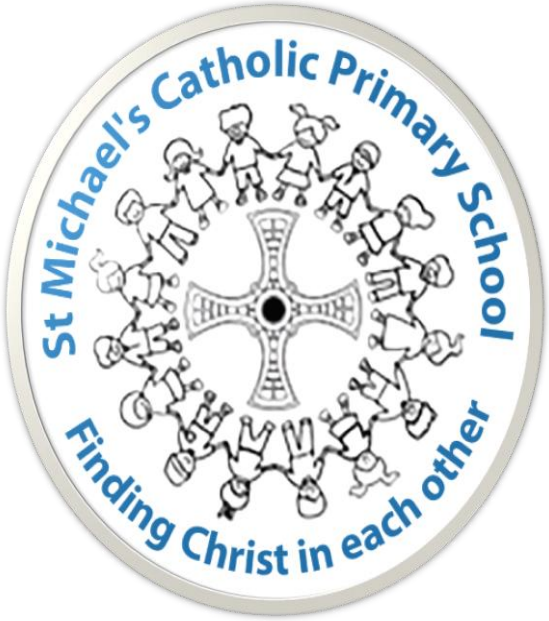
St Michael's Catholic Primary School



Maths Progression of Knowledge and Skills

NURSERY

Nursery 1

Nursery 1 children are not required to take part in WR input	- Shows an interest in size and weight -Explores capacity by selecting, filling and emptying containers, e.g. fitting toys in a pram -Beginning to understand that things might happen now or at another time, in routines

Nursery 2

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Block 1 – Comparison 1 **More than, fewer then, the same** -Children will collect objects to compare amounts. -Children will make simple comparisons of amounts. -Children will look for collections of large and small amounts. -Children will compare and talk about large and small amounts. -Children will make large and small collections. -Children will make collections the same.	**Block 5 – Counting 2** **Begin to order number names** -Model saying 1,2,3 in play -Children copy the sequence of 1,2,3 in play -Children will copy fingers to represent 1,2,3 -Children will begin to count actions -Children will say number names in order. -Children will begin to recognise anything that can be counted.	**Block 9 – Subitising 2** **Show me 1,2,3** -copy fingers to show 1 -Copy fingers to show 2 -Copy fingers to show 3 -Show 1 finger when seeing 1 thing is stories -Show two or three fingers when seeing two or three things in stories -show 1,2 and 3 on fingers when asked. -	**Block 13 – Counting 4** **Take and give 1,2,3** -Choose a group to count -Take out two from a group -Take out three from a group -Give others 2 items -Give others 3 items -Count 3 objects with 1:1 correspondence	**Block 17 – Pattern 4** **Lead on own repeats** -Join in fully with sequences and songs -Sing rhymes independently -Lead sequences and songs -Read on in familiar repeating stories -Copy art-based simple patterns -Explore own line and repeating patterns in art	**Block 21 – Counting 5** **Show me 5** -Sing rhymes to 5 and join in with movements -Move props to 5 -Move probs back from 5 -Show fingers to 5 -Begin to count 5 objects with 1:1 correspondence -Match numerals to quantities when acting out songs
Block 2 – Shape, space and measure 1 **Explore and build with shapes and objects.** -Children will explore and play with shapes.	**Block 6 – subitising 1** **I see 1,2,3** -Children will notice images in books	**Block 10 – counting 3** **Move and label 1,2,3** -Make actions when saying counting words	**Block 14- Shape, space and measure 4** **Match, talk, push and pull** -Match simple shapes	**Block 18 – Shape, space and measure 5** **Starting to puzzle** -Complete shape match puzzles	**Block 22 – Pattern 6** **My own pattern** -continue AB patterns

	-Children will show interest in simple differences between shapes. -Children will put shapes and blocks into position. -Children will select shapes for reason. -Children will begin to explore and describe natural shapes and objects. -Children will find and collect objects for purpose.	-Children respond to "I see 1,2,3," by taking interest in noticing 1, 2 or 3 in books. -Children will recognise "I see 1,2,3" -Children will copy "I see 1,2,3" after an adult or another child. -Children will point to 1, 2, 3 in books, images and the world around them. -Children will recognise 1, 2, 3 in well-known tales.	-Move fingers when saying counting words -Count up to 3 objects from rhymes -Notice number symbols as labels -Label amounts as 1 and not 1 -Label amounts as 1,2 or 3	-push some shapes and blocks together -Make simple arrangements -Talk about arrangements -Follow simple routes outside -Follow toys around a simple route	-Complete simple jigsaws -Match objects to pictures -Match objects to shadows -Explore objects and small world from different positions -Make simple routes in small world with lines and curves.	-Create their own AB patterns -Notice an error in a pattern -Build constructions with simple enclosures -Copy simple repeated constructions -Begin to sequence some events
	Block 3 – Pattern 1 **Explore repeats** -Children will listen to repeats in songs and stories. -Children will start to join in songs with repeats. -Children will starts to join in with repeats from stories. -Children will clap along to songs. -Children will make line patterns with own sequences. -Children will choose blocks to build roads and towers.	**Block 7 – Pattern 2** **Join in with repeats** -Children will join in with repeated actions in songs. -Children will join in with repeats in songs and stories. -Children will sing some refrains independently. -Children will have a sense of daily routines -Children will say what happens next. -Children build on previous learning of making line patterns and will make arrangements in art.	**Block 11- Space, shape and measure 3** **Explore position and routes** -Explore shape resources -Explore more complex inset jigsaws -Talk about simple positions -Move into simple positions -Move through positions -Follow simple small-world routes.	**Block 15 – Subitising 3** **Talk about dots** -Become familiar with dot patterns -Say when there is one dot -Say when there are two dots -Recognise one and two in different arrangements -Say when there are 3 dots -Recognise one, two and three in different arrangements.	**Block 19 – Pattern 5** **Making patterns together** -Sing their own songs independently -Clap in time to a beat -Make and talk about movement patterns -Talk about objects in patterns and arrangements -Copy AB patterns with support -Continue AB patterns with support.	**Block 23 – Counting 6** **Stop at 1,2,3,4,5** -Count up to 5 objects from a larger group -Explore counting to 5 in different ways -Verbally count to a given number -Label objects with numerals -Independently show fingers to 5 -Begin to make marks to represent quantities.

	Block 4 - Counting 1 **Hear and say numbers** -Children will hear some number names. -Children join in saying number names. -Model saying number names in order -Children will practise saying number names in order. -Children will join in stable order counting forwards. (1,2,3,4,5) -Children will join in stable order counting backwards. (1,2,3,4,5)	Block 8 – Shape, space and measure 2 **Explore position and space** -Children will respond to simple language of position. -Children will arrange blocks in a chosen position. -Children will select shapes for a space. -Children will recognise when 2 objects are the same shape. -Children will explore and describe shapes and objects. -Children will sort shapes and objects into simple categories.	Block 12 – Pattern 3 **Explore own first patterns** -Explain simple pattern arrangements -Make roads and bridges with intent -Choose blocks to copy simple creations -Make simple line patterns with objects -Make simple pattern arrangements -Show an interest in patterns and shapes.	Block 16 – Comparison 2 **Compare and sort collections** -Notice when two collections are the same -Make collections of small objects the same -Make collections of large objects the same -Recognise two collections are the same using small and large objects -Make collections the same using small and large objects -Sort and talk about their own collections	Block 20 – subitising 4 **Make games and actions** -Match dot patterns -Be introduced to subitising games -Play subitising games -Copy sets of sounds -Listen to and represent sounds with fingers -Listen to and represent sounds with resources	Block 24 -Comparison 3 **Match, sort, compare** -Compare up to five different objects -Compare by matching -Match by type -Recognise attributes of objects -Begin to sort some objects to a type.

RECEPTION

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
Autumn Number	**Baseline assessments:** The Reception Baseline Assessment from the Local Authority.		**Focus: Subitising** Subitise 1 and 2 Subitise 3 Make and describe special patterns with 3 dots Represent quantities on their fingers in different ways	**Focus: Counting, cardinality and ordinality** Hear and join in with the counting sequence to 5, including using	**Focus: Composition** Know that 2 is made of 1 and 'another 1' Make their own collections of 2	**Focus: Subitising** Subitise arrangements of 2 and 3 Practise making 2s and 3s with their fingers	**Focus: Comparison** Represent a given number on their fingers without looking Compare 2 sets of	**Focus: Counting, cardinality and ordinality** Practise counting each object, action or sound once	**Focus: Comparison** Practise subitising amounts to 4 Revisit 'more than' or 'fewer	**Focus: Composition** Identify the 'whole' when shown 1 part of a familiar object Identify that the	**Focus: Composition** Investigate ways to compose and de-compose sets of 3 Explore how 1 and	**Focus: Subitising** Use their fingers to quickly show quantities on 1 hand Recognise the numerals 1–5	Recap and consolidation

		Identify sub-groups of 1, 2 and 3 within larger arrangements	songs and rhymes See that counting is useful because it tells us 'how many' See that the last number in the count tells us 'How many altogether' (cardinality). Practise counting each object, action or sound once and only once. Experience counting sounds Record the results of their count Count each object, action or sound once and only once.	objects and identify the '1 and another 1' within them. Identify when a collection is composed of 3 objects Produce their own collection of 3. Identify when a collection is composed of 3 or NOT 3 See that 4 can be made with four 1s.	Subitise auditory patterns up to 3. Identify when a small collection is rearranged or the quantity changed. Show small quantities on their fingers Use positional language to describe patterns of 4. Make patterns showing 4	objects and say which is 'more than'. compare 2 sets of objects and say which is 'more than' or 'fewer than'.	Hear and join in with the counting sequence to 5 Tag each object with 1 number word (1:1 correspondence) See that they have 5 fingers on one hand. Make collections of 5 in different ways. Use a die frame to represent 5. Count each object, action or sound once Count 5 and 5 to make 10 altogether.	than' by looking. Compare groups of up to 3 objects by matching them 1:1 Say when they have an equal number. Say when there is an equal number, too many or not enough. Build towers with an equal number of squares Match the squares in the towers 1:1 Say when there is an equal number, too many or not enough.	parts are still visible when they are assembled to make the whole Hear the language of 'whole' and 'parts'. Identify parts of their own body Recognise that some whole objects have parts that cannot be removed. Identify parts of some animals' bodies Recognise that some whole objects have parts that cannot be removed. Investigate ways to compose and de-compose sets of 2 and 3 Know that 1 and 2 are parts of 3.	2 are parts of 3. Investigate ways to compose and de-compose 4. Use spatial language to describe the shapes Explain that different parts can make the same whole. Investigate ways to compose and de-compose 5	Begin to develop their conceptual subitising skills with linear and paired arrangements of up to 5 dots. Subitise linear and paired arrangements of 2, 3 and 4 dots Visualise and recreate arrangements of 3, 4 and 5 dots Match arrangements of 3, 4 and 5 dots to the correct numerals. Match numerals to quantities for 1–5 Recognise die arrangements Visualise and describe arrangements of dots on a die Use dice to link subitised amounts	

												with 1-to-1 counting actions Recognise die patterns to 6 Link die patterns to numbers shown on their fingers Use die patterns to play track games.	
Space, shape and measure.	Match objects with objects.	Match objects with pictures	Identify a set	Sort objects to a type and explore sorting techniques. Create own sorting rules (by playing games such as 'guess my rule'		Compare size	Compare Mass	Compare capacity	**Explore simple patterns and copy and continue simple patterns**	**Copy and continue simple patterns and create own simple patterns**	Identify and name circles and triangles	Compare circles and triangles and spot shapes in the environment	**Recap and consolidation**
	Daily practice: Counting forwards and backwards up to 10 and beyond												
Spring Number	**Focus: Counting, cardinality and ordinality** Recognise numerals 1–5 Order numbers from 1–5. Match numerals to quantities in order Help to build towers in order from 1–5 squares See the staircase pattern and recognise that each number is 1 more. Order towers of 1–5 interlocking cubes	**Focus: Composition** Show numbers to 5 using their fingers See that 5 can be partitioned into 4 and 1. Show ways of making 5 on their fingers See that 5 can be partitioned into 3 and 2. Find ways to partition a set of 5. Understand that 5 can be partitioned (split) into different parts Be able to explain what the parts are	**Focus: Composition** See that there are 5 dots on a die pattern Represent 4 in different ways on a die frame. Use their fingers to represent 6 as '5 and a bit' Use double dice frames to	**Focus: Comparison** Use 'more than' and 'fewer than' to describe quantities Say when they can see that someone has more or fewer of the same kind of object Know that it is quantity – not colour – that	**Focus: Counting, cardinality and ordinality** Practise counting aloud Revisit the principles of counting. Use generalised statements to describe the '5 and a bit' composition of the numbers 6–8.	**Focus: Comparison** Subitise arrangements of 6 and NOT 6 Order Numberblock images to 8. Represent 8 as '5 and 3 more' Describe how to place the numbers 1 to 8 in order.	**Focus: Composition** Use skills of conceptual subitising to describe parts of a whole set Visualise arrangements and use gestures to describe the numbers within a whole set Investigate ways of making 7	**Focus: Composition** Practise identifying when 2 sets are equal in number. Identify when a double is shown and explain why. Say what the whole is when there are 2 equal parts.	**Focus: Composition** Say what the whole is when there are 2 equal parts Recognise and talk about ways in which objects are similar to or different from each other (colour, size, function,	**Focus: Counting, cardinality and ordinality** Count things that cannot be seen – sounds Revisit rules for how to count Discuss and practise strategies for counting larger sets.	**Focus: Subitising** Visualise, make and describe spatial arrangements of 6. Practise subitising to 6 Listen to rhythmic patterns of up to 5 sounds and determine the quantity Recognise Numberblocks and related	**Focus: Composition** Recap that there are 5 fingers on 1 hand Consolidate their use of finger patterns to represent the composition of 5. Identify a missing part of 5. Identify when a set of objects	Recap and consolidation

	Notice when we have '1 more' and when we do NOT have '1 more'. Match numerals to representations Represent staircase patterns in different ways, knowing that each new 'step' is 1 more than the last.	Use what they know about 5 to work out a hidden number.	represent 6 as 5 and 1 more. Match die representations of numbers 1–6 to representations on their fingers See that 5 and '2 more' make 7. Count out 6 blocks from a collection Replace 1 block and know that there are still 6 Add another block to make 7.	determines if 1 set has more or fewer of the same type of object than another. Use the words 'an equal number' to say when there is the same number of items in 2 sets Say when they can see an equal number.	Investigate the '1 more/1 less' pattern of the base-10 counting system Begin to order numbers between 1 and 10, noticing the '5 and a bit' structure. Describe the '1 more/1 less' relationship of numbers to 10 Work together to order numbers between 1 and 10, noticing the '5 and a bit' structure.	Explain how to order quantities to 10 Reason about which numbers are 'more than' others. Consolidate their understanding of 8 as '5 and 3 more' Notice when numbers are increased or decreased and explain their thinking.	with two parts Use their fingers to make and describe 7 as '5 and 2 more'. Notice when towers are made of 7 or NOT 7 interlocking cubes Work out the missing part of 7 using the '5 and a bit' structure. See that 7 can be composed in different ways Explain their understanding of the composition of 7.	Use objects to make doubles patterns and describe what they can see. Show doubles patterns on their fingers in response to being given the whole Use positional language to describe spatial arrangements of objects Visualise doubles patterns to 5 and 5.	shape, etc.) Sort objects according to attributes described by an adult. Describe attributes that they notice for a group of objects Sort and re-sort objects according to their own attributes. Describe attributes of the Numberblocks Sort the Numberblocks using the criteria 'odd blocks' or 'even tops'. Investigate patterns of doubles.	Count things that cannot be seen – actions Discuss and practise strategies for counting larger sets by moving objects. Count things that cannot be seen – periods of time Discuss and practise strategies for counting larger sets by moving images Make or represent their own collections of larger amounts. Practise counting on from a given number Discuss and practise strategies for counting larger amounts that	doubles patterns on their fingers without counting. Subitise doubles amounts shown on 10-frames.	has 5/NOT 5 Identify that 6 can be composed of 5 and 1, and 7 can be composed of 5 and 2. Identify arrangements of 6 or 7 objects Represent numbers 6 – 9 on their fingers as '5 and a bit'.	

										cannot be moved.			
Shape, space and measure	Describe position	Identify and name shapes with 4 sides.	Combine shapes with 4 sides	Find shapes in the environment	My day and night	Explore and compare capacity	Explore and compare length	Explore and compare height	Talk about time and order sequence and time	Recognise and name 3-D shapes and find 3-D shapes in the environment	Find 2D shapes within 3D shapes and use 3D shapes for tasks.	Identify, copy and continue more complex patterns.	Recap and consolidation
	Daily practice: counting forwards and backwards up to 20 and beyond												
Summer Number	**Focus: Composition** Recap the numbers 6 to 9 in the '5 and a bit' structure Recap that 10 can be composed of 5 and 5 identify when 10 is shown using structured arrangements of objects. Match numerals to quantities shown as the 5 and a bit structure Explore ways in which 10 can be composed of 2 parts Represent the composition of 10 using dice frames and finger patterns. Use structured arrangements to find missing parts of 10 Solve problems involving the composition of 10.	**Focus: Comparison** Join in with a backward count from 5 to 1 Order towers of cubes or number plates from 1–10 on a class number track. Use language to describe positions on a number track. Identify whether numbers are before or after 5 on the number track. Begin to understand the rules for simple linear track games. Reason about the position of numbers on a number track Describe and follow the rules for simple, linear track games.	**Focus: Subitising on a rekenrek** Subitise numbers up to 5 represented by finger patterns Orientate a rekenrek correctly and push a number of beads with one finger. Subitise numbers up to 5 using linear dot patterns Use 'one finger, one push' to move a number of beads on the top row ALL AT ONCE to the far left of the rekenrek. Subitise numbers up to 5 using standard and non-standard dot patterns Use 'one finger, one push' to subitise and explore '1 more' patterns of beads on the rekenrek. Subitise numbers up to 5	**Review and assess Focus: comparison** Subitise quantities to 5 Say which set of up to 10 objects contains more than the other. Use their fingers to show 'more than' numbers to 10 Use rekenreks to push amounts of beads that are equal to, more than and fewer than a given number. Subitise '1 more' amounts to 5 Order towers to 10 – recognising the '1 more' pattern of number. Use their fingers to show 'more than' numbers to 10 Explore the order and magnitude of numbers to 10.	**Review and assess focus: Counting beyond 20** Subitise numbers to 5 and make equivalent amounts with their rekenreks Count out 6 or 8 objects from a larger group and check by counting 1-to-1 Arrange 6 or 8 objects into groups that can be subitised. Join in with the counting sequence to 10 Recognise and show numbers from 5 to 10 in '5 and a bit' arrangements Remember to stop when they count to the end of a set of up to 10 jumps/claps/hops. Count 20 objects	**Review and assess focus: Patterns within numbers to ten** Discuss their understanding of equivalence Make and describe doubles arrangements on their fingers. Distribute collections of objects into equal and unequal groups Sort numbers to 10 according to whether each number is a double / is not a double. Use their fingers to make matching doubles amounts Make and describe doubles patterns on a rekenrek. Recognise an odd and an even number when arranged in a 'doubles' pattern Sort models into those that	**Review and assess focus: Automatic recall** Find ways to partition (split) a set of 5 Understand that 5 can be partitioned in different ways. Understand that 5 can be partitioned (split) in different ways Use what they know about 5 to work out a hidden number. Use their fingers to represent numbers within 5 Use dice frames as a different structure with which to represent the same numbers within 5 Use spatial language to describe their arrangements Use positional language to describe spatial	**Review and assess focus: Understanding of numbers to ten** Use their fingers to make and describe doubles facts Explore and represent the composition of 5 on die frames Explore the commutativity of addition facts. Explore and represent the composition of 5 on rekenreks Use fingers and dice frames to explore and represent '5 and a bit' numbers to 10. Use their fingers to represent '1 more than/1 less than' a given number Use 10-frames to explore '5 and a bit' numbers to 10. Use what they know about the number	All Mastering number content will have been taught by this point. Use diagnostic assessment grid to assess and use these weeks to recap and plug gaps. Recap and consolidation	

	Identify pairs of numbers that make 10 in unstructured arrangements Identify a missing part of 10 in structured arrangements.		represented on dice frames Use 'one finger, one push' to subitise and explore '1 fewer' patterns of beads on the rekenrek.		Practise saying the tricky 'teen' numbers. Practise counting to 100 Share strategies for counting larger amounts that can't be moved.	contain odd and those that contain even numbers of interlocking cubes.	arrangements of objects Visualise and describe doubles patterns up to '5 and 5'.	sequence to work out missing numbers to 10 Use rekenreks to explore and make '5 and a bit' numbers to 10.				
Shape, space and measure	Select shapes for purpose	Rotate and manipulate shapes	Explain shape arrangements	Compose and decompose shapes copy 2D shape pictures	Find 2D shapes within 3D shapes	Identifying units of repeating patterns Create and explore own pattern rules.	Replicate and build scenes and constructions	Describe positions and visualise from different positions	Give instructions to build	Explore mapping and represent maps with models	Create own maps from familiar places and from story situations such as Little Red Riding Hood	Recap and consolidation	Recap and consolidation
	Daily practice: counting up to 30 and beyond (forwards)												

Ready To Progress Criteria

Key Stage 1

YEAR 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place value (within 10)** Sort objects (e.g. colour, shape, size) Count objects Count objects from a larger group Represent objects Recognise numbers as words Count on from any number- NPV1 1 more Count backwards within 10-NPV1 1 less Compare groups by matching Fewer, more, same- NPV2 Less than, greater than, equal to- NPV2 Compare numbers Order objects and numbers-NPV2 The number line-NPV2					**Addition and Subtraction (within 10)** Introduce parts and wholes Part-whole model Write number sentences Fact families - addition facts-AS2 Number bonds within 10-NF1/AS1 Systematic number bonds within 10-NF1/AS1 Number bonds to 10- NF1/AS1 Addition - add together-AS2 Addition - add more-AS2 Addition problems-AS2 Find a part-AS2 Subtraction - find a part-AS2 Fact families - the eight facts Subtraction - take away/crossing out (How many left?) -AS2 Subtraction - take away (How many left?) -AS2 Subtraction on a number line-AS2 Add or subtract 1 or 2					**Geometry: shape** Recognise and name 3-D shapes-G1 (EYFS plus prism, cuboid, square-based pyramid,) Sort 3-D shapes Recognise and name 2-D shapes-G1 (EYFS plus, pentagon, hexagon) Sort 2-D shapes-G1 Patterns with 3-D and 2-D shapes-G1 To name the faces of 3D shapes and say if they are curved or flat	Consolidation Assessments
Spring Linked to Science lessons	**Place Value (within 20)** Count within 20-NPV1 Understand 10 Understand 11, 12 and 13 Understand 14, 15 and 16 Understand 17, 18 ad 19 Understand 20 1 more and 1 less-NPV2 The number line to 20-NPV2 Estimate on a number line to 20-NPV2 Compare numbers to 20-NPV2 Order numbers to 20-NPV2			**Addition and Subtraction** Add by counting on within 20 Add ones using number bonds-AS2 Find and make number bonds to 20-AS2 Doubles Near doubles Subtract ones using number bonds-AS2 Subtraction- counting back Subtraction- finding the difference Related facts-AS2 Missing number problems-AS2			**Number: Place Value (within 50)** Counting from 20-50- NPV1 20,30,40 and 50 Count by making groups of 10 Groups of tens and ones Partition into tens and ones The number line to 50 Estimate on a number line to 50 1 more, 1 less		**Measurement: Length & Height** Compare lengths and heights using non-standard units Measure lengths using objects Measure length using a cm ruler		**Measurement: Weight & Volume** Introduce weight and mass (heavy/light) Measure mass (balancing scales) Compare mass (balancing scales) Introduce capacity and volume (full/empty, half full, more than less than, quarter full) Measure capacity (glass/jugs) Compare capacity	
Summer	**Multiplication and Division** Count in 2s-NF2 Count in 10s-NF2 Count in 5s-NF2 Recognise equal groups Add equal groups Make arrays			**Fractions** Recognise a half of an object or a shape Find a half of an object or a shape Recognise a half of a quantity		**Geometry** Describe turns Describe position – left and right Describe position –	**Place Value (within 100)** Count from 50 to 100-NPV1 Tens to 100 Partition into tens and ones The number line to 100-NF2 1 more, 1 less	**Money** Unitising-NF2 Recognise coins Recognise notes Count in coins-NF2	**Measurement: Time** Before and after Days of the week Months of the year Hours, minutes and seconds Tell the time to the hour Tell the time to the half hour		Consolidation Assessments

	Make doubles Make equal groups – grouping Make equal groups – sharing	Find a half of a quantity Recognise a quarter of an object or a shape Find a quarter of an object or a shape Recognise a quarter of a quantity Find a quarter of a quantity	forwards and backwards Describe position – above and below Ordinal numbers	Compare numbers with the same number of tens Compare any two numbers			

YEAR 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place Value** Numbers to 100 Count objects to 100 by making 10s Recognise tens and ones-NPV1 Use a place value chart-NPV1 Partition numbers to 100-NPV1 Write numbers to 100 in words-NPV1 Flexibly partition numbers to 100-NPV1 Write numbers to 100 in expanded form-NPV1 10s on the number line to 100-NPV2 10s and 1s on the number line to 100-NPV2 Estimate numbers on a number line-NPV2 Compare objects Compare numbers Order objects and numbers Count in 2s, 5s and 10s Count in 3s			**Addition and subtraction** Bonds to 10-NF2 Fact families – addition and subtraction bonds to 20 Related facts Bonds to 100 (tens)-AS2 Add and subtract 1s Add by making 10-NF1 Add three 1-digit numbers Add to the next 10- NF1/AS2 Add across 10-AS1/AS3 Subtract across 10-AS1/AS3 Subtract from 10-NF1/AS1/AS3 Subtract a 1-digit number from a 2-digit number – crossing ten- NF1/AS1/AS3 10 more, 10 less-AS3 Add and subtract 10s-AS3 Add two 2-digit numbers – not crossing ten -AS4 Add two 2-digit numbers – crossing ten-AS4 Subtract a 2-digit number from a 2-digit number – not crossing ten-AS4 Subtract a 2-digit number from a 2-digit number – crossing ten-AS4 Mixed addition and subtraction Compare number sentences Missing number questions					**Geometry: properties of shapes** Recognise 2-D and 3-D shapes (Year 1 plus heptagon, octagon, nonagon, decagon, regular and irregular and types of prism)-G1 Count sides on 2-D shapes-G1 Count vertices on 2-D shapes-G1 Draw 2-D shapes Lines of symmetry on shapes Use lines of symmetry to complete shapes Sort 2-D shapes-G1 Count faces on 3-D shapes-G1 Count edges of 3-D shapes-G1 Count vertices on 3-D shapes-G1 Sort 3-D shapes-G1 Make patterns with 2-D and 3-D shapes			
Spring	**Measurement: money** Count money – pence Count money – pounds (notes and coins) Count money – pounds and pence Choose notes and coins Make the same amount Compare amounts of money Calculate with money-AS4 Make a pound Find change-AS4 Two-step problems			**Multiplication and division** Recognise equal groups-MD1 Make equal groups-MD1 Add equal groups MD1 Introduce multiplication symbol- MD1 Multiplication sentences MD1 Use arrays Make equal groups – grouping- MD2			**Measurement: length and height** Measure in cm Measure in m Compare lengths and heights Order lengths and heights Four operations with length and height-AS4		**Measurement: mass, capacity and temperature** Compare mass Measure in grams- MD1 Measure in kg Four operations with mass- MD1 Compare volume and capacity Measure in ml Measure in l Four operations with volume and capacity- MD1 Temperature			

			Make equal groups – sharing The 2-times table Divide by 2- MD2 Doubling and halving Odd and even numbers The 10-times table Divide by 10- MD2 The 5-times table Divide by 5- MD2 The 5- and 10- times tables		
Summer	**Fractions** Introduction to part and wholes Equal and unequal parts Make equal parts Recognise a half Find a half Recognise a quarter Find a quarter Recognise a quarter Find a quarter Recognise a third Find a third Find the whole Unit fractions Non-unit fractions Recognise the equivalence of a half and 2 quarters Recognise 3 quarters Find 3 quarters Count in fractions up to a whole	**Measurement: Time** O'clock and half past Quarter past and quarter to Tell the time past the hour Tell the time to the hour Tell the time to 5 minutes Minutes in an hour Hours in a day	**Statistics** Make tally charts Tables Block diagrams Draw pictograms (1:1) MD1 Interpret pictograms (1:1)- MD1 Draw pictograms (2, 5 and 10) Interpret pictograms (2, 5 and 10)	**Geometry: position and direction** Language of position Describe movement Describe turns Describe movement and turns Shape patterns with turns	**Consolidation**

Ready To Progress Criteria

KEY STAGE 2

YEAR 3	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number – Place Value:** Represent numbers to 100 Partition numbers to 100 Number line to 100 Hundreds-NPV1 Represent numbers to 1,000-NPV2 Partition numbers to 1,000-NPV2 Flexible partitioning of numbers to 1,000-NPV2 Hundreds, tens and ones-NPV2 Find 1, 10 or 100 more or less-NPV3 Number line to 1,000-NPV3/NPV4 Estimate on a number line to 1,000-NPV3/NPV4 Compare numbers to 1,000-NPV3/NPV4 Order numbers to 1,000-NPV4/NPV4 Count in 50s-NPV4			**Addition and Subtraction** Apply number bonds within 10 Add and subtract 1s Add and subtract 10s Add and subtract 100s Spot the pattern Add 1s across a 10-NF1 Add 10s across a 100 -NF1 Subtract 1s across a 10 -NF1 Subtract 10s across a 100-NF1 Make connections-NPV1 Add two numbers (no exchange)-AS2 Subtract two numbers (no exchange)-AS2 Add two numbers (across a 10)-NF1/AS2 Add two numbers (across a 100))-NF1/AS2 Subtract two numbers (across a 10))-NF1/AS2 Subtract two numbers (across a 100))-NF1/AS2 Add 2-digit and 3-digit numbers-AS2 Subtract a 2-digit number from a 3-digit number-AS2 Complements to 100-AS1 Estimate answers Inverse operations-AS3 Make decisions-AS3				**Multiplication and Division** Multiplication – equal groups – MD1 Use arrays – MD1 Multiples of 2-– MD1/NF2/NPV1 Multiples of 5 and 10 – MD1/NF2/NPV1 Sharing and grouping – MD1/NF2/NPV1 Multiply by 3– MD1 Divide by 3– MD1 The 3 times table – MD1 Multiply by 4 – MD1/NF2 Divide by 4– MD1/NF2 The 4 times table – MD1/NF2 Multiply by 8 – MD1 Divide by 8 – MD1 The 8 times table – MD1 The 2, 4 and 8 times tables – MD1			
Spring	**Multiplication and Division** Multiples of 10 Related calculations-NF2 Reasoning about multiplication-MD1 Multiply a 2-digit number by a 1-digit number – no exchange Multiply a 2-digit number by a 1-digit number – with exchange Link multiplication and division Divide a 2-digit number by a 1-digit number – no exchange Divide a 2-digit number by a 1-digit number – flexible partitioning Divide a 2-digit number by a 1-digit number – with remainders Scaling-MD1			**Measurement: Length and Perimeter** Measure in metres and centimetres Measure in millimetres Measure in centimetres and millimetres Metres, centimetres and millimetres Equivalent lengths (metres and centimetres) Equivalent lengths (centimetres and millimetres) Compare lengths Add lengths Subtract lengths What is perimeter? Measure perimeter Calculate perimeter			**Number: Fractions** Understand the denominators of unit fractions-F1 Compare and order unit fractions-F1 Understand the numerators of non-unit fractions-F1 Understand the whole-F1 Compare and order non-unit fractions-F1 Fractions and scales-F3 Fractions on a number line-F3 Count in fractions on a number line-F3 Equivalent fractions on a number line-F3 Equivalent fractions as bar models		**Measurement: Mass and Capacity** Use scales-NPV4 Measure mass in grams Measure mass in kilograms and grams Equivalent masses (kilograms and grams) Compare mass Add and subtract mass Measure capacity and volume in millilitres Measure capacity and volume in litres and millilitres Equivalent capacities and volumes (litres and millilitres) Compare capacity and volume Add and subtract capacity and volume	

	How many ways				
Summer	**Number: Fractions** Add fractions-F4 Subtract fractions-F4 Partition the whole-F4 Unit fractions of a set of objects-F2 Reasoning with fractions of an amount	**Measurement: Money** Pounds and pence Convert pounds and pence Add money Subtract money-AS3 Find change-AS1/AS3	**Measurement: Time** Roman numerals to 12 Tell the time to 5 minutes Tell the time to the minute Read time on a digital clock Use am and pm Years, months and days Days and hours Hours and minutes – use start and end times Hours and minutes - use durations Minutes and seconds Units of time Solve problems with time	**Geometry: Shape** Turns and angles-G1 Right angles-G1 Compare angles Measure and draw lines accurately (nearest cm) Horizontal and vertical lines Parallel and perpendicular-G1/G2 Recognise and describe 2-D shapes-G1 (all from year 2, regular and irregular, plus trapezium and parallelogram) Draw polygons-G2 Recognise and describe 3-D shapes (all from Year 2 plus tetrahedron) Make 3-D shapes	**Statistics** Interpret pictograms Draw pictograms Interpret bar charts Draw bar charts Collect and represent data Two-way tables

YEAR 4	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place Value** Represent numbers to 1,000 Partition numbers to 1,000 Number line to 1,000 Thousands-NPV1 Represent numbers to 10,000-NPV2 Partition numbers to 10,000-NPV2 Flexible partitioning of numbers to 10,000-NPV2 Find 1, 10, 100, 1,000 more or less-NPV3 Number line to 10,000-NPV3/NPV4 Estimate on a number line to 10,000-NPV3/NPV4 Compare numbers to 10,000-NPV3 Order numbers to 10,000-NPV3 Roman numerals Round to the nearest 10-NPV3 Round to the nearest 100-NPV3 Round to the nearest 1,000-NPV3 Round to the nearest 10, 100 or 1,000-NPV3				**Addition and Subtraction** Add and subtract 1s, 10s, 100s and 1,000s-NF3 Add up to two 4-digit numbers - no Add two 4-digit numbers - one exchange Add two 4-digit numbers - more than one exchange Subtract two 4-digit numbers - no exchange Subtract two 4-digit numbers - one exchange Subtract two 4-digit numbers - more than one exchange Efficient subtraction download Estimate answers download Checking strategies			**Measurement: Area** What is area? Count squares Make shapes Compare areas		**Multiplication and Division (ALL -NF1+2/MD2)** Multiples of 3 Multiply and divide by 6 6 times-table and division facts-MD3 Multiply and divide by 9 9 times-table and division facts The 3, 6 and 9 times-tables Multiply and divide by 7 7 times-table and division facts-MD3 11 times-table and division facts-MD3 12 times-table and division facts-MD3 Multiply by 1 and 0 Divide a number by 1 and itself Multiply three numbers		Consolidation Assessments
Spring	**Multiplication and division B** Factor pairs-NF1 Use factor pairs Multiply by 10-MD1 Multiply by 100-MD1 Divide by 10-MD1		**Measurement: Length and Perimeter** Measure in kilometres and metres Equivalent lengths (kilometres and metres)		**Fractions** Understand the whole Count beyond 1 Partition a mixed number Number lines with mixed numbers-F1 Compare and order mixed numbers-F1				**Decimals A** Tenths as fractions Tenths as decimals Tenths on a place value chart Tenths on a number line Divide a 1-digit number by 10			Consolidation Assessments

	Divide by 100-MD1 Related facts – multiplication and division-NF3 Informal written methods for multiplication-MD3 Multiply a 2-digit number by a 1-digit number Multiply a 3-digit number by a 1-digit number Divide a 2-digit number by a 1-digit number -NF2 Divide a 3-digit number by a 1-digit number Correspondence problems Efficient multiplication-MD3	All G2: Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear shapes Find missing lengths in rectilinear shapes Calculate perimeter of rectilinear shapes Perimeter of regular polygons Perimeter of irregular polygons	Understand improper fractions-F2 Convert mixed numbers to improper fractions-F2 Convert improper fractions to mixed numbers-F2 Equivalent fractions on a number line-F1 Equivalent fraction families Add two or more fractions-F3 Add fractions and mixed numbers-F3 Subtract two fractions-F3 Subtract from whole amounts-F3 Subtract from mixed numbers-F3	Divide a 2-digit number by 10 Hundredths as fractions Hundredths as decimals Hundredths on a place value chart Divide a 1- or 2-digit number by 100		
Summer	**Decimals B** Make a whole with tenths Make a whole with hundredths Partition decimals Flexibly partition decimals Compare decimals Order decimals Round to the nearest whole number Halves and quarters as decimals	**Money** Write money using decimals Convert between pounds and pence Compare amounts of money Estimate with money Calculate with money Solve problems with money	**Time** Years, months, weeks and days Hours, minutes and seconds Convert between analogue and digital times Convert to the 24-hour clock Convert from the 24-hour clock	**Shape** Understand angles as turns Identify angles Compare and order angles Triangles Quadrilaterals Polygons-G2 Lines of symmetry -G3 Complete a symmetric figure-G3	**Statistics:** Interpret charts Comparison, sum and difference Interpret line graphs Draw line graphs	**Position and Direction (All G1)** Describe position using coordinates Plot coordinates Draw 2-D shapes on a grid Translate on a grid Describe translation on a grid

YEAR 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Place Value** Roman Numerals to 1,000 Numbers to 10,000 Numbers to 100,000 Numbers to a million Read and write numbers to 1,000,000 Powers of 10 10/100/1000/10000/100000 more or less Partition numbers to 1 million Number line to 1 million Compare and order numbers to 1 million		**Addition and Subtraction** Mental strategies Add whole numbers with more than 4 digits (column method) Subtract whole numbers with more than 4 digits (column method) Round to estimate and approximate Inverse operations (addition and subtraction) Multi-step addition and subtraction problems Find missing numbers		**Multiplication and division 1** Multiples and common multiples-NF1/MD2 Factors-NF1/MD2 Common factors-NF1/MD2 Prime numbers Square numbers-NF1/MD2 Cube numbers Multiply by 10, 100 and 1,000-MD1 Divide by 10, 100 and 1,000-NF2/MD1 Multiples of 10, 100 and 1,000-MD1			**Fractions 1** What is a fraction recap- unit and non-unit Fractions equivalent to a unit fraction-F2 Fractions equivalent to a non-unit fraction-F2 Recognise equivalent fractions-F2 Simplify fractions Convert improper fractions to mixed numbers Mixed numbers to improper fractions Compare and order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions with the same denominator Add fractions within 1 Add fractions that total greater than 1 Add to a mixed number Add two mixed numbers Subtract fractions				Consolidation Assessments

	Round to nearest 10, 100 and 1,000 Round numbers within 100,000 Round numbers to one million			Subtract from a mixed number Subtract from a mixed number-breaking the whole Subtract two mixed numbers		
Spring	**Multiplication and Division 2** Multiply up to a 4-digit number by a 1-digit number-MD3 Multiply a 2-digit number by a 2-digit number (area model) Multiply a 2-digit number by a 2-digit number Multiply a 3-digit number by a 2-digit number Multiply a 4-digit number by a 2-digit number Solve problems with multiplication Short division-MD4 Divide a 4-digit number by a 1-digit number-MD4 Divide with remainders-MD4 Efficient division Solve problems with multiplication and division	**Fractions 2** Multiply a unit fraction by an integer Multiply a non-unit fraction by an integer Multiply a mixed number by an integer Calculate a fraction of a quantity-F1/NF1 Fraction of an amount-F1/NF1 Find the whole-F1/NF1 Use fractions as operators	**Fractions, decimals and percentages** Decimals up to 2 decimal places-NPV1+2 Equivalent fractions and decimals (tenths)-F3/NPV1 Equivalent fractions and decimals (hundredths)-NPV1 Equivalent fractions and decimals-F3/NPV4 Thousandths as fractions Thousandths as decimals Thousandths on a place value chart Order and compare decimals (same number of decimal places)-NPV3 Order and compare any decimals with up to 3 decimal places-NPV3 Round to the nearest whole number-NPV3 Round to 1 decimal place-NPV3 Understand percentages Percentages as fractions Percentages as decimals Equivalent fractions, decimals and percentages	**Perimeter and area** Perimeter of rectangles Perimeter of rectilinear shapes Perimeter of polygons Area of rectangles-G2 Area of compound shapes Estimate area	**Statistics** Draw line graphs Read and interpret line graphs Read and interpret tables Two-way tables Read and interpret timetable	Consolidation Assessments
Summer	**Geometry: angles and shapes** Understand and use degrees-G1 Classify angles-G1 Estimate angles-G1 Measure angles up to 180^{o}-G1 Draw lines and angles correctly-G1 Calculate angles around a point Calculate angles on a straight line Lengths and angles in shapes Regular and irregular polygons 3D shapes	**Geometry: Position and direction** Read and plot coordinates Problem solving with coordinates Translation Translation with coordinates Lines of symmetry Reflection in horizontal and vertical lines	**Decimals** Use known facts to add and subtract decimals within 1-NF2 Complements to 1-NF2 Add and subtract decimals across 1-NF2 Add decimals with the same number of decimal places Subtract decimals with the same number of decimal places Add decimals with different numbers of decimal places Subtract decimals with different numbers of decimal places	**Negative numbers** Understand negative numbers Count through zero in 1s Count through zero in multiples Compare and order negative numbers Find the difference	**Measurement: converting units** (All NPV5) Kilograms and kilometres Millimetres and millilitres Convert units of length Convert between metric and imperial units Convert units of time Calculate with timetables	Consolidation Assessments

			Efficient strategies for adding and subtracting decimals Decimal sequences Multiply by 10, 100 and 1000-MD1 Divide by 10, 100 and 1000-MD1 Multiply and divide decimals - missing values-MD1		**Measurement: volume** Cubic centimetres Compare volume Estimate volume Estimate capacity	

YEAR 6	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Number: Place Value** Numbers to one million-NPV2 Numbers to ten million-NPV2 Read and write numbers to ten million -NPV2 Powers of 10-NPV1 Number line to ten million -NPV4 Compare and order any integers-NPV3 Round any integer-NPV3 Negative numbers		**Number: Addition, subtraction, multiplication and division** Add and subtract integers Common factors Common multiples Rules of divisibility Primes to 100 Squares and cube numbers Multiply up to a 4-digit number by 2-digit number Solve problems with multiplication -AS1/MD2 Short division Division using factors -AS1/MD2 Introduction to long division Long division with remainders Solve problems with division -AS1/MD2 Solve multi-step problems-AS1/MD2 Order of operations Mental calculations and estimation Reason from known facts-AS1/MD2					**Number: Fractions A** Equivalent fractions and simplifying -F1 Equivalent fractions on a number line -F1 Compare and order (denominator)-F2/F3 Compare and order (numerator)-F3 Add and subtract simple fractions Add and subtract any two fractions Add mixed numbers Subtract mixed numbers Multi-step problems		**Number: Fractions B** Multiply fractions by integers Multiply fractions by fractions Divide a fraction by an integer Divide any fractions by an integer Mixed questions with fractions Fraction of an amount Fraction of an amount – find the whole		**Measurement: Converting Units** Metric measures Convert metric measures-NPV4 Calculate with metric measures Miles and kilometres Imperial measures
Spring	**Number: Ratio** Add or multiply?-AS1/MD1 Use ratio language-AS1/MD1 Introduction to the ratio symbol-AS1/MD1 Ratio and fractions-AS1/MD1		**Number: Algebra** 1-step function machines 2-step function machines Form expressions Substitution Formulae Form equations Solve 1-step equations		**Number: Decimals** Place value within 1-NPV4 Place value – integers and decimals-NPV4 Round decimals Add and subtract decimals Multiply by 10, 100 and 1,000		**Number: Fractions decimals and percentages** Decimal and fraction equivalents Fractions as division Understand percentages Fractions to percentages		**Measurement: Area and perimeter and volume (All G1)** Shapes – same area Area and perimeter Area of a triangle – counting squares		**Statistics** Line graphs Dual bar charts Read and interpret pie charts Pie charts with percentages Draw pie charts The mean

	Scale drawing-AS1/MD1 Use scale factors-AS1/MD1 Similar shapes-AS1/MD1 Ratio problems-AS1/MD3 Proportion problems-AS1/MD1 Recipes-AS1/MD1	Solve 2-step equations Find pairs of values-AS1/MD4 Solve problems with two unknowns-AS1/MD4	Divide by 10, 100 and 1,000 Multiply decimals by integers Divide decimals by integers Multiply and divide decimals in context	Equivalent fractions, decimals and percentages Order fractions, decimals and percentages Percentage of an amount – one step Percentage of an amount – multi-step Percentages – missing values	Area of a right-angled triangle Area of any triangle Area of a parallelogram Volume – counting cubes Volume of a cuboid	
Summer	**Geometry: Properties of Shape** Measure and classify angles All G1: Calculate angles Vertically opposite angles Angles in a triangle Angles in a triangle – special cases Angles in a triangle – missing angles Angles in a quadrilateral Angles in polygons Circles Draw shapes accurately Nets of 3D shapes	**Geometry: Position & Direction** The first quadrant Read and plot points in 4 quadrants Solve problems with coordinates Translations Reflections	Consolidation and themed projects (review areas that need deepening/securing and prepare for secondary school. Develop investigation skill, trial and error etc)			

Cross Curricular Links	
Science	Measuring and reading scales (temperature, mass, length, volume); calculations (adding, find differences), graphs, tables and charts
History	Life of mathematicians in the past, dates, timelines (BC and AD link to negative numbers), time durations
DT	Measuring, units, calculations, costs
Geography	Grids, co-ordinates, distances, heights, comparing numbers e.g. population, land area.