA Model and use groups, arrays and repeated subtraction as strategies for division Record using drawings, words and numerals</p>	<p>Patterns and Algebra 1 MA1-8NA Recognise, copy, create, continue and describe repeating patterns of objects or symbols Model and describe odd and even numbers</p>
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Content Cluster 6: Partitioning: Numbers can be partitioned in multiple ways (part-whole number knowledge)

<p>Whole Numbers 1 MA1-4NA Partition two-digit numbers using place value</p> <p>Whole Numbers 2 MA1-4NA Partition numbers of up to three digits using place value</p>	<p>Addition and Subtraction 1 MA1-5NA 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</p> <p>Addition and Subtraction 2 MA1-5NA Use and record a range of mental strategies for addition and subtraction of two-digit numbers</p>	<p>Multiplication and Division 1 MA1-6NA 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</p> <p>Multiplication and Division 2 MA1-6NA 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</p>	<p>Fractions and Decimals 1 MA1-7NA Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections</p> <p>Fractions and Decimals 2 MA1-7NA Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections</p>
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Content Cluster 7: Place Value: A number can be regrouped or renamed to aid in operating with the number (partitioning to operate with numbers)

<p>Whole Numbers 1 MA1-4NA Partition two-digit numbers using place value</p>	<p>Whole Numbers 2 MA1-4NA Partition numbers of up to three digits using place value</p>	<p>Addition and Subtraction 1 MA1-5NA Model addition and subtraction using concrete materials Model and apply the commutative property for addition</p> <p>Addition and Subtraction 2 MA1-5NA Use and record a range of mental strategies for addition and subtraction of two-digit numbers Solve word problems involving addition and subtraction</p>	<p>Multiplication and Division 1 MA1-6NA 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 Model division by sharing a collection equally into groups of a given size to determine the number of groups</p> <p>Multiplication and Division 2 MA1-6NA Model and use groups, arrays and repeated subtraction as strategies for division</p>
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Content Cluster 8: Applies non-count-by-ones (as flexible arithmetic strategies)

<p>Addition and Subtraction 1 MA1-5NA 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 Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers</p>	<p>Whole Numbers 1 MA1-4NA Partition two-digit numbers using place value</p>	<p>Addition and Subtraction 2 MA1-5NA Make connections between 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</p>	<p>Multiplication and Division 2 MA1-6NA Model and use repeated addition as a strategy for multiplication</p>	<p>Patterns and Algebra 2 MA1-8NA Find missing numbers in number sentences involving one operation of addition or subtraction</p>
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Content Cluster 9: One ten is ten ones (number relationships, place value)

Whole Numbers 1 MA1-4NA Partition two-digit numbers using place value	Addition and Subtraction 1 MA1-5NA 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	Addition and Subtraction 2 MA1-5NA Use and record a range of mental strategies for addition and subtraction of two-digit numbers	Patterns and Algebra 2 MA1-8NA Find missing numbers in number sentences involving one operation of addition or subtraction
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Content Cluster 10: One hundred can be regrouped as ten tens, or, one hundred ones (number relationships, place value)

Whole Numbers 2 MA1-4NA Partition numbers of up to three digits using place value Read, write and order three-digit numbers	Length 2 MA1-9MG 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		
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Content Cluster 11: Any number can be a countable unit e.g. counting by fives off the decade (e.g. relate to money)

Whole Numbers 1 MA1-4NA Recognise, describe and order Australian coins according to their value	Whole Numbers 2 MA1-4NA Count forwards and backwards by twos, threes, fives and tens from any starting point Recognise, count and order Australian coins and notes according to their value	Multiplication and Division 1 MA1-6NA Rhythmic and skip count by twos, fives and tens from zero	Patterns and Algebra 2 MA1-8NA Describe patterns with numbers and identify missing elements
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Content Cluster 12: Numbers can be represented using pairs to show odd and even

Patterns and Algebra 1 MA1-7NA Model and describe odd and even numbers	Whole Numbers 2 MA1-4NA Count forwards and backwards by twos, threes, fives and tens from any starting point		
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Content Cluster 13: Patterns repeat or grow and the next number can be predicted (number structure)

Whole Numbers 1 MA1-4NA Read, write and order two-digit numbers Read and use ordinal names to at least 'thirty-first' Whole Numbers 2 MA1-4NA Count forwards and backwards by twos, threes, fives and tens from any starting point	Multiplication and Division 1 MA1-6NA Rhythmic and skip count by twos, fives and tens from zero	Patterns and Algebra 1 MA1-8NA Recognise, copy, continue, create and describe increasing and decreasing number patterns Recognise, copy, create, continue and describe repeating patterns of objects or symbols	Patterns and Algebra 2 MA1-8NA Describe patterns with numbers and identify missing elements
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Content Cluster 14: The 'equals sign' means 'the same as' (equality and inequality)

Addition and Subtraction 1 MA1-5NA Record number sentences using drawings, words, numerals and the symbols +, - and = Use the equals sign to record equivalent number sentences Model and apply the commutative property for addition	Addition and Subtraction 2 MA1-5NA Make connections between addition and subtraction	Patterns and Algebra 2 MA1-8NA Find missing numbers in number sentences involving one operation of addition or subtraction	Mass 1 MA1-12MG 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
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Content Cluster 15: Array structure: Multiples can be visually represented in an array (structure of number)
Multiplication and Division 1 MA1-6NA

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
 Model division by sharing a collection equally into groups of a given size to determine the number of groups

Multiplication and Division 2 MA1-6NA

Model and use repeated addition as a strategy for multiplication
Multiplication and Division 2 MA1-6NA
 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

Patterns and Algebra 1 MA1-8NA

Recognise, copy, create, continue and describe repeating patterns of objects or symbols

Area 1 MA1-10MG

Use uniform informal units to measure and estimate areas
 Record areas by referring to the number and type of uniform informal unit used

Content Cluster 16: The 'for each' concept: For each one of these (how many rows) there are some of those (how much in each row) - multiplicative thinking
Multiplication and Division 1 MA1-6NA

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
 Model division by sharing a collection equally into groups of a given size to determine the number of groups

Multiplication and Division 2 MA1-6NA

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
 Model and use groups, arrays and repeated subtraction as strategies for division

Patterns and Algebra 1 MA1-8NA

Recognise, copy, create, continue and describe repeating patterns of objects or symbols

Whole Numbers 2 MA1-4NA

Count forwards and backwards by twos, threes, fives and tens from any starting point



Content Cluster 17: Quantities can be estimated (how much/ how many) using counting

<p>Length 1 MA1-9MG Use uniform informal units to measure, compare and estimate lengths</p>	<p>Area 1 MA1-10MG Use uniform informal units to measure and estimate areas</p>	<p>Volume and Capacity 1 MA1-11MG Use uniform informal units to measure, compare and estimate capacities Use uniform informal units to measure and estimate volumes</p>	<p>Mass MA1-12MG 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 Mass 2 MA1-12MG Use uniform informal units to measure, compare and estimate the masses of objects</p>	<p>Multiplication and Division 2 MA1-6NA 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</p>	<p>Addition and Subtraction 1 MA1-5NA Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers</p>
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Content Cluster 18: Benchmarks can be used to estimate quantity (how much/ how many)

<p>Length 2 MA1-9MG Compare and order shapes/objects based on length measured using uniform informal units</p>	<p>Time 2 MA1-13MG Experience activities with duration of one hour, half/quarter of an hour, one minute and a few seconds</p>	<p>Fractions and Decimals 1 MA1-7NA Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections Use fraction notation $\frac{1}{2}$ Fractions and Decimals 2 MA1-7NA Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections Use fraction notation $\frac{1}{4}$ and $\frac{1}{8}$</p>	<p>Addition and Subtraction 1 MA1-5NA Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers</p>
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Content Cluster 19: An object has attributes that can be measured using different processes

<p>Length 1 MA1-9MG Use uniform informal units to measure, compare and estimate lengths</p> <p>Length 2 MA1-9MG Record lengths by referring to the number and type of uniform informal unit used</p>	<p>Area 1 MA1-10MG Use uniform informal units to measure and estimate areas Record areas by referring to the number and type of uniform informal unit used</p>	<p>Volume and Capacity 1 MA1-11MG Use uniform informal units to measure, compare and estimate capacities 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</p>	<p>Mass 2 MA1-12MG 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</p>	<p>Addition and Subtraction 1 MA1-5NA Model addition and subtraction using concrete materials Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers</p>	<p>Multiplication and Division 2 MA1-6NA Model and use arrays described in terms of ‘rows’ and ‘columns’ as a strategy for multiplication</p>	<p>Three-Dimensional Space 2 MA1-14MG Represent three-dimensional objects in models and drawings</p>
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Content Cluster 20: Repeated units provide structure: Units of measurement can be iterated (no gaps or overlaps)

<p>Length 1 MA1-9MG Use uniform informal units to measure, compare and estimate lengths</p> <p>Length 2 MA1-9MG Record lengths by referring to the number and type of uniform informal unit used</p>	<p>Area 1 MA1-10MG Use uniform informal units to measure and estimate areas Record areas by referring to the number and type of uniform informal unit used</p>	<p>Addition and Subtraction 1 MA1-5NA Model addition and subtraction using concrete materials Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers</p> <p>Addition and Subtraction 2 MA1-5NA Use and record a range of mental strategies for addition and subtraction of two-digit numbers</p>	<p>Multiplication and Division 1 MA1-6NA Rhythmic and skip count by twos, fives and tens from zero</p> <p>Multiplication and Division 2 MA1-6NA 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</p>	<p>Whole Numbers 2 MA1-4NA Count forwards and backwards by twos, threes, fives and tens from any starting point</p>
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Content Cluster 21: Objects can be ordered based on (informal) units of measurement (e.g. size, quantity/number of cubes a container can hold)

<p>Whole Numbers 1 MA1-4NA Read, write and order two-digit numbers</p>	<p>Addition and Subtraction 1 MA1-5NA Model addition and subtraction using concrete materials</p>	<p>Length 2 MA1-9MG Compare and order shapes/objects based on length measured using uniform informal units</p>	<p>Area 2 MA1-10MG Compare and order surfaces based on area measured using uniform informal units</p>	<p>Volume 2 MA1-11MG Compare and order objects based on capacity and volume measured using uniform informal units</p>
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Content Cluster 22: Objects can be measured and compared using formal units

<p>Length 2 MA1-9MG 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</p>	<p>Addition and Subtraction 1 MA1-5NA Use and record a range of mental strategies for addition and subtraction of one- and two-digit numbers</p>		
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Content Cluster 23: A fraction is a number that represents a relationship between parts and the whole (number relationships)

<p>Fractions and Decimals 1 MA1-7NA Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections</p>	<p>Fractions and Decimals 2 MA1-7NA Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections</p>	<p>Time 2 MA1-13MG Experience activities with duration of one hour, half/quarter of an hour, one minute and a few seconds</p>	<p>Two-Dimensional Space 2 MA1-15MG Identify, perform, describe and record the result of full, half and quarter 'turns'</p>
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Content Cluster 24: Fractions are created through sharing - division (a fraction is less than one whole and that fractions are the result of dividing e.g sharing 2 biscuits among 4 people)

<p>Fractions and Decimals 1 MA1-7NA Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections Use fraction notation $\frac{1}{2}$</p>	<p>Fractions and Decimals 2 MA1-7NA Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections Use fraction notation $\frac{1}{4}$ and $\frac{1}{8}$</p>	<p>Multiplication and Division 1 MA1-6NA 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</p>	<p>Multiplication and Division 2 MA1-6NA Model and use groups, arrays and repeated subtraction as strategies for division</p>
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Content Cluster 25: A fraction can be represented in many ways e.g as length, area, or a collection (continuous and discrete representations)

<p>Fractions and Decimals 1 MA1-7NA Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections Use fraction notation $\frac{1}{2}$</p>	<p>Fractions and Decimals 2 MA1-7NA Recognise, describe and represent halves, quarters and eighths of whole objects, shapes and collections Use fraction notation $\frac{1}{4}$ and $\frac{1}{8}$</p>	<p>Multiplication and Division 1 MA1-6NA Model division by sharing a collection equally into a given number of groups to determine the number in each group</p>	<p>Length 2 MA1-9MG Use metres and centimetres to measure and estimate lengths and distances Record lengths using the abbreviations m and cm</p>	<p>Time 2 MA1-13MG Experience activities with duration of one hour, half/quarter of an hour, one minute and a few seconds</p>
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Content Cluster 26: Shape properties remain constant even when they are moved or reorientated (transforming shapes)

<p>Three-Dimensional Space 1 MA1-14MG Identify cones, cubes, cylinders, spheres and prisms presented in different orientations, in pictures and the environment Recognise that three-dimensional objects look different from different vantage-points</p>	<p>Two-Dimensional Space 1 MA1-15MG Identify and name triangles, quadrilaterals, pentagons, hexagons and octagons presented in different orientations, in pictures and the environment</p>	<p>Two-Dimensional Space 2 MA1-15MG Make and draw two-dimensional shapes in different orientations Identify, perform, describe and record the result of full, half and quarter 'turns'</p>	
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Content Cluster 27: Shapes and objects are classified based on properties (describing and comparing features)

<p>Three-Dimensional Space 1 MA1-14MG Distinguish between flat and curved surfaces Use the term 'faces' to describe flat surfaces with straight edges</p>	<p>Three-Dimensional Space 2 MA1-14MG Use the terms 'flat surface', 'curved surface', 'face', 'edge' and 'vertex' appropriately to describe three-dimensional objects Recognise faces of three-dimensional objects as two-dimensional shapes Distinguish between three-dimensional objects and two-dimensional shapes Represent three-dimensional objects in models and drawings</p>	<p>Two-Dimensional Space 1 MA1-15MG Identify horizontal, vertical and parallel lines Use the terms 'side' and 'vertex' to describe and compare two-dimensional shapes</p>	
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Content Cluster 28: Patterns can be created using shapes (copying, turning, flipping, sliding)

<p>Two-Dimensional Space 1 MA1-15MG Identify horizontal, vertical and parallel lines</p>	<p>Two-Dimensional Space 2 MA1-15MG Make and draw two-dimensional shapes in different orientations Identify, perform and record the result of one-step 'slides' and 'flips' Make symmetrical designs with a variety of materials Identify, perform, describe and record the result of full, half and quarter 'turns'</p>	<p>Patterns and Algebra 1 MA1-8NA Recognise, copy, create, continue and describe repeating patterns of objects or symbols</p>	
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Content Cluster 29: Locating: Your position can be described in relation to other objects or landmarks

<p>Position 1 MA1-16MG 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 Describe a path from one location to another</p>	<p>Position 2 MA1-16MG Interpret simple maps of familiar locations Represent the position of objects in models, photographs and drawings</p>	<p>Two-Dimensional Space 2 MA1-15MG Make and draw two-dimensional shapes in different orientations</p>	<p>Three-Dimensional Space 2 MA1-14MG Represent three-dimensional objects in models and drawings</p>
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Content Cluster 30: Time can be measured in minutes and hours

<p>Time 1 MA1-13MG Tell time to the half-hour</p>	<p>Time 2 MA1-13MG Experience activities with duration of one hour, half/quarter of an hour, one minute and a few seconds Tell time to the quarter-hour, using the language of 'past' and 'to'</p>	<p>Fractions and Decimals 1 MA1-7NA Recognise, describe and represent one-half as one of two equal parts of whole objects, shapes and collections</p>	
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Content Cluster 31: Time (duration) can be visually represented in multiple ways e.g. calendars, clocks, timetables

Whole Numbers 1 MA1-4NA

Read and use ordinal names to at least 'thirty-first'

Time 1 MA1-13MG

Name and order months and seasons
Use a calendar to identify the date and determine the number of days in each month

Time 2 MA1-13MG

Use a calendar to determine duration in months, weeks and days
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

Content Cluster 32: Collecting data: Information can be collected and represented using numbers

Data 1 MA1-17SP

Collect data and track what has been counted

Data 2 MA1-17SP

Pose questions and collect categorical data

Whole Numbers 1 MA1-4NA

Count forwards and backwards by ones from a two-digit number

Addition and Subtraction 2 MA1-5NA

Solve word problems involving addition and subtraction

Addition and Subtraction 1 MA1-5NA

Model addition and subtraction using concrete materials
Record number sentences using drawings, words, numerals and the symbols +, - and =

Content Cluster 33: Representing data: Information can be presented visually to convey meaning (data representations)

Data 1 MA1-17SP

Create data displays using objects and pictures (one-to-one correspondence) and interpret them

Data 2 MA1-17SP

Create data displays using lists, tables and picture graphs (one-to-one correspondence) and interpret them

Two-Dimensional Space 1 MA1-15MG

Identify horizontal, vertical and parallel lines



Content Cluster 34: Events can be measured and predicted based on chance

Chance 1 MA1-18SP

Recognise the element of chance in familiar situations
Describe chance events using everyday language

Chance 2 MA1-18SP

Identify practical activities and everyday events that involve chance
Describe events as 'likely' or 'unlikely'
Distinguish between 'possible' and 'impossible' events
Identify some events as 'certain' or 'impossible'

Time 2 MA1-13MG

Use informal units to measure and compare the durations of events