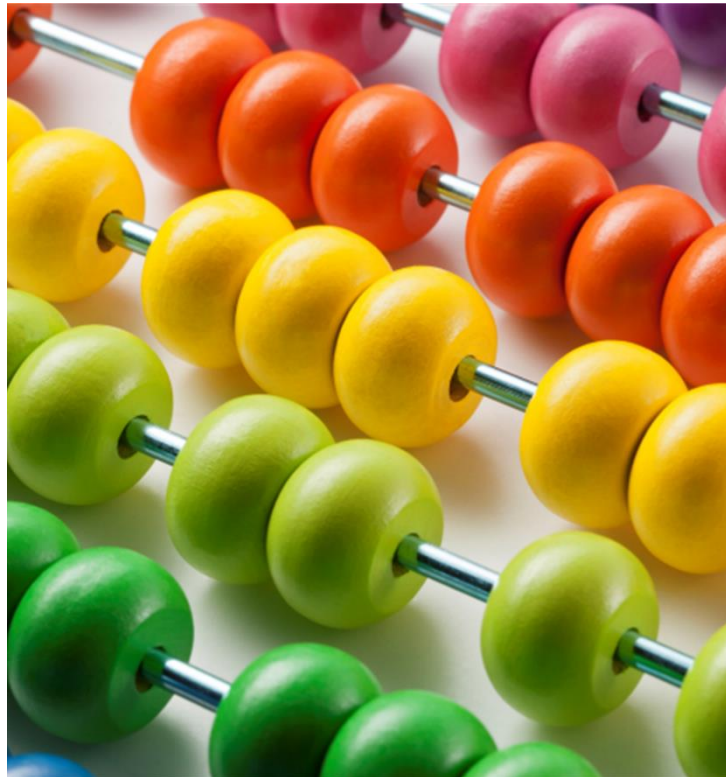# OUR LADY AND ST. HUBERT'S PRIMARY

Maths Knowledge and Skills Progression aligned with

White Rose Maths long term overview and small steps
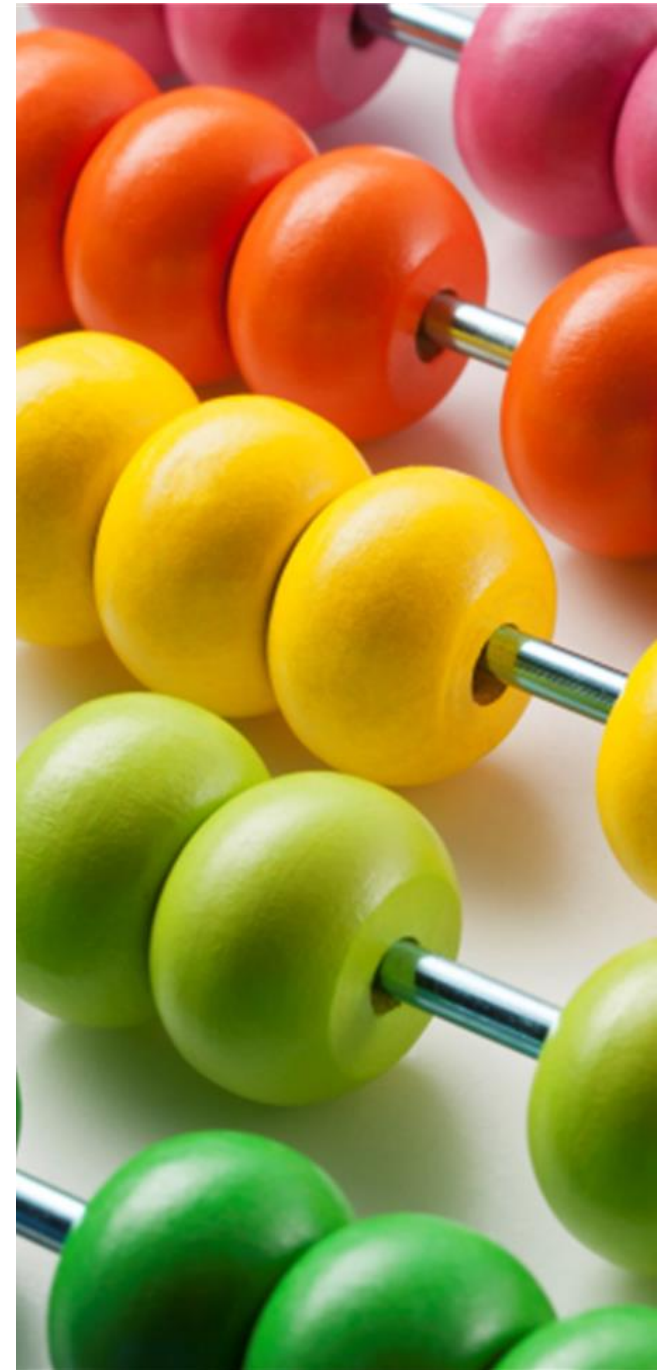
At Our Lady and St. Hubert's, home, school and parish work together, knowing that God is with us in all we do.

OUR LADY AND ST HUBERT'S CATHOLIC PRIMARY SCHOOL

Contents

Maths Curriculum Intent

Mathematics is vital in everyday life and, with this is mind, the purpose of Mathematics at Our Lady and St. Hubert's Primary School is to learn knowledge and skills in order to develop an ability to solve problems, to reason, to think logically and to work systematically and accurately in all aspects of mathematics. We want pupils to become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately; to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language; and to can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The maths curriculum at Our Lady and St. Hubert's is organised into topic areas, but we want pupils to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems by applying and recalling previous knowledge.

We want pupils to apply their mathematical knowledge to science and other subject areas when appropriate, so that they can see the real-life applications of mathematics.

We want the majority of pupils to move through the programmes of study at broadly the same pace, using small steps in understanding and coherence, whilst also considering the pace of learning required to ensure challenge. Whilst a detailed medium-term plan gives a framework for this progress, teachers are given the flexibility to address gaps in pupil's mathematical knowledge and understanding. In addition, whilst a lesson approach should include certain key elements, no one lesson approach is adopted, so teachers have the flexibility to deliver content in a way that it is engaging and effective.

We understand the importance of parents and carers in the supporting their children to develop as mathematicians and aim to encourage a home-school partnership which enables parents and carers to understand the skills taught and support pupils in their development as mathematicians.

Implementation of the Maths Curriculum

Organisation of the Mathematics curriculum

At OLSH, no one programme or scheme is used. Each year group has a medium-term plan that is divided into weekly units. Each unit details the content that needs to be taught together with suggested steps. This provides teachers with a framework for the delivery of maths but also recognises the need for flexibility when delivering the teaching to ensure that the content is carefully matched to the prior attainment of the children.

The curriculum is planned to build on previous content and understanding so that, by the end of key stage 2, all statutory objectives have been taught and the majority of pupils are confident mathematicians who solve problems, to reason, to think logically and to work systematically and accurately in all aspects of mathematics.

Approach to teaching Mathematics.

At OLSH, learning in mathematics is set out in small steps to ensure that the majority of pupils move at the same pace through the content. When needed teachers have the discretion and flexibility to divide steps into further steps or to advance more quickly depending on the needs to the pupils. No one scheme of mathematics is used and so resources are drawn from a range of paid for and free, printed and online resources. Concepts are introduced and embedded using manipulatives and representations alongside abstract methods to ensure that pupils develop conceptual understanding alongside fluency in written methods.

Pupils develop conceptual fluency through manipulatives and images before advancing to abstract representations. When revisiting and advancing the learning, these should be used alongside abstract methods. Pupils apply their understanding of concepts to reasoning and problems, eventually solving problems that contain different strands of mathematics.

A typical maths lesson will follow this structure:

- Time to complete a "Just Checking" task. This is a task not linked to current learning that presents the pupil with an opportunity to revisit a previous topic or concept and demonstrate their understanding and provide the teacher with an assessment opportunity.
- A "Do now" task if appropriate. This will be another review opportunity but linked to a prior lesson on the aspect of maths being taught in the main lesson. This might be a question to consolidate learning from the previous day, previous year group or from a lesson earlier in the academic year.
- Teaching and modelling to demonstrate the aspect of maths being taught, where appropriate this will include the use of manipulatives and representations. Opportunities for discussion, peer working should also be given.
- Time for pupils to complete some independent task linked to the lesson content.

There is no expectation that every maths lesson should be recorded in books as some lessons might require the use of practical equipment, maths games or whiteboard work to build confidence and fluency; however, towards the end of sequence of learning, more time will be spent recording independent practice and learning in books.

Grouping and differentiation

It is the decision of the teachers as to how they choose to group children for maths lessons: in mixed ability groups or in similar ability groups; however, tasks should be differentiated to meet the needs of individual pupils or groups of pupils. This can be through assigned tasks or pupils can be given the choice of task depending on their confidence in the area being taught.

Flexibility

The Medium-term whole school has been designed to allow for flexibility in order to meet the needs of the pupils. Strands of maths are revisited at different intervals in the year to allow for the opportunity to revisit and build upon skills. Whilst there is guidance on the plan for what to teach in each week, it is left to the teacher to map the teaching to the needs of the class; therefore, the notes are guidance only. If a cohort missed particular sections of teaching (for example as a result of covid restrictions) the teaching may need to revisit objectives from a previous year group. If a cohort is more able, then the outcomes can be changed to reflect greater challenge. Similarly, if a teacher feels that more than one

week is needed on a particular group of lessons, again, the plan can be adjusted. Teachers should however, aim to complete all objectives by the year end and any areas that the cohort found difficult or did not cover in depth, should be discussed in end-of-year transition meetings.

Enrichment and cross curricular

Mathematics has many real-life applications and these should be explored both in maths lessons and when an opportunity presents itself in other subject areas. Any opportunity to teach the relevancy of maths to real life should be explored

Impact of the Maths Curriculum

Regardless of background, ability or additional needs, on leaving Our Lady and St. Hubert's, pupils should be confident mathematicians who are able to use written methods fluently and apply their skills in order to problem-solve and reason successfully. They will recognise the value of maths in their lives and understand how it is an essential skill.

Long Term Overview

Key

Maths area	Number	Measurement	Geometry	Statistics	Algebra	Consolidation	Ready to progress statements
Colour coding							In red

Nursery	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	Baseline		Comparison 1 More than, fewer than, same	Shape, space and measure 1 Explore and build with objects and shapes	Pattern 1 Explore repeats	Counting 1 Hear and say number names		Counting 2 Begin to order number names	Subitising 1 I see 1, 2, 3		Pattern 2 Join in with repeats	Shape, space and measure 2 Explore position and space
Spring	Subitising 2 Show me 1, 2, 3	Counting 3 Move and label 1,2,3	Shape, space and measure 3 Explore position and routes		Pattern 3 Explore own first patterns	Counting 4 Take and give 1, 2, 3		Shape, space and measure 4 Match, talk, push and pull	Subitising 3 Talk about dots		Comparison 2 Compare and sort collections	Consolidation
Summer	Pattern 4 Lead on own repeats		Shape, space and measure 5 Start to puzzle	Pattern 5 Making patterns together		Subitising 4 Make games and actions	Counting 5 Show me 5		Pattern 6 My own pattern	Counting 6 Stop at 1, 2, 3, 4, 5	Comparison 3 Match, sort and compare	Consolidation

EYFS	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	Baseline		Match, sort and compare		Talk about measure and pattern		It's me 1,2,3		Circles and triangles	1, 2, 3, 4, 5		Shapes with 4
Spring	Alive in 5		Mass and capacity	Growing 6, 7, 8		Length height and time		Building 9 and 10			Explore 3D shapes	
Summer	To 20 and beyond		How many now?	Manipulate, compose and decompose		Sharing and grouping		Visualise, build and map			Make connections	Consolidation

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						Addition and subtraction within 10				Shape	Consolidation
Spring	Place value within 20			Addition and subtraction within 20			Place value within 50		Length and height		Mass and volume	
Summer	Multiplication and division			Fractions		Position and direction	Place value withing 200		Money	Time		Consolidation

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				Addition and subtraction						Shape	
Spring	Money		Multiplication and division					Length and height		Mass, capacity and temperature		
Summer	Fractions			Time			Statistics		Position and direction		Consolidation	

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	Place value			Addition and subtraction						Multiplication and division A		
Spring	Multiplication and division B			Length and perimeter			Fractions A			Mass and capacity		
Summer	Fractions B			Money		Time			Shape		Statistics	Consolidation

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				Addition and subtraction			Area	Multiplication and division A			Consolidation
Spring	Multiplication and division B			Length and perimeter		Fractions					Decimals A	
Summer	Decimals B		Money		Time		Consolidation	Shape		Statistics	Position and direction	

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			Addition and subtraction		Multiplication and division A			Fractions A			
Spring	Multiplication and division B			Fractions B		Decimals and percentages			Perimeter and area		Statistics	
Summer	Shape			Position and direction		Decimals			Negative numbers	Converting units		Volume

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	Place value			Addition, subtraction, multiplication and division					Fractions A		Fractions B	Converting units
Spring	Ratio		Algebra		Decimals		Fractions, decimals and percentages		Area, perimeter and volume		Statistics	
Summer	Shape			Position and direction	Themed projects, consolidation and problem solving							

Nursery

Nursery	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	**Baseline**	**Comparison 1** More than, fewer than, same -collect objects and compare amounts -make simple comparisons of amounts -look for collections of large and small amounts -compare and talk about large and small amounts -make large and small collections -make collections the same	**Shape, space and measure 1** Explore and build with shapes and objects -explore and play with shapes -show interest in simple differences between shapes -put shapes and blocks into position -select shapes for a reason -begin to explore and describe natural shapes and objects -find and collect objects for a purpose		**Pattern 1** Explore repeats -listen to repeats in songs and stories -start to join in songs with repeats -start to join in with repeats from stories -clap along to songs -make line patterns with own sequences -choose blocks to build roads and towers	**Counting 1** Hear and say number names -hear some number names -join in saying some number names -model saying number names in order -practice saying number names in order -join in stable order counting forwards -join in stable order counting backwards	**Counting 2** Begin to order number names -model saying 1, 2 and 3 in play -copy the sequence of 1, 2 and 3 -copy fingers to represent 1, 2 and 3 -begin to count actions -say number names in order -begin to recognise that anything can be counted	**Subitising 1** I see 1, 2, 3 -notice images in books -respond to I see 1, 2, 3 -recognise I see 1, 2, 3 -copy I see 1, 2, 3 -Point to 1, 2, 3 -Recognise 1, 2, 3 in well-known tales	**Pattern 2** Join in with repeats -join in with repeated actions in songs -join in with repeats in songs and stories -sing some refrains independently -have a sense of daily routines -say what happens next -make arrangements in art	**Shape, space and measure 2** Explore position and space -Respond to simple language of position -Arrange blocks in a chosen position -Select shapes for a space -Recognise when 2 objects are the same shape -Explore and describe shapes and objects -Look for collections of large and small amounts
Rhymes		I'm a Little Teapot Old MacDonald Had a Farm	Build it up		Twinkle, Twinkle, Little Star Polly Put the Kettle On The Grand Old Duke of York	One Potato, Two Potato One, Two, Buckle My Shoe Here Is the Beehive 1, 2, 3, 4, 5, Once I Caught a Fish Alive	Baa Baa Black Sheep When Goldilocks Went to the House of the Bears Wind the Bobbin Up		• I Can Clap My Hands • If You're Happy and You Know It • Muffin Man	Hokey Cokey	
Books		-Harry and the Bucketful of Dinosaurs by Ian Whybrow -Rosie's Zoo by Ailie Busby -More, Fewer, Less by Tana Hoban -Full, Full, Full of Love by Trish Cooke -Little Red Riding Hood	-Big and Small by Elizabeth Bennett -Whatever Next! by Jill Murphy -Crash! Boom! A Math Tale by Robie H. Harris		-The Little Red Hen -Dig Dig Digging by Margaret Mayo	-Five Little Ducks by Belinda Gallagher -Round and Round the Garden by Sarah Williams -Nursery Rhymes and Finger Play collections	The Three Billy Goats Gruff	- Guess Who? by Pam Ayres • Macdog's Home by Caroline and John Astrop • Peepo! by Janet and Allan Ahlberg • Each Peach Pear Plum by Janet and Allan Ahlberg • The Three Billy Goats Gruff • The Three Little Pigs • Goldilocks and the Three Bears	• Peck Peck Peck by Lucy Cousins • Splish, Splash, Ducky! by Lucy Cousins • Brown Bear, Brown Bear, What Do You See? by Bill Martin Jr.	-Duck in the Truck by Jez Alborough • Cat Up, Cat Down by Catherine Hnatov	
Spring	**Subitising 2** Show me 1, 2, 3 -copy fingers to show 1 -copy fingers to show 2 -copy fingers to show 3 -show 1 fingers when seeing 1 item in stories	**Counting 3** Move and label 1,2,3 -Make actions when saying counting words -Move fingers when saying counting words	**Shape, space and measure 3** Explore position and routes -Explore shape resources		**Pattern 3** Explore own first patterns -Explain simple pattern arrangements -Make roads and bridges with intent	**Counting 4** Take and give 1, 2, 3	**Shape, space and measure 4** Match, talk, push and pull	**Subitising 3** Talk about dots	**Comparison 2** Compare and sort collections	**Consolidation**	

	-show 2 or 3 fingers when seeing 2 or 3 in stories -show 1, 2, 3 on fingers when asked	-Count out up to 3 objects from rhymes -Notice number symbols as labels -Label amounts as 1 and not 1 -Look for collections of large and small am	-Explore more complex inset jigsaws -Talk about simple positions -Move into simple positions -Move through positions -Follow simple small world routes	-Choose blocks to copy simple creations -Make simple line patterns with objects -Make simple pattern arrangements -Show an interest in patterns and shapes						
Rhymes	Tommy Thumb • Two Little Dicky Birds • Three Blind Mice	• When Goldilocks Went to the House of the Bears • 1, 2, 3, 4, 5, Once I Caught a Fish Alive	In and Out the Dusty Bluebells	London Bridge is Falling Down						
Books	-Fox's Socks by Julia Donaldson • Three Little Bunnies by Beatrix Potter • Peepo! by Janet and Allan Ahlberg	Goldilocks and the Three Bears	Where's Spot? by Eric Hill • Everyone Hide From Wibbly Pig by Mick Inkpen • Where, Oh Where, is Rosie's Chick? by Pat Hutchins	• The Three Billy Goats Gruff • Dinosaur Roar! by Paul and Harriet Stickland • Cave Baby by Julia Donaldson						
Summer	**Pattern 4** Lead on own repeats	**Shape, space and measure 5** Start to puzzle	**Pattern 5** Making patterns together	**Subitising 4** Make games and actions	**Counting 5** Show me 5	**Pattern 6** My own pattern	**Counting 6** Stop at 1, 2, 3, 4, 5	**Comparison 3** Match, sort and compare	**Consolidation**	
Rhymes										
Books										

EYFS

	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 small steps	Baseline	Baseline	**Match, sort and compare** -Match objects -Match pictures and objects -Identify a set -Sort objects to a type -Explore sorting techniques -Create sorting rules - Compare amounts		**Talk about measure and pattern** -Match objects -Match pictures and objects -Identify a set -Sort objects to a type -Explore sorting techniques -Create sorting rules - 7 Compare amounts		**It's me 1,2,3** -Find 1, 2 and 3 -Subitise 1, 2 and 3 -Represent 1, 2 and 3 -1 more -1 less -Composition of 1, 2 and 3		**Circles and triangles** -Identify and name circles and triangles -Compare circles and triangles -Shapes in the environment - Describe position	**1, 2, 3, 4, 5** -1 Find 4 and 5 -Subitise 4 and 5 -Represent 4 and 5 -1 more -1 less -Composition of 4 and 5 -Composition of 1 - 5		**Shapes with 4** -Identify and name shapes with 4 sides -Combine shapes with 4 sides -Shapes in the environment - My day and night
Number blocks episode							Series 1: Ep 1: One Ep 2: Another One Ep 3: Two Ep 4: Three			S1: Ep5: One, two, three Ep6: Four Ep7: Five Ep8: Three little pigs Ep9: Off we go Ep10: How to count S3: Ep 4: Fruit salad		
Early learning goals							ELG – Subitize deep understanding of numbers to 10		- select, rotate and manipulate shapes	- compare quantities up to 10 in different contexts -Explore composition of numbers to 10 -Deep understanding of numbers to 10 -deep understanding of the numbers to 1 to 10, including the composition of each number -compare quantities up to 10 in different contexts -explore and represent patterns within numbers of 10 - subitize, recognise when one quantity is greater than, less than or the same, have a deep understanding of numbers to 10 - Explore and represent patterns within numbers to 10		
Spring small steps	**Alive in 5** -Introduce zero -Find 0 to 5 -Subitise 0 to 5 -Represent 0 to 5 -1 more -1 less -Composition -Conceptual subitising to 5		**Mass and capacity** -Compare mass -Find a balance -Explore capacity - Compare capacity	**Growing 6, 7, 8** -Find 6, 7 and 8 -Represent 6, 7 and 8 -1 more -1 less -Composition of 6, 7 and 8 -Make pairs-odd and even -Double to 8 (find a double) -Double to 8 (make a double)		**Length height and time** - Explore length - Compare length - Explore height - Compare height - Talk about time - Order and sequence time		**Building 9 and 10** - Find 9 and 10 - Compare numbers to 10 - Represent 9 and 10 -Conceptual subitising to 10 - 1 more - 6 1 less - Composition to 10 - Bonds to 10 (2 parts)			**Explore 3D shapes** - Recognise and name 3-D shapes - Find 2-D shapes within 3-D shapes -Use 3-D shapes for tasks -3-D shapes in the environment -Identify more complex patterns -Copy and continue patterns - Patterns in the environment

			-Combine 2 groups -Conceptual subitising		- Make arrangements of 10 - Bonds to 10 (3 parts) - Doubles to 10 (find a double) - Doubles to 10 (make a double) - Explore even and odd	
Number block episode	S3: Ep 1: Once upon a time Ep 2: Blockzilla Ep 3: The Numberblocks Express Ep 5: Zero Ep 9: Peekaboo Ep 10 Hiccups		S2: Ep 1: Six Ep 2: Seven Ep 3: Eight Ep 4: Nine Ep 14 The Two Tree S3 Ep 12 The Numberblocks Rally		S2: Ep 5: Ten Ep 6: Just add one Ep 7: Ten Green Bottles Ep 8: Counting sheep Ep 9: 9 Double Trouble Ep 11: odds and even Ep 12: Fluffies Ep 13: Blast off (number bonds) S3: Ep 6: Now we are 6 to 10 Ep 7: Numberblobs Ep 11: What's the difference Ep 13: Five and Friends Ep 16: Fltland (shape) Ep 18: The legend of big tum Ep 19: Mirror, mirror S4 Ep 2: On your head Ep 13: flights of fancy Ep 27: The Big One	S3: Ep 8 building blocks
Early learning goals	- have a deep understanding of the numbers 1 to 10, including the composition of each number - have a deep understanding of the numbers to 10, including the composition of each number -Explore and represent patterns within numbers up to 10 - Subitize -Compare quantities up to 10 in different contexts, recognising when one quantity is greater, less or equal to -Have a deep understanding of the numbers to 10, including the composition of each number		- have a deep understanding of numbers to 10, subitize, explore composition of numbers to 10, explore pattern in numbers -have a deep understanding of the numbers to 10, including the composition of each number -Explore and represent patterns within numbers up to 10 -compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same		– explore and represent patterns in numbers, including distributing equally -verbally count beyond 20, recognising the pattern of the number system -Compare quantities up to 10 in different contexts - Explore and represent patterns within numbers up to 10, including double facts - Explore and represent patterns within numbers up to 10, including odd and even numbers - Automatically recall number bonds to 5 and some to 10 - compare quantities up to 10 indifferent contexts, recognising when one quantity is greater than, less than or equal to - Verbally count beyond 20, recognising the pattern of the number system	R – select, rotate and manipulate shapes, including composing and decomposing

Summer small steps	To 20 and beyond - Build numbers beyond 10 (10 -13) -Continue patterns beyond 10 (10-13) -Build numbers beyond 10 (14-20) -Continue patterns beyond 10 (14-20) -Verbal counting beyond 20 -Verbal counting patterns	How many now? - Add more -How many did I add? -Take away -How many did I take away?	Manipulate, compose and decompose - Select shapes for a purpose -Rotate shapes -Manipulate shapes -Explain shape arrangements -Compose shapes -Decompose shapes -Copy 2-D shape pictures - Find 2-D shapes within 3-D shapes	Sharing and grouping -Explore sharing -Sharing -Explore grouping -Grouping - Even and odd sharing - Play with and build doubles	Visualise, build and map -Identify units of repeating patterns -Create own pattern rules -Explore own pattern rules -Replicate and build scenes and constructions -Visualise from different positions -Describe positions -Give instructions to build -Explore mapping -Represent maps with models -Create own maps from familiar places -Create own maps and plans from story situations	Make connections - Deepen understanding -Patterns and relationships	Consolidation

Number block episode	S4: Ep 1: Fifteen's minute of fame Ep 3: Ten's place Ep 5: Meet sixteen S4: Ep 7: Seventeen Ep 8: Eighteen	S4 Ep 4 Balancing Bridge (+)		S4 Ep 16: The lair of shapes			
Early learning goals	– have a deep understanding of number R – count beyond 10 - link the number symbol with its cardinal value Count beyond 10 - Verbally count beyond 20, recognising the pattern of the number system			R- compare numbers			

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 small steps	**Place Value (within 10)** -sort objects -count objects -count objects from a larger group -represent objects -recognise numbers as words -count on from any number -1 more -count backwards within 10 -1 less -compare groups by matching -fewer, more, same -less than, greater than, equal to -compare numbers -order objects and numbers -the number line					**Addition and subtraction within 10** -Introduce parts and wholes -Part whole model -Write number sentences -Fact families → addition facts -number bonds within 10 -systematic number bonds within 10 -number bonds to 10 -addition → add together -addition → add more -addition problems -find a part -subtraction → find a part -fact families → the 8 facts -subtraction → take away/cross out (how many left) -subtraction – take away (how many left) -subtraction on a number line -add or subtract 1 or 2					**Shape** -recognise and name 3D shapes -sort 3D shapes -recognise and name 2D shapes -sort 2D shapes -patterns with 2D and 3D shapes	Consolidation
Resources	S1: How to count Blockzilla, S1: Stampolines Jack Hartman – ordinal number https://www .youtube.co m/watch?v =3afEr61KN Dk					S1: The Whole Of Me S1: Hide and Seek S2: Ten Green Bottles S3: Number block rally S3: Number block rally Number blocks 10 again. What's the difference? S4: Ten's Place Jack Hartman counting in 2, 5, 10 https://www.y outube.com/w atch?v=q_yUC 1NCFkE S2: The Two Tree					Number blocks flatland	
Spring small steps	**Place value within 20** -count within 20 -understand 10 -understand 11, 12 and 13 -understand 14, 15 and 16 -understand 17, 18 and 19 -understand 20 -1 more and 1 less -the number line to 20 -use a number line to 20 -estimate on a number line to 20 -compare numbers to 20 -order numbers to 20			**Addition and subtraction within 20** -add by counting on within 20 -add ones using number bonds -find and make number bonds to 20 -doubles -near doubles -subtract ones using number bonds -subtraction → counting back -subtraction → finding the difference -related facts -missing number problems			**Place value within 50** -count from 20 to 50 -20, 30, 40 and 50 -count by making groups of tens -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		**Length and height** - compare lengths and heights -measure length using objects -measure length in centimetres		**Mass and volume** -heavier and lighter -measure mass -compare mass -full and empty -compare volume -measure capacity -compare capacity	
Resources	S4: Fifteen's minute of fame S4: Flights of fancy S4: I can count to twenty, S4: Heist			S1: Hide and Seek S2: Just add one S2: Blast off S5: Ten's Top Ten S2: fluffies Jack Hartman - https://www.y outube.com/w atch?v=lD9tjBU iXs0 S3 number block rally								

Summer small steps	Multiplication and division	Fractions	Position and direction	Place Value within 100	Money	Time	Consolidation
	-count in 2's -count in 10's -count in 5's -recognise equal groups -add equal groups -add equal groups -make arrays -make doubles -make equal groups - grouping -make equal groups - sharing	-recognise a half of an object or shape -find a half of an object or a shape -recognise a half of a quantity - 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	-describe turns -describe position (left and right) -describe position (forwards and backwards) -describe position (above and below) -ordinal numbers	-count from 50 to 100 -tens to 100 -partition into tens and ones -the number line to 100 -1 more, 1 less -compare numbers with the same number of tens -compare any two numbers	-unitising -recognise coins -recognise notes -count in coins	-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	
Resources	S2: The Two Tree, S4: Land of the Giants S4: Fifty S2: Double Trouble S3: The Way of the rectangle (arrays) S3: Ride the rays S4: Loop the loop S3: Twelve S3: Octoblock to the rescue S3: Ten again S2: Counting sheep S2: Double trouble S2: Odds and evens S4: The lair of shares			S5: Your Turn S4: The Big one S4: One hundred S3: Hiccups S1: Holes S4: I can count to twenty			

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 small steps	**Place Value** - Numbers to 20 - Count objects to 100 by making 10s - Recognise tens and ones - Use a place value chart - Partition numbers to 100 - Write numbers to 100 in words - Flexibly partition numbers to 100 - Write numbers to 100 in expanded form - 10s on the number line to 100 - 10s and 1s on the number line to 100 - Estimate numbers on a number line - Compare objects - Compare numbers - Order objects and numbers - Count in 2s, 5s and 10s - Count in 3s				**Addition and subtraction** - bonds to 10 -fact families (addition and subtraction bonds within 20) -related facts -bonds to 100 (tens) -add and subtract 1's -add by making 10 -add 3 1 digit numbers -add to the next 10 -add across a 10 -subtract across a 10 -subtract from a 10 -subtract a 1 digit number from a 2 digit number (across a 10) -10 more, 10 less -add and subtract 10's -add two 2 digit numbers (not across a 10) -add two 2 digit numbers (across a 10) -subtract two 2 digit numbers (not across a 10) -subtract two 2 digit numbers (across a 10) -mixed addition and subtraction -compare number sentences -missing number problems					**Shape** -recognise 2D and 3D shapes -count sides on 2D shapes -count vertices on 2D shapes -lines of symmetry on shapes -use lines of symmetry to complete shapes -sort 2D shapes -count faces on 3D shapes -count edges on 3D shapes -count vertices on 3D shapes -sort 3D shapes -make patterns within 2D and 3D shapes		
Resources	S4: Twenty one and on Jack Hartman videos – on server or Youtube (counting in 2s, 5s, 10s)				S4: - Ten times bigger - Sixties high score							
Spring small steps	**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 -make a pound -find change -two step problems	**Multiplication and division** -recognise equal groups -make equal groups -add equal groups -introduce the multiplication symbol -multiplication sentences -use arrays -make equal groups – grouping -make equal groups – sharing - 2 x table -divide by 2 -doubling and halving -odd and even numbers -10 x table -divide by 10 -5 x table -divide by 5 -5 and 10 x table						**Length and height** -measure in centimetres -measure in metres -compare lengths and heights -order lengths and heights -four operations with lengths and heights		**Mass, capacity and temperature** -compare mass -measure in grams -measure in kilograms -four operations with mass -compare volume and capacity -measure in millimetres -measure in litres -four operations with volume and capacity -temperature		
Resources	S4: - Sign of the times (Multiplication symbol) S5: How Rectangly! (arrays)	S4: - Divide and drive, Fifty, Land Of The Giants S5: - Twoland (even numbers to 20) - Odd side story (odds and evens) - The Team Factor (equal parts) Two Times Shoe Shop										
Summer small steps	**Fractions** -introduction to parts and wholes -equal and unequal parts -recognise a half			**Time** -o'clock and half past -quarter past and quarter to -tell time past the hour				**Statistics** -make a tally charts -tables -block diagrams		**Position and direction** -language of position -describe movement -describe turns	Consolidation	

	-find a half -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 two quarters -recognise three quarters -find three quarters -count in fractions up to a whole	-tell time to the hour -time the time to 5 minutes -minutes in an hour -hours a day	-draw pictograms (1:1) -interpret pictograms (1:1) -draw pictograms (2, 5 and 10) -interpret pictograms (2, 5 and 10)	-describe movement and turns -shape patterns with turns	
Resources		Specials: - About time			

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 small steps	**Place Value** -represent numbers to 100 -partition numbers to 100 -number line to 100 -hundreds -represent numbers 1000 -partition numbers to 1000 -flexible partitioning of numbers to 1000 -hundreds, tens and ones -find 1, 10 or 100 more or less -number line to 1000 -estimate on a number line to 1000 -compare numbers to 1000 -order numbers to 1000 -count in 50's			**Addition and subtraction** -apply number bonds within 10 -add and subtract 1's -add and subtract 10's -add and subtract 100's -spot the pattern -add 1's across a 10 -add 10's across a 100 -subtract 1's across a 10 -subtract 10's across a 100 -make connections -add 2 numbers (no exchange) -subtract 2 numbers (no exchange) -add 2 numbers (across a 10) -Add 2 numbers (across a 100) -subtract 2 numbers (across a 10) -subtract 2 numbers (across a 100) -add 2 digit and 3 digit numbers -subtract a 2 digit number from a 3 digit numbers -complements to 100 -estimate answers -inverse operations -make decisions					**Multiplication and division A** -multiplication – equal groups -use arrays -multiples of 2 -multiples of 5 and 10 -sharing and grouping - x by 3 - divide by 3 - 3 x table - x by 4 - divide by 4 - 4 x table - x by 8 - divide by 8 - 8 x table - 2, 4 and 8 times tables			
Spring small steps	**Multiplication and division B** -multiplies of 10 -related calculations -reasoning about multiplication -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 by 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 -how many ways?			**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			**Fractions A** -understand the denominators of unit fractions -compare and order unit fractions -understand the numerators of non-unit fractions -understand the whole -compare and order non-unit fractions -fractions and scales -fractions on a number line -count in fractions on a number line -equivalent fractions on a number line -equivalent fractions as bar models		**Mass and capacity** -use scales -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 column in litres and millilitres -equivalent capacities and volumes (litres and millilitres) -compare capacity and volume -add and subtract capacity and volume			
Summer small steps	**Fractions B** -add fractions -subtract fractions -partition the whole -unit fractions of a set of objects -non-unit fractions of a set of objects -reasoning with fractions of an amount		**Money** -pounds and pence -convert pounds and pence -add money -subtract money -find change	**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					**Shape** -turns and angles -right angles -compare angles -measure and draw accurately -horizontal and vertical -parallel and perpendicular -recognise and describe 2D shapes -draw polygons		**Statistics** -interpret pictograms -draw pictograms -interpret bar charts -draw bar charts -collect and represent data -2 way tables	Consolidation

			-minutes and seconds -units of time -solve problems with time	-recognise and describe 3D shapes -make 3D shapes		

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 small steps	**Place Value** -represent numbers to 1000 -partition numbers to 1000 -number line to 10,000 -thousands -represent numbers to 10,000 -partition numbers to 10,000 -flexible partitioning of numbers to 10,000 -find 1, 10 , 100, 1000 more or less -number line to 10,000 -estimate a number line to 10,000 -compare numbers to 10,000 -order numbers to 10,000 -roman numerals -round to the nearest 10 -round to the nearest 100 -round to the nearest 1000 -round to the nearest 10,000 -round to the nearest 10, 1000 and 1000				**Addition and subtraction** -add and subtract 1's, 10's, 100's and 1000's -add up to two 4 digit numbers – no exchange -add two 4 digit numbers – one exchange -add two 4 digit number – more than one exchange -subtract two 4 digit number – no exchange -subtract two 4 digit numbers – one exchange -subtract two 4 digit numbers – more than one exchange -efficient subtraction -estimate answers -checking strategies			**Measurement** -what is area? -count squares -make shapes -compare areas	**Multiplication and division A** -multiples of 3 -multiply and divide by 6 -6 x able and division facts -multiply and divide by 9 - 9 x table and division facts -3, 6 and 9 x tables -11 x table and division facts -12 x table and division facts -multiply by 1 and 0 - divide a number by 1 and itself -multiply 3 numbers			Consolidation
Spring small steps	**Multiplication and division B** -factor pairs -use of factor pairs -x by 10 -X by 100 -divide by 10 -divide by 100 -related facts – multiplication and division -informal written methods for multiplication -multiply by a 2 digit number and by a 1 digit number -multiply by a 3 digit number and by a 1 digit number -divide by a 2 digit number by a 1 digit number -divide a 2 digit number by a 1 digit number -divide a 3 digit number by a 1 digit number -correspondence problems -efficient multiplication			**Length and perimeter** -measure in kilometres and metres -equivalent lengths (kilometres and metres) -perimeter on a grid -perimeter on a rectangle -perimeter of a rectilinear shapes -find missing lengths in rectilinear shapes -calculate the perimeter of rectilinear shapes -perimeter of regular polygons -perimeter of polygons		**Fractions** -understand the whole -count beyond 1 -partition of a mixed number -number lines with mixed numbers -compare and order mixed numbers -understand improper fractions -convert mixed numbers to improper fractions -convert improper fractions to mixed numbers -equivalent fractions on a number line -add 2 or more fractions -add fractions and mixed numbers -subtract 2 fractions -subtract from whole amounts -subtract from mixed numbers				**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 -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 small steps	**Decimals B** -make a whole with tenths -make a while 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 as 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		Consolidation	**Shape** -understand angles as turns -identify angles -compare and order angles -triangles -quadrilaterals -polygons -lines of symmetry -compare a symmetrical figure		**Statistics** -interpret charts -comparison, sum and difference -interpret line graphs -draw line graphs	**Position and direction** -describe position using coordinates -plot coordinates -draw 2D shapes on a grid -translate on a grid -describe transition 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 small steps	**Place Value** -roman numerals to 1000 -numbers to 10,000 -numbers to 100,000 -numbers to 1,000,000 -read and write numbers to 1,000,000 -powers of 10 -10,100,1000,10000,100000 more or less -partition numbers to 1,000,000 -number line to 1,000,000 -compare and order numbers to 1,000,000 -round to the nearest 10, 100 or 1000 -round within 100,000 -round within 1,000,000			**Addition and subtraction** -mental strategies -add whole numbers with more than 4 digital -subtract whole numbers with more than 4 digits -round to check answers -inverse operations (addition and subtraction) -multi-step addition and subtraction problems -compare calculations -find missing numbers		**Multiplication and division A** -multiples -common multiples -factors -common factors -prime numbers -square numbers -cube numbers -multiply by 10, 100 and 1000 -divide by 10, 100 and 1000 -multiples of 10, 100 and 1000			**Fractions A** -Find fractions equivalent to a unit fraction -Find fractions equivalent to a non - unit fraction -recognise equivalent fractions -convert improper fractions to mixed numbers -convert mixed numbers to improper fractions -compare fractions less than 1 -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 with a greater total than 1 -add to a mixed number -add 2 mixed numbers -subtract from a mixed number (breaking the whole) -subtract 2 mixed numbers			
Spring small steps	**Multiplication and Division B** - Multiply up to a 4-digit number by a 1-digit number - 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 - Divide a 4-digit number by a 1-digit number - Divide with remainders - Efficient division - Solve problems with multiplication and division			**Fractions B** - 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 - Fraction of an amount - Find the whole - Use fractions as operators		**Decimals and percentages** -Decimals up to 2 decimal places - Equivalent fractions and decimals (tenths) - Equivalent fractions and decimals (hundredths) - Equivalent fractions and decimals - Thousandths as fractions - Thousandths as decimals - Thousandths on a place value chart - Order and compare decimals (same number of decimal places) - Order and compare any decimals with up to 3 decimal places - Round to the nearest whole number - Round to 1 decimal place - 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 - 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 timetables	
Summer small steps	**Shape** - Understand and use degrees - Classify angles - Estimate angles - Measure angles up to 180° - Draw lines and angles accurately - Calculate angles around a point - Calculate angles on a straight line - Lengths and angles in shapes - Regular and irregular polygons - 3-D shapes			**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 - Complements to 1 - Add and subtract decimals across 1 - Add decimals with the same number of decimal places - Subtract decimals with the same number of decimal places -A dd 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	**Converting units** - Kilograms and kilometres - Millimetres and millilitres - Convert units of length - Convert between metric and imperial units - Convert units of time - Calculate with timetables		**Volume** - Cubic centimetres - Compare volume - Estimate volume - Estimate capacity

			- Efficient strategies for adding and subtracting decimals - Decimal sequences - Multiply by 10, 100 and 1,000 - Divide by 10, 100 and 1,000 - Multiply and divide decimals - missing values	- Compare and order negative numbers - Find the difference		

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 small steps	**Place value** - Numbers to 1,000,000 - Numbers to 10,000,000 - Read and write numbers to 10,000,000 - Powers of 10 - Number line to 10,000,000 - Compare and order any integers - Round any integer - Negative numbers		**Addition, subtraction, multiplication and division** - Add and subtract integers - Common factors - Common multiples - Rules of divisibility - Primes to 100 - Square and cube numbers - Multiply up to a 4-digit number by a 2-digit number - Multiply up to a 4-digit number by a 2-digit number - Short division - Division using factors - Introduction to long division - Long division with remainders - Solve problems with division - Solve multi-step problems - Order of operations - Mental calculations and estimation - Reason from known facts					**Fractions A** - Equivalent fractions and simplifying - Equivalent fractions on a number line -Compare and order (denominator) - Compare and order (numerator) - Add and subtract simple fractions - Add and subtract any two fractions - Add mixed numbers - Subtract mixed numbers -Multi-step problems		**Fractions B** - Multiply fractions by integers - Multiply fractions by fractions - Divide a fraction by an integer - Divide any fraction by an integer - Mixed questions with fractions - Fraction of an amount - Fraction of an amount - find the whole		**Converting units** - Metric measures - Convert metric measures - Calculate with metric measures - Miles and kilometres - Imperial measures
Spring small steps	**Ratio** -add or multiply -use ratio language -introduction to the ratio symbol -ratio and fractions -scale drawing -use scale factors -similar shapes -ratio problems -proportion problems -recipes	**Algebra** -1 step function machines -2 step function machines -form expressions -substitution -formulae -form equations -solve 1 step equations -solve 2 step equations -find pairs of values -solve problems with 2 unknowns		**Decimals** -place value within 1 -place value – integers and decimals -round decimals -add and subtract decimals -multiply by 10, 100 and 1000 -divide by 10,100 and 1000 -multiply decimals by integers -divide decimals by integers -multiply and divide decimals in context		**Fractions, percentages and decimals** -decimal and fractions equivalents -fractions as division -understand percentages -fractions to percentages - 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, volume and perimeter** -shapes – same area -area and perimeter -area of a triangle – counting squares -area of a right angled triangle -area of any triangle -area of a parallelogram -volume – counting cubes -volume of a cuboid		**Statistics** -line graphs -dual bar charts -read and interpret pie charts -pie charts with percentages -draw pie charts -the mean	
Summer small steps	**Shape** - Measure and classify angles - Calculate angles - Vertically opposite angles - Angles in a triangle - Angles in a triangle – special cases - Angles in a triangle – missing angles - Angles in quadrilaterals - Angles in polygons - Circles - Draw shapes accurately - Nets of 3-D shapes			**Position and direction** - The first quadrant - Read and plot points in four quadrants - Solve problems with coordinates - Translations - Reflections	**Themed projects, consolidation and problem solving** **White Rose Bakery** -Activity 1 - Resources -Best value -Activity 2 - Resources -profit and loss -packaging -cooking problems -activity 6 - resources **White Rose tours** -Climate worksheet -Activity 1 - Resources -Distance conversion graph -Conversion							

			-Airport
			Activity 2 - Resources
			-Accommodation
			-Activity 3 - Resources
			-Budget
			-Activity 4 - Resources
			-Time problems
			White Rose Futures
			-Annual salary
			-Hourly rates
			-Activity 1 - Resources
			-Bills
			-Activity 2 - Resources
			-Mortgage
			-Activity 3 - Resources
			House
			Activity 4 - Resources