

Maths Intent

At Rivelin, we encourage ALL pupils to become mathematicians. We work hard to cultivate an environment rich in mathematical understanding, and the use of rich Maths vocabulary through oracy sentence stems and opportunities for talk.

Mathematics is a skill that we use on a daily basis and is an essential part of everyday life. At Rivelin Primary School, we provide a rich, high-quality, challenging and progressive mastery-based Mathematics curriculum, enabling all students to use reasoning and problem solving to encourage fluent, conceptual understanding in all areas. Using this approach, we endeavor that children develop an enjoyment and enthusiasm for Maths that will stay with them throughout their lives and empower them in the future.

Our curriculum is designed to ensure that pupils develop their declarative, procedural and conditional knowledge. We develop:

- 1) declarative knowledge by teaching the mathematical facts, concepts and rules,
- 2) the procedural knowledge by ensuring pupils know how to perform the steps in a process,
- 3) the conditional knowledge by providing children with the ability to know when to use a procedure, skill or strategy.

We use a variety of interactive and engaging resources and oracy-driven classroom-based activities to promote a love of Maths.

The structure of our Mathematics education breaks down the National Curriculum end of year objectives in to small steps. We follow the White Rose curriculum in Y1-Y6.

These are then divided in to units, clearly showing progression in line with age-related expectations. It allows children to explore skills and knowledge in depth, to gain a secure understanding of each subject area. Key

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knowledge and skills are revisited, allowing children to embed learning through repetition. We use a concrete, pictorial, abstract (CPA) approach which provides a clear structure to help develop understanding.

Oracy-based Maths lessons with purposeful sentence stems prove to be a key learning tool for all pupils. These opportunities for talk along with a newly introduced calculation policy will continue to help bolster children's use of maths-specific vocabulary and provide them with confidence to solve increasingly challenging questions.

We encourage resilient, 'mistake-friendly' classrooms, where children see mistakes as learning tools. This philosophy aligns with our Core Values and it sets all of our pupils up for success as mathematicians.

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Nursery's Yearly Overview

	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 Starters: Number songs	Colours • Red • Blue • Yellow	Colours • Green • Purple • Mix of colours	Match • Buttons and colours • Matching towers • Matching shoes	Match • Match number shapes • Match shapes • Pattern handprints – big and small	Sort • Colour • Size • Shape	Sort • What do you notice? • Guess the rule • Guess the rule	Number 1 • Subitising • Counting • Numeral	Number 2 Subitising-dice pattern. Subitising-random pattern. Subitising – different sizes	Number 2 • Counting • Numeral • Numeral	Pattern • Extend AB Colour patterns • Extend AB Outdoor Patterns • AB Movement Patterns	• Fix my Pattern • Extend ABC Colour patterns • Extend ABC Outdoor Patterns	Consolidation Activities - Winter activity week
Spring Starters: Number songs	Number 3 Subitising Subitising Subitising	Number 3 3 Little pigs 1:1 counting Numerals/Triangles	Number 4 1:1 counting Numerals Squares/rectangles	Number 4 Composition of 4 Composition of 4 Composition of 4	Number 5 1:1 counting Numerals Pentagon	Number 5 Composition of 5 Composition of 5 Composition of 5	Consolidate 1 - 5	Number 6 Introduce 10 frame	Height & Length • Tall and short • Long and short • Tall/long and short	Mass Relate to books 3 little pigs goldilocks	Capacity	Consolidation
Summer Starters – subitising and revision	Sequencing	Positional Language	More than/fewer than	Shape – 2D Revisit pattern from Autumn	Shape – 3D Revisit pattern from Autumn	Consolidation: More than/fewer one more and one less	Number composition 1 – 5 Revision.	What comes after?	What comes before?	Numbers to 5	Consolidation / Activity weeks SUMMER	Consolidation / Activity weeks

This document outlines objectives met from Birth to 5 and Development Matters for Master the Curriculum's nursery maths scheme.

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Term 1: Nursery Progression	Week	Objectives	Development Matters	Birth to 5 Matters
	1	Recognise the colour red Children identify red objects and say if an object is red or not.	EAD 3 – 4 Year Olds: Explore colour and colour mixing	EAD Range 4: Enjoys and responds to playing with colour in a variety of ways, for example combining colours
		Recognise the colour blue Children identify blue objects and say if an object is blue or not.		
		Recognise the colour yellow Children identify yellow objects and say if an object is yellow or not.		
	2	Recognise the colour green Children identify green objects and say if an object is green or not.		
		Recognise the colour purple Children identify purple objects and say if an object is purple or not.		
		Recognise colours Children recap the colours they have already learnt and explore other colours. They talk about their favourite colours and match objects to the correct colour name.		
	3	Recognise matching buttons Children identify a button that is the same shape or colour as a set of buttons on a shirt.	3 – 4 Year Olds: Make comparisons between objects relating to size	Range 4: Recognises that two objects have the same shape
		Recognise matching shoes Children pair up shoes that match because they are the same colour or have the same shape on them.		
		Recognise and create matching towers Children match up towers of blocks that are made up of the same colours in the same order.		
4	Match number shapes Children identify matching Numicon shapes and begin to identify how they have the same number of holes.	3 – 4 Year Olds: Complete inset puzzles Compare sizes using gestures and language: 'bigger/little/small' Talk about and explore 2D shapes using informal and mathematical language sides, corners, straight, flat	Range 5: Shows awareness of shape similarities and differences between objects.	
	Match the same size Children match up handprints that are the same size or colour.			
	Match prints Children match prints that are the same shape, even though they might be different colours.			
5	Sort by size Children sort objects, like counting bears, by creating groups of objects that are the same size.	3 – 4 Year Olds: Make comparisons between objects relating to size	Range 4: Recognises that two objects have the same shape	
	Sort by colour Children sort objects that are 2 or 3 different colours.			
	Sort by shape Children sort objects, like buttons, by creating groups of objects that are the same shape.			
6	Sorting – What do you notice? Children talk about what the notice about the objects that have been grouped by an adult.	3 – 4 Year Olds: Complete inset puzzles Compare sizes using gestures and language: 'bigger/little/small'	Range 5: Shows awareness of shape similarities and differences between objects.	
	Sorting – Guess My Rule Children are asked to identify how groups of objects have been sorted by identifying the similarities between the objects. They then sort objects based on their own criteria.			

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Week	Objectives	Development Matters	Birth to 5 Matters
1	Number 1 – Subitising Children learn to recognise when there is 1 object in a set and how to show 1 on their fingers.	3 – 4 Year Olds: Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). Say one number for each item in order: 1,2,3,4,5. Know that the last number reached when counting a small set of objects tells you how many there are in total Show 'finger numbers' up to 5. Reception Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5	Range 4: Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Begin to recognise numerals 0 to 10 Subitises one, two and three objects (without counting) Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) Links numerals with amounts up to 5 and maybe beyond Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers
	Number 1 – Counting Children practise counting 1 object by touching them and saying '1'.		
	Number 1 – Numeral Matching Children are introduced to the numeral 1 and match the numeral to amounts that show 1.		
2	Number 2 – Subitising Dice Patterns Children will learn to recognise 2 dots, like they see on a dice, without counting them.	Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5	Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers
	Number 2 – Subitising Different Patterns Children will continue to recognise 2 objects without counting, this time in different arrangements.		
	Number 2 – Subitising Different Sizes and Patterns Children will learn to recognise when there are 2 dots, even if they are different sizes.		
3	Number 2 – Counting – Say One Number for Each Item Children practise counting 2 objects by touching them or pointing to them as they '1...2'.	Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5	Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers
	Number 2 – Link Numeral and Amounts Children are introduced to the numeral 2 and link the numeral to amounts that show 2.		
	Number 2 – Link Numeral and Amounts Children look at different fonts and images of number 2 and match them to the correct amount.		
4	Colour AB Patterns Children describe AB patterns from 2 different colours and predict what will come next in the pattern.	3 – 4 Year Olds: Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern.	Range 4: Creates their own spatial patterns showing some organisation or regularity Explores and adds to simple linear patterns of two or three repeating items, e.g stick, leaf (AB) or stick, leaf, stone (ABC) Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next
	Extend AB Patterns – Outdoor Objects Children explore creating, describing and continuing AB patterns with natural objects.		
	Extend AB Patterns – Movement In this lesson, children will continue AB patterns using movement of their body.		
5	Fix My Pattern (AB Patterns) Children describe ABC patterns made from 3 different colours and predict what will come next.	Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5	Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers
	Extend ABC Colour Patterns Children sort objects that are 2 or 3 different colours.		
	Outdoor ABC Patterns Children explore creating, describing and continuing ABC patterns with natural objects.		
6	Consolidation – Sorting and Matching		
	Consolidation - Counting		
	Consolidation - Pattern		

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Term 3: Nursery Progression	Week	Objectives	Development Matters	Birth to 5 Matters
	1	Subitising 3 - Dice Patterns Children will learn to recognise 3 dots, like they see on a die, without counting them.	3 – 4 Year Olds: Develop fast recognition of up to 3 objects, without having to count them individually ('subitising') Show 'finger numbers' up to 5	Range 4: Subitises one, two and three objects (without counting)
		Subitising 3 –Different Patterns Children will continue to recognise 3 objects without counting them, this time in different arrangements.		
		Subitising 3 Children will learn to recognise when there are 3 dots, even if they are different sizes.		
	2	Counting 3 Children focus on counting 3 objects.	3 – 4 Year Olds: Say one number for each item in order: 1,2,3,4,5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.	Range 4: Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Begin to recognise numerals 0 to 10 Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle)
		Numeral 3 Children are introduced to what the numeral 3 looks like and learn what it represents.		
		Composition of 3 Children are introduced to the idea that numbers are made up of smaller numbers and they will begin to explore what smaller numbers the number 3 is composed of.		
		Recognise triangles Children learn that triangles are 2-D shapes that have 3 sides. They are asked to identify triangles by counting their sides.		
	3	Counting 4 Children focus on counting 4 objects.	Experiment with their own symbols and marks as well as numerals. Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'	Links numerals with amounts up to 5 and maybe beyond • Explores using a range of their own marks and signs to which they ascribe mathematical meanings Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers
		Numeral 4 Children are introduced to what the numeral 4 looks like and match the numeral 4 to the quantity.		
		Recognise squares and rectangles Children learn that squares and rectangles are 2-D shapes that have 4 sides. They are asked to identify them by counting their sides.		
	4	Composition of 4 Children will continue to explore how numbers are composed of smaller numbers. In this lesson, they will explore what numbers make up the number 4, by moving frogs between a log and a pond.		Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same
		Composition of 4 Children will continue to explore how numbers are composed of smaller numbers. In this lesson, they will explore what numbers make up the number 4, by moving frogs exploring spots on a ladybird.		
		Composition of 4 Children will continue to explore how numbers are composed of smaller numbers. In this lesson, they will explore what numbers make up the number 4, by throwing 4 beanbags at a hoop.		
	5	Counting 5 Children focus on counting 5 objects.	www.masterthecurriculum.co.uk	Responds to both informal language and common shape names
		Numeral 5 Children are introduced to what the numeral 5 looks like and match the numeral 5 to the quantity.		
		Recognise pentagons Children learn that pentagons are 2-D shapes that have 5 sides. They are asked to identify them by counting their sides.		
	6	Composition of 5 Children explore the composition of number 5 using Numicon pieces to make a shell for Sammy the Snail.		
		Composition of 5 Children explore fitting pieces of Numicon inside a number 5 'house' shape.		
Composition of 5 Children explore the composition of 5 by arranging red and blue spots on a rocket.				

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Term 4: Nursery Progression	Week	Objectives	Development Matters	Birth to 5 Matters
	1	<p>Consolidation – Subitising Subitise counters on a 5 frame and objects arranged in dice patterns. Then, show the matching amount on your fingers.</p> <p>Consolidation – Counting Count the toys in Crocodiles toybox</p> <p>Consolidation – Numerals Children see the numerals in different contexts and identify which number they represent.</p>	<p>3 – 4 Year Olds: Recite numbers past 5.</p> <p>Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').</p>	<p>Range 4: May enjoy counting verbally as far as they can go.</p> <p>Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5.</p>
	2	<p>Counting 6 Children practise counting 6 objects with 1:1 correspondence.</p> <p>Counting 6 Children continue to practise counting 6 objects with 1:1 correspondence, in the context of pennies.</p> <p>Counting 6 – Ten Frame Children are introduced to a ten frame and learn how 6 objects can be arranged on a ten frame.</p>	<p>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</p>	<p>Uses some number names and number language within play, and may show fascination with large numbers.</p> <p>Begin to recognise numerals 0 to 10.</p> <p>Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle).</p> <p>Links numerals with amounts up to 5 and maybe beyond.</p>
	3	<p>Tall and Short Children compare the height of different objects using the word tall or short.</p> <p>Long or Short Children compare the length of different objects using the word long or short.</p> <p>Tall / Long or Short Children compare the height or length of different objects using the words long or tall and short.</p>	<p>3 – 4 Year Olds Make comparisons between objects relating to size, length, weight and capacity.</p>	<p>Range 4 Explores differences in size, length, weight and capacity.</p> <p>In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items.</p>
	4	<p>Mass – Introducing Balance Scales Children are introduced to balance scales. They explore what happens when they put different objects in them. They hear the words heavier and lighter.</p> <p>Mass - Lighter Children use the balance scales to investigate which objects are lighter.</p> <p>Mass – Heavier or Lighter Children use the balance scales again but this time they say which object is heavier and which is lighter.</p>		
	5	<p>Capacity – Full or Empty Children explore containers that are full or empty, both practically and pictorially.</p> <p>Capacity – Nearly Full or Nearly Empty Children explore containers that are nearly full or nearly empty.</p> <p>Capacity – Comparing Containers Children compare the capacity of different containers by directly pouring from one to the other.</p>	<p>www.masterthecurriculum.co.uk</p>	
	6	<p>Consolidation – Length Children say which objects are longer or taller and shorter.</p> <p>Consolidation – Mass Children say which objects are heavier and which are lighter.</p> <p>Consolidation – Capacity Children compare the capacity of different containers.</p>		

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Week	Objectives	Development Matters	Birth to 5 Matters
1	Sequencing Children sequence pictures from a nursery rhyme.	3 – 4 Year Olds: Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then..'	Range 4: Recalls a sequence of events in everyday life and stories.
	Sequencing Children sequence pictures from their daily routine.		
	Sequencing Children sequence pictures from a familiar story.		
2	Position – On and Under Children place an object on or under a chair, a table etc.	3 – 4 Year Olds: Understand position through words alone for example, "The bag is under the table," with no pointing.	Range 4: Responds to and uses language of position and direction.
	Position – In and Out Children explore whether an object is in or out of a basket, bag etc.		
	Position – In Front or Behind Children explore whether the gingerbread man is in front of or behind different animals		
3	Comparing Groups – More Than Children look at two sets of objects and say which set has more.	3 – 4 Year Olds: Compare quantities using language: 'more than', 'fewer than'.	Range 4: Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same!
	Comparing Groups – Fewer Than Children look at two sets of objects and say which set has fewer.		
	Comparing Groups – More Than and Fewer Than Children look at two sets of objects and identify which set has more and which set has fewer.		
4	2-D Shapes - Circles Children learn to identify circles and they begin to learn some properties of a circle.	3 – 4 Year Olds: Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'	Range 4 Responds to both informal language and common shape names. Shows awareness of shape similarities and differences between objects
	2-D Shapes – Triangles Children learn to recognise triangles and begin to learn some of the properties of a triangle.		
	2-D Shapes - Rectangles Children learn to recognise rectangles. They learn that a square is a special rectangle. They learn some of the properties of a rectangle.		
5	3-D Shapes – Cubes and Cuboids Children identify cubes and cuboids and begin to talk about some of their properties.		
	3-D Shapes - Cylinders Children learn to recognise cylinders and begin to talk about some of their properties.		
	3-D Shapes - Spheres Children learn to recognise spheres and begin to talk about some of their properties.		
6	Consolidation – Sequencing Children put familiar events in the correct order.		
	Consolidation - Position Children recap the vocabulary on, under, in, out, in front of and behind.		
	Consolidation – More or Fewer Children compare two sets of objects and say which has more and which has fewer.		

Term 5: Nursery Progression

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Term 6: Nursery Progression

Week	Objectives	Development Matters	Birth to 5 Matters
1	Composition of 3 Children explore the different pairs of numbers that make up number 3.	3 – 4 Year Olds: Explore the composition of numbers to 10.	Range 4: Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers Beginning to use understanding of number to solve practical problems in play and meaningful activities Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same
	Composition of 4 Children explore the different pairs of numbers that make up number 4.		
	Number Composition Children recap the different pairs of numbers that make up 3, 4 or 5.		
2	What Comes After? Children explore jumping along the number line to find what comes after.	3 – 4 Year Olds: Recite numbers past 5.	Range 4: May enjoy counting verbally as far as they can go.
	What Comes After? Children count along the number track and fill in the missing number by identifying the number that comes after the numbers they know.		
	What Comes After? Children sequence numerals to 5 by identifying what comes after each number.		
3	What Comes Before? Children jump back along a number track to find the number that comes before a given number.	3 – 4 Year Olds: Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle') Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 Solve real-world mathematical problems with numbers up to 5	Range 4 Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) Links numerals with amounts up to 5 and maybe beyond.
	What Comes Before? Children identify the missing number on a number track by identifying what number comes before a given number.		
	What Comes Before? Children sequence numerals by counting backwards along a number line and identifying what comes before.		
4	Numbers to 5 Children count how many objects there are in a set and identify if there are enough of each object for everyone.	3 – 4 Year Olds: Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle') Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 Solve real-world mathematical problems with numbers up to 5	Range 4 Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) Links numerals with amounts up to 5 and maybe beyond.
	Numbers to 5 Children work out what number is represented by different counting cards and then sequence them.		
	Numbers to 5 Children complete mazes by working their way through the numerals in the correct order.		
5	Consolidation – Shape Patterns Children describe patterns made up of 2-D and 3-D shapes.		
	Consolidation – More or Fewer Children identify which has more and which has fewer out of two sets of objects.		
6	Consolidation – What Comes Before or After? Children use a number line to help them identify what comes before or after a given number up to 5.		
	Consolidation – Composition Children explore the composition of number 5, through the song '5 Green Bottles'.		

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Reception's Yearly Overview

Autumn term

Focus	Number names to 5	Subitizing to 3	Counting 1:1 correspondence (within 5)	Composition of no.s 1-4	Subitizing different arrangements	Comparison of sets ('more than' 'fewer than')	Counting (five-ness of 5 - die, hand, objects)	Comparison of sets by matching: 'more than', 'fewer than', 'an equal number')	Composition (explore the concept of 'whole' and 'part')	Composition (focus on composition of 3, 4 and 5)	Counting Practise object counting skills

Spring Term

Focus	Subitise within 5 focusing on die patterns Match numerals to quantities within 5	Counting - focus on ordinality and the 'staircase' pattern See that each number is one more than the previous number	Focus on 5	Focus on 6 and 7 as '5 and a bit'	Compare sets and use language of comparison: more than, fewer than, an equal number to Make unequal sets equal	Focus on the 'staircase' pattern and ordering numbers	Focus on ordering of numbers to 8 Use language of less than	Focus on 7	Doubles - explore how some numbers can be made with 2 equal parts	Sorting numbers according to attributes - odd and even numbers

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Summer Term

Focus	Counting - larger sets and things that cannot be seen	Subitising - to 6, including in structured arrangements	Composition - '5 and a bit'	Composition - of 10	Comparison - linked to ordinality Play track games	Review and Assess Subitise to 5 Introduce the rekenrek	Review and Assess Automatic recall of bonds to 5	Review and Assess Composition of numbers to 10	Review and Assess Comparison	Review and Assess Number patterns	Review and Assess Counting

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Reception's Maths Continuum

Mastering Number

FS2 Autumn term

Counting, ordinality and cardinality skills	Number names to 5	Counting 1:1 correspondence (within 5)	Counting (five-ness of 5 - die, hand, objects)	Counting (Practise object counting skills, Match numerals within 10, Verbal counting beyond 20)	Counting - focus on ordinality and the 'staircase' pattern See that each number is one more than the previous number	Counting Focus on the staircase pattern and ordering numbers	Counting - larger sets and things that cannot be seen
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Subitizing	Subitizing to 3	Subitizing different arrangements	Subitise within 5 focusing on die patterns Match numerals to quantities within 5	Subitising - to 6, including in structured arrangements
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Composition	Composition of numbers 1-4	Composition (explore the concept of 'whole' and 'part')	Composition (focus on composition of 3, 4 and 5)	Composition (focus on 5)	Composition (focus on 6 and 7 as '5 and a bit')	Composition Focus on 7	Composition Doubles - explore how some numbers can be made with 2 equal parts	Composition Sorting numbers according to attributes - odd and even numbers	Composition - '5 and a bit'	Composition of 10
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Comparison	Comparison of sets ('more than' 'fewer than')	Comparison (comparison of sets by matching: 'more than', 'fewer than', 'an equal number')	Comparison Focus on ordering of numbers to 8 Use language of less than	Comparison - linked to ordinality Play track games
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Space, shape, measure and patterns: *Select, rotate and manipulate shapes to develop spatial reasoning skills; Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can; Continue, copy and create repeating patterns; Compare length, weight and capacity*

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Year 1's Yearly Overview

	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 (within 10)					Number: Addition & Subtraction (within 10)					Geometry: Shape	Consolidation
Spring	Number: Place Value (within 20)			Number: Addition & Subtraction (within 20)			Number: Place Value (within 50)	Measurement: Length and Height	Measurement: Mass and Volume			
Summer	Number: Multiplication and Division			Number: Fractions	Geometry: Position and Direction	Number: Place Value Within 100	Measurement: Money	Measurement: Time			Consolidation	

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Year 1			
Units	Key Vocabulary	Key knowledge and Skills	End Points
Unit 1 Number: Place Value within 10	Forwards/Backwards Numerals Words Multiples Equal to More than/ Less than Fewer Most/ Least Identify Represent Digit Calculate Odd Even Pattern Numbers to 100	<ul style="list-style-type: none"> Sort objects (Within 10) Count objects (Within 10) Count objects from a larger group (Within 10) Represent objects (Within 10) Recognise numbers as words Count on from any number (Within 10) Find 1 more than any number (Within 10) Count backwards within 10 Find 1 less from any number (Within 10) Compare groups by matching Use the vocabulary fewer, more, same (Within 10) Use the vocabulary and symbols less than, greater than and equal to (Within 10) Compare numbers (within 10) Order objects and numbers (within 10) Use a number line (Within 10) 	<ul style="list-style-type: none"> Count to 10, forwards and backwards, beginning with 0 or 1 or from any given number Count, read and write numerals to 10 in numerals and words Given a number, identify one more or one less within 10 Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least within 10 Compare numbers using $<$, $>$ and $=$ signs
Unit 2 Addition and Subtraction	One step problem Concrete object Pictorial representation Missing number Problem Read Write Interpret Equals = Signs	<ul style="list-style-type: none"> Identify parts and wholes. To use part-whole models (within 10). Write addition number sentences (within 10). Identify and recognise addition fact families. Investigate number bonds (within 10). Investigate systematic number bonds (within 10). Calculate number bonds to 10. Add numbers together (within 10). Add by counting on more (within 10). 	<ul style="list-style-type: none"> Represent and use number bonds and related subtraction facts within 10 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Add and subtract one-digit numbers to 10 including 0 Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer) add and subtract one-digit and two-digit numbers to 10, including zero

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	One-digit	<ul style="list-style-type: none"> Solve addition problems (within 10). Find a part of a whole (within 10). Find a part by subtracting (within 10). Identify and recognise addition and subtraction fact families (within 10). Subtract by taking away (within 10). Subtract on a number line (within 10). Add or subtract 1 or 2 from a given number (within 10) 	
Unit 3 Geometry: Shape	2-D Shapes 3-D Shapes Two- Dimensional Three- Dimensional Cuboid Cube Pyramid Cone Cylinder Sphere	<ul style="list-style-type: none"> Recognise and name 3-D shapes. Sort 3-D shapes. Recognise and name 2-D shapes. Sort 2-D shapes. Identify patterns with 2D and 3-D shapes. 	<ul style="list-style-type: none"> Recognise and name common 2-D shapes e.g. square, circle and triangles Recognise and name common 3-D shapes e.g. Cuboids, cubes, pyramids and spheres
Unit 4 Place Value (within 20)	Forwards/Backwards, Numerals Words Multiples Equal to More than/ Less than Fewer Most/ Least Identify Represent Digit Calculate Odd Even Pattern	<ul style="list-style-type: none"> Recognise and count numbers within 20. Understand the value of 10. Understand the value of 11, 12 and 13. Understand the value of 14, 15 and 16. Understand the value of 17, 18 and 19. Understand the value of 20. Find 1 more and 1 less from a given number (within 20). The number line (up to 20). Use a number line (up to 20). Estimate on a number line (up to 20). Compare numbers to 20. Order numbers (up to 20). 	<ul style="list-style-type: none"> Count to 20 forwards and backwards from any given number Count, read and write numbers to 20 in numerals; count in multiples of 2s, 5s and 10s Read and write numbers from 1 to 20 in numerals and words Given a number identify one more or one less within 20 Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least within 20

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	Numbers to 100		
<p>Unit 5 Addition and subtraction (within 20)</p>	<p>One step problem Concrete object Pictorial representation Missing number Problem Read Write Interpret Equals = Signs One-digit</p>	<ul style="list-style-type: none"> • Add by counting on (within 20). • Add ones using number bonds (within 20). • Find and make number bonds (within 20). • Calculate doubles by adding the same amount (within 20). • Recognise near doubles (within 20). • Subtract ones using number bonds (within 20). • Subtract by counting back (within 20). • Subtract by finding the difference (within 20). • Identify related addition and subtraction facts families (within 20). • Solve missing number problems (within 20). 	<ul style="list-style-type: none"> • Represent and use number bonds and related subtraction facts within 20. • Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • Add and subtract one-digit and 2-digit numbers to 20 including 0 • Solve one step problems that involve addition and subtraction using concrete objects and pictorial $7=? -9$ within 20
<p>Unit 6 Place value (within 50)</p>	<p>Forwards/Backwards, Numerals Words Multiples Equal to More than/ Less than Fewer Most/ Least Identify Represent Digit Calculate Odd Even Pattern Numbers to 100</p>	<ul style="list-style-type: none"> • Count from 20 to 50. • Know the value of 20, 30, 40 and 50. • Count by making groups of 10. • Count groups of tens and ones (up to 50). • Partition into tens and ones (up to 50). • Use a number line (up to 50). • Estimate on a number line (up to 50). • Find 1 more and 1 less from a given number (within 50). 	<ul style="list-style-type: none"> • Count to 50, forwards and backwards, beginning with 0 or 1 or from any given number • Count, read and write numerals to 50 in numerals and words • Given a number, identify one more or one less • Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least
<p>Unit 7 Length and height</p>	<p>Length Height Long Short Longer</p>	<ul style="list-style-type: none"> • Compare lengths and heights. • Measure length using objects. • Measure length in centimetres. 	<ul style="list-style-type: none"> • Measure and begin to record lengths and heights • Compare, describe for lengths and heights • Solve practical problems for lengths and heights e.g. long/short, longer/shorter, tall/short, double/half

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	Shorter Tall Double Half		
Unit 8 Mass and volume	Heavy Light Heavier than Lighter than Volume Full Empty More than Less than Half Half full	<ul style="list-style-type: none"> • Compare objects using the terms heavier and lighter. • Measure mass. • Compare mass. • Understand the term full and empty. • Compare volume. • Measure capacity. • Compare capacity. 	<ul style="list-style-type: none"> • Measure and begin to record mass/weight, capacity and volume • Compare, describe and solve practical problems for mass/weight e.g. heavy/light, heavier than/lighter than • Compare, describe and solve practical problems for capacity and volume e.g. full/empty, more than/less than, half, half full, quarter
Unit 9 Multiplication and division	Multiples Twos Fives Tens Number Multiply Divide Multiplication Division One step problem Answer Concrete object Pictorial representation Arrays Count Equals Write	<ul style="list-style-type: none"> • Count in 2s. • Count in 10s. • Count in 5s. • Recognise equal groups. • Add equal groups. • Make arrays. • Make doubles. • Make equal groups by grouping. • Make equal groups by sharing. 	<ul style="list-style-type: none"> • Count in multiples of 2 • Count in multiples of 5 • Count in multiples of 10 • Solve one-step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays
Unit 10 Fractions	Fraction Half Equal parts	<ul style="list-style-type: none"> • Recognise half of an object or shape. • Find half of an object or shape. • Recognise half of a quantity. 	<ul style="list-style-type: none"> • Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four

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	<p>One whole Object Shape Quantity Quarter</p>	<ul style="list-style-type: none"> • Find half of a quantity. • Recognise a quarter of an object or shape. • Find a quarter of an object or shape. • Recognise quarter of a quantity. • Find quarter of a quantity. 	<p>equal parts of an object, shape or quantity</p> <ul style="list-style-type: none"> • Compare, describe and solve practical problems using fractions
<p>Unit 11 Position and direction</p>	<p>Half turn Quarter turn Three-quarter turn Left Right Up Down</p>	<ul style="list-style-type: none"> • Describe turns. • Describe position (left and right). • Describe position (forward and backwards). • Describe position (above and below). • Identify and use ordinal numbers. 	<ul style="list-style-type: none"> • Describe position, direction and movement using whole and half turn • Describe position, direction and movement using quarter and three-quarter turns • Use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside (non-statutory guidance) • Practise counting (1, 2, 3...), ordering (for example, 1st, 2nd, 3rd ...) (non-statutory guidance)
<p>Unit 12 Place Value within 100</p>	<p>Forwards/Backwards, Numerals Words Multiples Equal to More than/ Less than Fewer Most/ Least Identify Represent Digit Calculate Odd Even Pattern Numbers to 100</p>	<ul style="list-style-type: none"> • Count from 50 - 100. • Count in groups of 10 to 100. • Partition into tens and ones. • Use a number line (up to 100). • To find one more and one less than a number (up to 100). • Compare numbers with the same number of tens. • Compare any two numbers. 	<ul style="list-style-type: none"> • Count to 100, forwards and backwards, beginning with 0 or 1 or from any given number • Count, read and write numerals to 100 in numerals and words • Given a number, identify one more or one less within 100 • Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least within 100
<p>Unit 13 Money</p>	<p>Coins Notes</p>	<ul style="list-style-type: none"> • Unitise amounts. • Recognise coins and their value. • Recognise notes and their values. • Count in coins. 	<ul style="list-style-type: none"> • Recognise and know the value of different denominations of coins and notes • Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s

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<p>Unit 14 Time</p>	<p>Quicker Slower Earlier</p>	<ul style="list-style-type: none"> • Understand the terms before and after. • Know days of the week. • Know months of the year. 	<ul style="list-style-type: none"> • Sequence events in chronological order using language e.g. before, after, next, first, today, yesterday, tomorrow, morning, afternoon and
	<p>Later Sequence events Chronological order Before After Next First Today Yesterday Tomorrow</p>	<ul style="list-style-type: none"> • Compare units of time (hours, minutes and seconds). • Tell the time to the hour. • Tell the time to the half hour. 	<p>evening</p> <ul style="list-style-type: none"> • Recognise and use language relating to dates including days of the week, weeks, months and years • Tell the time to the hour and half past the hour and draw hands on a clock face to show these times • Compare, describe and solve practical problems for time e.g. quicker, slower, earlier, later • Measure and begin to record time e.g. hours, minutes seconds

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Year 2's Yearly Overview

	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				Number: Addition and Subtraction				Shape: Geometry			
Spring	Measurement: Money		Number: Multiplication and Division					Measurement: Length and Height		Measurement: Mass, capacity and temperature		
Summer	Number: Fractions			Measurement: Time			Statistics		Geometry: Position and Direction		Consolidation	

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Year 2			
Units	Key Vocabulary	Key knowledge and Skills	End Points
Unit 1 Number: Place Value	Ones Tens Two- digit Estimate Place Value Solve Problems Greater than > Less than < Nearest ten Number facts Partition Count in steps Zero Compare Determine Value	<ul style="list-style-type: none"> Recognise and count numbers to 20. Count objects to 100 by making 10s. Recognise tens and ones. Use a place value chart. Partition numbers to 100. 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 using less than, greater than and equal to. Order objects and numbers. Count in 2s, 5s and 10s. Count in 3s. 	<ul style="list-style-type: none"> Read and write numbers to at least 100 in numerals and words. Recognise the place value of each digit in a 2-digit number (tens & ones) Identify, represent and estimate 2-digit numbers using different representations including the number line. Compare and order numbers from 0 – 100; use < > and = signs. Use place value and number facts to solve problems Count in steps of 2,3, 5 and 10 from any number forwards and backwards
Unit 2 Addition and subtraction.	Tens Order Inverse Relationship Calculation Solve problems Missing number problems Quantities Measures Operation Apply Whole number	<ul style="list-style-type: none"> To know number bonds to 10. Identify related addition and subtraction fact families (within 20). Use related number facts. Recall number bonds to 100 (tens). Add and subtract ones up to 100. Add by making 10 then counting on. Add 3 1-digit numbers. Add to the next multiple of 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). Recognise 10 more or 10 less than a number. 	<ul style="list-style-type: none"> Recall and use addition & subtraction facts to 20 fluently. Add & subtract numbers using concrete objects, pictorial representations and mentally two-digit numbers and ones Add & subtract numbers using concrete objects, pictorial representations and mentally two-digit numbers and tens Add & subtract numbers using concrete objects, pictorial representations and mentally two-digit number and two-digit number and adding 3 one- digit numbers Compare and order numbers from 0 – 100; use < > and = signs (<u>Number and PV</u>) Derive and use related facts up to 100 Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. (<u>Step 2</u>)

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		<ul style="list-style-type: none"> • Add and subtract tens. • 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). • Solve mixed addition and subtraction number problems. • Compare number sentences. • Solve missing number problems (beyond 20). 	
Unit 3 Shape: Geometry	Properties Compare Common Line symmetry Vertical line Edges Faces Vertices Pentagon Hexagon	<ul style="list-style-type: none"> • Recognise 2-D and 3-D shapes. • Count sides on 2-D shapes. • Count vertices on 2-D shapes. • Draw 2-D shapes. • Identify lines of symmetry on shapes. • Use lines of symmetry to complete shapes. • Sort 2-D shapes. • Count faces on 3-D shapes. • Count edges on 3-D shapes. • Count vertices on 3-D shapes. • Sort 3-D shapes. • Make patterns with 2-D and 3-D shapes. 	<ul style="list-style-type: none"> • Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line • Compare and sort common 2D and 3D shapes and everyday objects. • Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. • Identify 2D shapes on the surface of 3D shapes e.g. a circle on a cylinder and a triangle on a pyramid.
Unit 4: Money	Pounds (£) Pence (p) Change	<ul style="list-style-type: none"> • Count money – pence • Count money pounds (notes and coins). • Count money (pounds and pence). • Choose notes and coins to make an amount. • Identify/make the same amount of money. • Compare the amounts of money. • Calculate with money. • Recognise different ways to make a pound. • Calculate change. • Solve two-step problems involving money. 	<ul style="list-style-type: none"> • Recognise and use symbols for pounds (£) and pence (p) • Combine amounts to make a particular value • Compare amounts using symbols • Find different combinations of coins that make the same amount of money (Step 8) • Solve simple problems practically, including addition and subtraction and giving change.

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<p>Unit 5: Multiplication and division.</p>	<p>Multiplication facts Division facts Multiplication tables Odd numbers Even numbers Share Equally Repeated multiplication/ division Calculate Arrays</p>	<ul style="list-style-type: none"> • Recognise equal groups. • Make equal groups. • Add equal groups. • Introduce the multiplication symbol. • Calculate multiplication sentences. • Use arrays to solve multiplication problems. • Use grouping to solve multiplication problems. • Use sharing to solve multiplication and division problems. • Recite and apply the 2 times table. • Divide by 2. • Understand doubling and halving as multiplication and division. • Identify odd and even numbers. • Recite and apply the 10 times table. • Divide by 10. • Recite and apply the 5 times table. • Divide by 5. • Understand the relationship between the 5 and 10- times tables. 	<ul style="list-style-type: none"> • Calculate mathematical statements for 2, 5 and 10's Using multiplication and division using symbols (\times, \div and $=$) • Recall and use multiplication facts for 2, 5- and 10- times tables • Recognise odd and even numbers • Solve problems using multiplication and division using, materials, arrays, repeated addition and mental methods. • Show that multiplication of two numbers can be done in any order (commutative) but division cannot. • Recognise that doubling a number is multiplying by 2 • Recognise that halving a number dividing by 2
<p>Unit 6 Length and height</p>	<p>Greater than > Less than < Equals = Metres Centimetres</p>	<ul style="list-style-type: none"> • Measure in centimetres. • Measure in metres. • Compare lengths and heights. • Order lengths and heights. • Solve problems using the four operations with lengths and heights. 	<ul style="list-style-type: none"> • Choose and use appropriate standards of units to estimate and measure length/height (m/cm) in any direction • Order lengths and heights and record the results using $<$ $>$ and $=$ symbols • Compare lengths and heights and record the results using $<$ $>$ and $=$ symbols • Use the four operations to solve problems relating to length and height. • Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures taller or shorter than is lots of cm/m long/tall. cm/m is cm/m is? How do you know? cm/m. cm/m. (Step 5) • Solve problems involving multiplication and division, using materials, arrays, repeated

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			addition, mental methods, and multiplication and division facts, including problems in contexts (Step 5)
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<p>Unit 7 Mass, capacity and temperature.</p>	<p>Temperature Thermometers Metres Centimetres Kilograms Grams Degrees Celsius Litres Millilitres</p>	<ul style="list-style-type: none"> • Compare mass. • Measure in grams. • Measure in kilograms. • Apply the four operations with mass. • Compare volume and capacity. • Measure in millilitres. • Measure in litres. • Apply the four operations with volume and capacity. • Read and understand temperature. 	<ul style="list-style-type: none"> • Choose and use appropriate standards of units to estimate and measure mass (kg/g) • Choose and use appropriate standards of units to estimate and measure volume/capacity (l/ml). • Choose and use appropriate standards of units to predict and read temperature. • Use rulers, scales thermometers and measuring vessels to the nearest unit. • Compare and order mass, volume/capacity and record the results using < > and = • Compare temperature using key vocabulary such as warmer/cooler/hotter/colder • Use rulers, scales thermometers and measuring vessels to the nearest unit.
<p>Unit 8 Fractions</p>	<p>Simple fractions Equivalent Equivalence Count</p>	<ul style="list-style-type: none"> • Introduction to parts and whole. • Identify equal and unequal parts. • Recognise half of an object or shape. • Find half of an object or shape. • Recognise a quarter of an object or shape. • Find a quarter of an object or shape. • Recognise a third of an object or shape. • Find a third of an object or shape. • Find the whole of an amount. • Identify unit fractions. • Identify non-unit fractions. • Recognise the equivalence of a half as two quarters. • Recognise three-quarters. • Find three quarters of an object or a shape. • Count in fractions up to a whole. 	<ul style="list-style-type: none"> • Count in fractions to make a whole • Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity • Write simple fractions, for example $\frac{1}{2}$ of $6 = 3$ • Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$
<p>Unit 9 Time</p>	<p>Five past Ten past Quarter past Twenty past Twenty-five past Half past</p>	<ul style="list-style-type: none"> • Tell the time to o'clock and half past. • Tell the time to quarter past and quarter to. • Tell the time past the hour. • Tell the time to the hour. • Tell the time to 5 minutes. • Understand how many minutes in an hour. 	<ul style="list-style-type: none"> • Tell and write the time to five minutes, including quarter past/to the hour. • Draw hands on a clock to show these times • Know the number of minutes in an hour • Know the number of hours in a day • Compare and sequence intervals of time

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	<p>Twenty-five to Twenty to Quarter to Ten to Five to</p>	<ul style="list-style-type: none"> Understand how many hours in a day. 	
<p>Unit 10 Statistics</p>	<p>Interpret Construct Pictogram Tally chart Block diagrams Horizontal Vertical x- axis y-axis Key Title Chart title Simple tables Ask Answer Questions Counting Objects Category Sort Quantity Total Compare Data</p>	<ul style="list-style-type: none"> Make tally charts. Read and interpret tables. Read and interpret block diagrams. Draw pictograms. Interpret pictograms. Draw pictograms (representing 2, 5 and 10). Interpret pictograms (representing 2, 5 and 10). 	<ul style="list-style-type: none"> Interpret and construct simple pictograms, tally charts, block diagrams and simple tables Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Ask and answer questions about totaling and comparing categorical data. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Step 6)
<p>Unit 11 Position and direction.</p>	<p>Rotation Right angle Clockwise Anti-clockwise Order Arrange Sequence</p>	<ul style="list-style-type: none"> Use the language of position. Describe movement. Describe turns Describe movements and turns. Shape patterns with turns. 	<ul style="list-style-type: none"> Use mathematical vocabulary to describe position, direction and movement including in a straight line. Distinguish between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) Order and arrange combinations of mathematical objects in patterns and sequences.

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Year 3's Yearly Overview

	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			Number: Addition and subtraction				Number: Multiplication and division A				
Spring	Number: Multiplication and division B			Measurement: Length and perimeter		Number: Fractions A			Measurement: Mass and capacity			
Summer	Number: Fractions B		Measurement: Money		Measurement: Time		Geometry: Shape		Statistics		Consolidation	

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Year 3			
Units	Key Vocabulary	Key knowledge and Skills	End Points
Unit 1 Number: Place Value	<p>Hundreds Three-digit Ten more One hundred more Ten less One hundred less Roman numeral Numbers up to one thousand</p>	<ul style="list-style-type: none"> • Represent numbers to 100. • Partition numbers to 100. • Place tens and ones on a number line to 100. • Count in hundreds up to 1,000. • Represent numbers to 1,000. • Partition numbers to 1,000. • Flexibly partition numbers to 1,000. • Represent hundreds, tens and ones. • Find 1, 10 and 100 more or less than a number up to 1,000. • Use a number line up to 1,000. • Estimate on a number line to 1,000. • Compare numbers to 1,000. • Order numbers to 1,000. • Count in 50s up to 1,000. 	<ul style="list-style-type: none"> • Recognise the place value of each digit in a three-digit number • Count from zero in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number (Step 3) • Identify, represent and estimate three-digit numbers using different representations • Find 10 or 100 more or less than a given number • Compare and order numbers up to 1000 • Read and write numbers up to 1,000 in numerals and words • Count from 0 in multiples of 50. • Count from 0 in multiples of 100.
Unit 2 Addition and subtraction	<p>Hundreds Three-digit Ten more One hundred more Ten less One hundred less Roman numeral Numbers up to one thousand</p>	<ul style="list-style-type: none"> • Apply number bonds within 10. • Add and subtract ones. • Add and subtract tens. • Add and subtract hundreds. • Recognise addition and subtraction patterns. • Add ones across a ten to a three-digit numbers. • Add 10s across a hundred. • Subtract ones across a ten to a three-digit number. • Subtract tens across a hundred. • Make connections between addition and subtraction. • Add two numbers using the formal written method (no exchange). • Subtract two numbers using the formal written method (no exchange). • Add two numbers using the formal written method (across a ten). 	<ul style="list-style-type: none"> • Add and subtract numbers mentally including: 3 digits and ones, 3 digits and tens, 3 digits and hundreds. • Add and subtract numbers with up to 3 digits using formal written methods of columnar addition and subtraction • Estimate the answer to a calculation and use inverse operations to check answers • Solve problems, including missing numbers, using number facts, place value and more complex addition and subtraction.

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		<ul style="list-style-type: none"> • Add two numbers using the formal written method (across a hundred). • Subtract two numbers using the formal written method (across a ten). • Subtract two numbers using the formal written method (across a hundred). • Add 2-digit and 3-digit numbers using the formal written method. • Subtract a 2-digit number from a 3-digit number using the formal written method. • Find complements to 100 (fluency practice). • Estimate answers to addition and subtraction problems to (3-digit numbers). • Use and apply inverse operations (to 3-digit numbers). • Select the correct operations to solve addition and subtraction problems. 	
<p style="text-align: center;">Unit 3 Multiplication and division A</p>	<p style="text-align: center;">Missing number problem Estimate Inverse Formal written method Mathematical statement Recall Integer Two- digit One- digit</p>	<ul style="list-style-type: none"> • Use equal grouping to solve multiplication problems. • Use arrays to solve multiplication problems. • Recall and apply multiples of 2. • Recall and apply multiples of 5 and 10. • Use sharing and grouping to solve multiplication and division problems. • Multiply by 3 • Divide by 3. • Recite and apply the 3- times table. • Multiply by 4. • Divide by 4. • Recite and apply the 4-times table. • Multiply by 8 • Divide by 8 • Recite and apply the 8- times table. • Understand the relationship between the 2, 4 and 8 – times table. 	<ul style="list-style-type: none"> • write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers • Count from 0 in multiples of 3 • Count from 0 in multiples of 4 • Count from 0 in multiples of 8 • Recall and use multiplication and division facts for the 3 times tables. • Recall and use multiplication and division facts for the 4 times tables. • Recall and use multiplication and division facts for the 8 times tables.

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<p style="text-align: center;">Unit 4 Multiplication and division B</p>	<p style="text-align: center;">Missing number problem Estimate Inverse Formal written method Mathematical statement Recall Integer Two- digit One- digit</p>	<ul style="list-style-type: none"> • Identify multiples of 10. • Recognise and use related calculations. • Reason 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). • Understand the relationship between 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). • Solve problems by scaling. • Solve correspondence problems 	<ul style="list-style-type: none"> • Write and calculate multiplication and division statements for the tables known including 2 digits times 1-digit numbers using mental and formal written methods • Solve problems, including missing numbers involving multiplication and division. • Solve problems including positive integer scaling and correspondence problems
<p style="text-align: center;">Unit 5 Length and perimeter</p>	<p style="text-align: center;">Greater than > Less than < Equals = Metres Centimetres</p>	<ul style="list-style-type: none"> • Measure in metres and centimetres. • Measure in millimetres. • Measure in centimetres and millimetres. • Compare objects using metres, centimetres and millimetres. • Calculate equivalent lengths (metres and centimetres). • Calculate equivalent lengths (centimetres and millimetres). • Compare lengths. • Add lengths. • Subtract lengths. • Understand what perimeter is. • Measure perimeter. • Calculate perimeter. 	<ul style="list-style-type: none"> • Measure, compare (m/cm/mm) • Add and subtract lengths (m/cm/mm) • Calculate equivalent lengths • Measure the perimeter of simple 2D shapes.
<p style="text-align: center;">Unit 6 Fractions A</p>	<p style="text-align: center;">Tenths Unit fractions Non- unit fractions Numerator Denominator Compare</p>	<ul style="list-style-type: none"> • Understand the denominators of unit fractions. • Compare and order unit fractions. • Understand the numerators of non-unit fractions. • Understand the whole. 	<ul style="list-style-type: none"> • Compare and order unit fractions, and fractions with the same denominators • Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • Recognise and show, using diagrams, equivalent fractions with small denominators • Recognise and use fractions as numbers, unit and non-unit fractions with small denominators.

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	Order Add Subtract Solve problems	<ul style="list-style-type: none"> • Compare and order non-unit fractions. • Identify fractions of scales. • Plot fractions on a number line. • Count in fractions on a number line. • Identify equivalent fractions on a number line. • Identify equivalent fractions as a bar model. 	<ul style="list-style-type: none"> • Recognise, find and write fractions of a discrete set of objects, unit and non-unit fractions with small denominators.
Unit 7 Mass and capacity	Temperature Thermometers Metres Centimetres Kilograms Grams Degrees Celsius Litres Millilitres Kilometre Millimetres	<ul style="list-style-type: none"> • Read/use scales. • Measure mass in grams. • Measure mass in kilograms and grams. • Calculate 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. • Calculate equivalent capacities and volumes (litres and millilitres). • Compare capacity and volume. • Add and subtract capacity and volume. 	<ul style="list-style-type: none"> • Measure and compare mass (kg/g) • Add and subtract mass (kg/g) • Measure and compare volume/capacity (l/ml) • Add and subtract volume/capacity (l/ml)
Unit 8 Fractions B	Tenths Unit fractions Non- unit fractions Numerator Denominator Compare Order Add Subtract Solve problems	<ul style="list-style-type: none"> • Add fractions. • Subtract fractions. • Partition the whole. • Find unit fractions of a set of objects. • Find non-unit fractions in a set of objects. • Use reasoning to explain fractions of amounts. 	<ul style="list-style-type: none"> • Add and subtract fractions with the same denominator within one whole. • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • Solve problems that involve recognising, comparing, adding or subtracting fractions • Find unit fractions of amounts.

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<p>Unit 9 Money</p>	<p>Pounds Pence Change Coins Notes Add money Subtract money</p>	<ul style="list-style-type: none"> • Recognise pounds and pence. • Convert pounds and pence. • Add money. • Subtract money. • Calculate change. 	<ul style="list-style-type: none"> • Add amounts of money to give change using £ and p in practical contexts. • Subtract amounts of money to give change using £ and p in practical contexts.
<p>Unit 10 Time</p>	<p>Duration Time taken Nearest minute Record Seconds a.m. p.m. noon Midnight analogue clock</p>	<ul style="list-style-type: none"> • Recognise Roman Numerals to 12. • Tell the time to 5 minutes. • Tell the time to the minute. • Read time on a digital clock. • Understand and use a.m. and p.m. • Compare units of time (years, month and days). • Convert days and hours. • Calculate durations (hours and minutes) using start and end times. • Calculate durations (hours and minutes). • Convert minutes and seconds. • Select appropriate units of time. • Solve problems with time. 	<ul style="list-style-type: none"> • Tell and write the time from an analogue clock • Tell and write the time from an analogue clock with Roman Numerals I to XII • Tell the 12 hour and 24-hour time • Estimate and read time with increasing accuracy to the nearest minute • Record and compare time in terms of seconds, minutes and hours • Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight • Know the number of seconds in a minute • Know the number of days in each month • Know the number of days in a year and leap year • Compare durations of events (time taken by particular events or tasks)
<p>Unit 11 Geometry: Shape</p>	<p>Angle Turn Right angles Quarter of a turn Half-turn Three quarters of a turn Complete turn Horizontal lines Vertical lines Perpendicular lines Parallel lines</p>	<ul style="list-style-type: none"> • Recognise turns and angles. • Recognise right angles in shapes. • Compare angles. • Measure and draw lines and shapes accurately. • Understand the terms horizontal and vertical. • Understand the terms parallel and perpendicular. • Recognise and describe 2-D shapes. • Draw polygons. • Recognise and describe 3-D shapes. • Make 3-D shapes using cubes and straws/marshmallows. 	<ul style="list-style-type: none"> • Recognise angles as a property of shape or a description of a turn • Identify right angles • Recognise that 2 right angles make a half turn, 3 make three quarters of a turn, and 4 make a complete turn • Identify whether angles are greater than or less than a right angle • Identify horizontal and vertical lines. • Identify pairs of perpendicular and parallel lines • Draw 2-D shapes and make 3-D shapes using modelling materials • Recognise 3-D shapes in different orientations and describe them

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Unit 12 Statistics	Present Presented Graph Statistics Bar charts Tables Solve One- step questions Two- step questions Information	<ul style="list-style-type: none">• Interpret pictograms.• Draw pictograms.• Interpret bar charts.• Draw bar charts.• Collect and represent data.• Read and interpret two-way tables.	<ul style="list-style-type: none">• Interpret and present data using bar charts, pictograms and tables• Using information presented in scaled bar charts, pictograms and tables, solve one step and two step questions e.g. How many more? How many fewer?
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Year 4's Yearly Overview

	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			Number: Addition and subtraction			Measurement: Area	Number: Multiplication and Division A			Consolidation	
Spring	Number: Multiplication and Division B			Measurement: Length and perimeter		Number: Fractions			Number: Decimals A			
Summer	Number: Decimals B	Measurement: Money		Measurement: Time		Consolidation	Geometry: Shape		Statistics	Geometry: Position and Direction		

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Year 4			
Units	Key Vocabulary	Key knowledge and Skills	End Points
Unit 1 Number: Place Value	Thousands Four- digit Negative number One thousand more One thousand less Decimal Decimal place Rounding Place holder Nearest 10, 100 & 1,000 One place Whole number Integer Tenths Hundredths	<ul style="list-style-type: none"> • Represent numbers to 1,000. • Partition numbers to 1,000. • Use a number line to 1,000. • Count in thousands up to 10,000. • Represent numbers to 10,000. • Partition numbers to 10,000. • Flexibly partition numbers to 10,000. • Find 1, 10, 100, 1000 more or less than a number. • Use a number line to 10,000. • Estimate on a number line to 10,000. • Compare numbers to 10,000. • Order numbers to 10,000. • Explore Roman Numerals to 100. • Round to the nearest 10, within 1,000. • Round to the nearest 100 within 1,000. • Round to the nearest 1,000 within 10,000. • Round to the nearest 10, 100 or 1,000 within 10,000. 	<ul style="list-style-type: none"> • Find 1000 more or less than a given number • Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones) • Order and compare numbers beyond 1000 • Identify, represent and estimate numbers using different representations • Round any number to the nearest 10, 100 and 1000 • Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value • Count in multiples of 6,7,9, 25 and 1,000.
Unit 2 Addition and Subtraction	Two step problems Context Four-digit	<ul style="list-style-type: none"> • Add and subtract ones, tens, hundreds and thousands. • Add up to two 4-digit numbers using the formal written method (no exchange). • Add two 4-digit number numbers using the formal written method (one exchange). • Add two 4-digit numbers using the formal written method (more than one exchange). • Subtract two 4-digit numbers using the formal written method (no exchange). • Subtract two 4-digit numbers using the formal written method (one exchange). • Subtract two 4-digit numbers using the formal written method (more than one exchange). • Apply a variety of strategies to solve 	<ul style="list-style-type: none"> • Add and subtract numbers with up to four digits using the formal written method of columnar addition and subtraction where appropriate • Estimate and use inverse operations to check answers to a calculation • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

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		<p>subtraction problems efficiently.</p> <ul style="list-style-type: none"> Estimate answers to addition and subtraction problems (to 4-digit numbers). Use and apply inverse operations (to 4-digit numbers). 	
Unit 3 Measurement: Area	<p>Estimate Rectilinear figure Area Rectilinear shapes Convert</p>	<ul style="list-style-type: none"> Understand what area is. Calculate the area by counting squares. Make shapes from a given area. Compare areas. 	<ul style="list-style-type: none"> Find the area of rectilinear shapes by counting squares
Unit 4 Multiplication and division A	<p>Derived facts Factors Factor pairs Scaling problems Three-digit</p>	<ul style="list-style-type: none"> Recall and apply multiples of 3. Multiply and divide by 6. Recall the 6- times table and derive division facts. Multiply and divide by 9. Recall the 9-times table and derive division facts. Understand the relationship between 3, 6, and 9 times tables. Multiply and divide by 7. Recall the 7- times table and derive division facts. Recall the 11 – times tables and derive division facts. Recall the 12- times table and derive division facts. Multiply by 1 and 0. Divide a number by 1 and itself. Multiply 3 numbers. 	<ul style="list-style-type: none"> Recall and use multiplication and division facts for multiplication tables up to 12 X 12 Recognise and use factor pairs and commutativity in mental calculations Count in multiples of 6 Count in multiples of 7 Count in multiples of 9 Count in multiples of 1,000 Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1, dividing by 1 Multiplying together 3 numbers
Unit 5 Multiplication and division B	<p>Derived facts Factors Factor pairs Scaling problems Three-digit</p>	<ul style="list-style-type: none"> Find factor pairs. Use factor pairs. Multiply by 10. Multiply by 100. Divide by 10. Divide by 100. 	<ul style="list-style-type: none"> Recognise and use factor pairs and commutativity in mental calculations Multiply 2-digit and 3-digit numbers by a one-digit number using formal written layout Solve problems involving multiplying and adding including using the written methods to multiply 2-

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		<ul style="list-style-type: none"> Recognise and use related multiplication and division facts. Use informal written methods for multiplication. Multiply a 2-digit number by a 1-digit number using the grid method. Multiply a 3- 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. Solve correspondence problems. Apply a variety of strategies to solve multiplication problems. Solve multiplication problems using efficient methods 	<p>digit numbers by 1 digit</p> <ul style="list-style-type: none"> Solve integer scaling problems and correspondence problems
Unit 6 Length and perimeter	Estimate Rectilinear figure Area Rectilinear shapes Convert	<ul style="list-style-type: none"> Measure in kilometres and metres. Calculate equivalent lengths (kilometres and metres). Calculate perimeter on a grid. Calculate the perimeter of a rectangle. Measure the perimeter of rectilinear shapes. Find missing lengths in rectilinear shapes. Calculate perimeter of rectilinear shapes. Calculate perimeter of regular polygons. Calculate the perimeter of polygons. 	<ul style="list-style-type: none"> Convert between different units of measure (km to m) Measure and calculate the perimeter of regular polygons (<u>taken from non-statutory DfE Ready to Progress guidance</u>) Measure and calculate the perimeter of irregular polygons (<u>taken from non-statutory DfE Ready to Progress guidance</u>) Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m .
Unit 7 Fractions	Hundredths Decimal Decimal place One decimal place Two decimal places Round decimals Whole number Common equivalent fractions Decimal equivalents Dividing Ones Tenths Hundredths	<ul style="list-style-type: none"> Understand the whole. Count in fractions beyond 1. Partition a mixed number fraction. Plot mixed number fractions on a number line. Compare and order mixed number fractions. Understand improper fractions Convert mixed numbers to improper fractions. Convert improper fractions to mixed numbers. Plot equivalent fractions on a number line. Find equivalent fraction families. Add two or more fractions. 	<ul style="list-style-type: none"> <u>Taken from non-statutory DfE Ready to Progress guidance:</u> Count beyond 1 Partition a mixed number Number lines with mixed numbers Compare and order mixed numbers Understand improper fractions Convert mixed numbers to improper fractions Recognise and show, using diagrams, families of common equivalent fractions

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	<p>Simple measure Money problems</p>	<ul style="list-style-type: none"> • Add fractions and mixed number fractions. • Subtract two fractions. • Subtract fractions from whole amounts. • Subtract fractions from mixed number fractions. 	
<p>Unit 8 Decimals A</p>	<p>Hundredths Decimal Decimal place One decimal place Two decimal places Round decimals Whole number Common equivalent fractions Decimal equivalents Dividing Ones Tenths Hundredths Simple measure Money problems</p>	<ul style="list-style-type: none"> • Identify tenths as fractions. • Identify tenths as decimals. • Place tenths on a place value chart. • Plot tenths on a number line. • Divide a 1-digit number by 10 (involving decimals). • Divide a 2-digit number by 10 (involving decimals). • Identify hundredths as fractions. • Identify hundredths as decimals. • Place hundredths on a place value chart. • Divide a 1- or 2-digit number by 100 (involving decimals) 	<ul style="list-style-type: none"> • Recognise and write decimal equivalents of any number of tenths or hundredths. • Compare numbers with the same number of decimal places up to 2 decimal places • Find the effect of dividing a one- or two-digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths • Count up and down in hundredths; recognize that hundredths arise when dividing an object by 100 and dividing tenths by 10
<p>Unit 9 Decimals B</p>	<p>Hundredths Decimal Decimal place One decimal place Two decimal places Round decimals Whole number Common equivalent fractions Decimal equivalents Dividing Ones Tenths</p>	<ul style="list-style-type: none"> • Make a whole with tenths. • Make a whole with hundredths. • Partition decimals. • Flexibly partition decimals. • Compare decimals. • Order decimals. • Round decimals to the nearest whole numbers. • Recognise halves and quarters as decimals. 	<ul style="list-style-type: none"> • Compare numbers with the same number of decimal places up to two decimal places. • Round decimals with one decimal place to the nearest whole number. • Recognise and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ and $\frac{3}{4}$ • Identifying the value of the digits in the answer as ones, tenths and hundredths. • Solve simple measure and money problems involving fractions and decimals to 2 decimal places • Recognise and write decimal equivalents of any number of tenths or hundredths. • Solve simple measure problems involving fractions and decimals to two decimal places.

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	<p>Hundredths Simple measure Money problems</p>		
<p>Unit 10 Money</p>	<p>Decimals Solve Estimate Covert</p>	<ul style="list-style-type: none"> • Record money using decimals. • Convert between pounds and pence. • Compare amounts of money. • Estimate using money. • Calculate with money. • Solve problems with money. 	<ul style="list-style-type: none"> • Estimate, compare and calculate different measures, including money in pounds and pence. • Solve simple money problems involving fractions and decimals to two decimal places.
<p>Unit 11 Time</p>	<p>Duration Time taken Nearest minute Record Seconds a.m. p.m. noon Midnight analogue Clock Compare Convert</p>	<ul style="list-style-type: none"> • Compare units of time (years, months and days). • Compare and convert hours, minutes and seconds. • Convert between analogue and digit times. • Convert to the 24-hour clock. • Convert from the 24-hour clock. 	<ul style="list-style-type: none"> • Read, write and convert time between analogue and digital 12- and 24-hour clocks. • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
<p>Unit 12 Geometry: Properties of shape.</p>	<p>Lines of symmetry Symmetric figure Classify Geometric shapes Quadrilaterals Acute angle Obtuse angle</p>	<ul style="list-style-type: none"> • Understand angles as turns. • Compare and order angles. • Identify angles. • Compare and order angles. • Identify and name triangles. • Identify and identify quadrilaterals. • Identify and name polygons. • Identify lines of symmetry. • Complete a symmetric figure. 	<ul style="list-style-type: none"> • Identify acute and obtuse angles • Compare and order angles up to two right angles by size • Compare and classify geometric shapes including quadrilaterals and triangles, based on their properties and size. • Identify lines of symmetry in 2-D shapes presented in different orientations

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<p style="text-align: center;">Unit 13 Statistics</p>	<p style="text-align: center;">Time graphs Comparison Problems</p>	<ul style="list-style-type: none"> • Interpret charts. • Compare charts and calculate sum and difference. • Interpret line graphs. • Draw line graphs. 	<ul style="list-style-type: none"> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
<p style="text-align: center;">Unit 14 Geometry: Position and direction</p>	<p style="text-align: center;">Co-ordinates Quadrant Grid Translate Translation Axis X- axis Y-axis Spaces Unit Plot Point Polygon</p>	<ul style="list-style-type: none"> • Describe position using coordinates. • Plot coordinates on a grid. • Draw 2D shapes on a grid. • Translate using a grid. • Describe translation on a grid. 	<ul style="list-style-type: none"> • Describe positions on a 2-D grid as coordinates in the first quadrant. • Plot specified points and draw sides to complete a given polygon • Describe movements between positions as translations of a given unit to the left/right and up/down.

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Year 5's Yearly Overview

	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			Number: Addition & Subtraction		Number: Multiplication and Division A			Number: Fractions A			
Spring	Number: Multiplication and Division B			Number: Fractions B		Number: Decimals and Percentages			Measurement: Perimeter and Area		Statistics	
Summer	Geometry: Shape			Geometry: Position and Direction		Number: Decimals			Number: Negative Numbers	Measurement: Converting Units		Measurement: Volume

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Year 5			
Units	Key Vocabulary	Key knowledge and Skills	End Points
<p>Unit 1 Number: Place Value</p>	<p>Ten thousand Hundred thousand Millions Context Steps of powers Decimal equivalents Two decimal places Thousandths Numbers up to one million</p>	<ul style="list-style-type: none"> • Read and write Roman numerals to 1,000. • Represent and count number to 10,000. • Represent and count numbers to 100,000. • Represent and count numbers to 1,000,000. • Read and write numbers to 1,000,000. • Understand the importance of 10 up to 1,000,000. • Find 10, 100, 1,000, 10,000, 100,000 more or less than a number. • Partition numbers to 1,000,000. • Use a number line to 1,000,000. • Compare and order numbers to 100,000. • Compare and order numbers to 1,000,000. • Round to nearest 10, 100 or 1,000 within • Round within 100,000. • Round within 1,000,000. 	<ul style="list-style-type: none"> • Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 • Read numbers to at least 1,000,000 and determine the value of each digit • Write numbers to at least 1,000,000 • Order and compare numbers to at least 1,000,000 • Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 • Solve number and practical problems that involve all the above • Read Roman numerals up to 1,000 (M) and recognise years written in Roman numerals
<p>Unit 2 Number: Addition and subtraction.</p>	<p>Increasingly large numbers More than 4 digits Rounding Determine Context Multi-step problems</p>	<ul style="list-style-type: none"> • Apply mental strategies to solve addition and subtraction problems. • Add whole numbers with more than four digits. • Subtract whole numbers with more than four digits. • Round to check answers. • Use and apply inverse operations (to 5-digit numbers). • Solve multi-step addition and subtraction problems. • Compare addition and subtraction calculations. • Find missing numbers in addition and subtraction number sentences. 	<ul style="list-style-type: none"> • Add and subtract numbers mentally with increasingly large numbers • Add and subtract whole numbers with 4 digits, including using formal written methods (columnar) • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • Solve addition and subtraction multi-step problems in contexts, deciding with operations and methods to use and why. • Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000

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<p style="text-align: center;">Unit 3 Multiplication and division A</p>	<p>Decimals Four-digit Long multiplication Short division Remainders Context Common factors Common multiples Prime numbers Prime factors Composite numbers Square number Cube number Notation Squares Cubes</p>	<ul style="list-style-type: none"> • To recall multiples of any number. • Identify common multiples. • Find factors of a number. • Identify common factors. • Recognise prime numbers. • Recognise square numbers. • Recognise cube numbers. • Multiply by 10, 100 and 1,000. • Divide by 10, 100 and 1,000. • Use multiples of 10, 100 and 1,000. 	<ul style="list-style-type: none"> • Multiply and divide numbers mentally drawing upon known facts • Multiply and divide whole numbers by 10, 100 and 1000 • Identify multiples and factors • Find all factor pairs of a number and common factors of 2 numbers • Recognise and use square numbers and cube numbers using the notations (<i>e. g</i> 3^2 and 4^3) • Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes • Know and use vocabulary of prime numbers and composite (non-prime) numbers • Establish whether a number up to 100 is a prime and recall prime numbers up to 19
<p style="text-align: center;">Unit 4 Fractions A</p>	<p>Thousandths Multiples Three decimal places Per cent Number of parts per hundred Percentages Decimal fraction Mixed numbers Improper fraction Proper fraction Convert Mathematical statements Multiply Percentage and decimal equivalents</p>	<ul style="list-style-type: none"> • Find fractions equivalent to a unit fraction. • Find fractions equivalent to a non-unit fraction. • Recognise equivalent fractions. • Convert improper fractions to mixed number fractions. • 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 total greater than 1. • Use addition involving mixed number fractions. • Add two mixed numbers. • Subtract fractions. • Subtract from a mixed number fraction. 	<ul style="list-style-type: none"> • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number • Compare and order fractions whose denominators are all multiples of the same number • Add fractions with the same denominator and denominators that are multiples of the same number. • Subtract fractions with the same denominator and denominators that are multiples of the same number.

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		<ul style="list-style-type: none"> • Subtract from a mixed number fraction – breaking the whole. • Subtract two mixed numbers. 	
<p>Unit 5 Number: Multiplication and division B</p>	<p>Decimals Four-digit Long multiplication Short division Remainders Context Common factors Common multiples Prime numbers Prime factors Composite numbers Square number Cube number Notation Squares Cubes</p>	<ul style="list-style-type: none"> • Multiply a 4- digit number by a 1- digit number. • Multiply a 2-digit number by a 2-digit number using a variety of representations. • Multiply a 2-digit number by a 2-digit number using the formal written method. • Multiply a 3-digit number by a 2-digit number using the formal written method. • Multiply a 4-digit number by a 2-digit number using the formal written method. • Solve problems with multiplication. • Use the formal written methods of division. • Divide a 4- digit number by a 1- digit number using the formal written method. • Divide with remainders using the formal written method. • Apply a variety of strategies to solve division problems. • Solve problems with multiplication and division. 	<ul style="list-style-type: none"> • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for 2-digit numbers. • Divide numbers up to 4 digits by a 1- digit number using the formal written method of short division and interpret remainders appropriately for the context. • Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes
<p>Unit 6 Fractions B</p>	<p>Thousandths Multiples Three decimal places Per cent Number of parts per hundred Percentages Decimal fraction Mixed numbers Improper fraction Proper fraction Convert Mathematical</p>	<ul style="list-style-type: none"> • 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. • Find a fraction of an amount. • Find the whole of an amount. • Use fractions as operators. 	<ul style="list-style-type: none"> • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

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<p style="text-align: center;">Unit 7 Decimals and percentages</p>	<p>statements Multiply Percentage and decimal equivalents</p>	<ul style="list-style-type: none"> • Recognise decimals up to 2 decimal places. • Identify equivalent fractions and decimals (tenths). • Identify equivalent fractions and decimals (hundredths) • Find equivalent fractions and decimals. • Identify thousandths as fractions. • Identify thousandths as decimals. • Place 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 what makes a percentage. • Compare percentages to fractions. • Compare percentages to decimals. • Identify equivalent fractions, decimals and percentages. 	<ul style="list-style-type: none"> • Read, write, order and compare numbers with up to three decimal places. • Read and write decimal numbers as fractions • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 • • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • Round decimals with two decimal places to the nearest whole number and to one decimal place. • Recognise the per cent symbol (%) and understand that percent relates to 'parts per hundred', • Write percentages as a fraction with denominator 100, and as a decimal.
<p style="text-align: center;">Unit 8 Perimeter and Area.</p>	<p>Estimate Rectilinear figure Area Rectilinear shapes Convert</p>	<ul style="list-style-type: none"> • Calculate perimeter of rectangles. • Calculate the perimeter of rectilinear shapes. • Calculate the perimeter of polygons. • Calculate the area of rectangles. • Find the area of compound shapes. • Estimate area. 	<ul style="list-style-type: none"> • Measure and calculate the perimeter of composite rectilinear shapes in cm and m • Calculate and compare the area of rectangles (including squares) using standard units cm²/m² • Estimate the area of irregular shapes.
<p style="text-align: center;">Unit 9 Statistics</p>	<p>Timetables Line graph</p>	<ul style="list-style-type: none"> • Draw line graphs. • Read and interpret line graphs. • Read and interpret tables. • Read and interpret two-way tables. • Read and interpret timetables. 	<ul style="list-style-type: none"> • Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables including timetables and two-way tables.
<p style="text-align: center;">Unit 10 Geometry Properties of Shape</p>	<p>Angles Measure Degrees Missing lengths Missing angles Regular polygons</p>	<ul style="list-style-type: none"> • 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. • Calculate lengths and angles in shapes. 	<ul style="list-style-type: none"> • Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. • Use the properties of rectangles to deduce related facts and find missing lengths and angles. • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.

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	Irregular polygons Degrees Estimate Compare Reflex angle Point Straight line Multiples	<ul style="list-style-type: none"> Identify and describe regular and irregular polygons. Recognise and describe 3D shapes. 	<ul style="list-style-type: none"> Draw given angles and measure them in degrees ($^{\circ}$). Identify: angles at a point and one whole turn (total 360°) Identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)
Uni 11 Geometry Position and Direction	Reflection	<ul style="list-style-type: none"> Read and plot coordinates. Solve problems with coordinates. Translate shapes on a grid. Translate points with coordinates. Draw lines of symmetry. Reflect in horizontal and vertical lines. 	<ul style="list-style-type: none"> Identify and describe the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.
Unit 12 Number: Decimals	Thousandths Multiples Three decimal places Per cent Number of parts per hundred Percentages Decimal fraction Mixed numbers Improper fraction Proper fraction Convert Mathematical statements Multiply Percentage and decimal equivalents	<ul style="list-style-type: none"> Use known facts to add and subtract decimals within 1. Add decimals to make a whole number. Add and subtract decimals across 1. Add decimals with the same number of decimal places. Subtract decimals with the same number of decimal places. Add decimal with a different number of decimals places. Subtract decimals with a different number of decimal places. Use efficient strategies for adding and subtracting decimals. Recognise decimal sequences. Multiply decimals by 10, 100 and 1,000. Divide decimals by 10, 100 and 1,000. Calculate missing values by multiplying and dividing decimals. 	<ul style="list-style-type: none"> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents Solve problems involving number up to 3 decimal places Read, write order and compare numbers with up to 3 decimal places Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

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<p>Unit 13: Number: Negative numbers. Convert un</p>	<p>Zero Minus Negative Sub zero Forwards/backwards Positive Compare Calculate</p>	<ul style="list-style-type: none"> • Understand negative numbers. • Count through zero in ones. • Count through zero in multiples. • Compare and order negative numbers. • Calculate the difference between negative numbers. 	<ul style="list-style-type: none"> • Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
<p>Unit 14 Measure: Converting units.</p>	<p>Compare Kilograms Kilometres Convert Litres Millilitres Metric Imperial</p>	<ul style="list-style-type: none"> • Convert amounts using kilograms and kilometres. • Convert amounts using millimetres and millilitres. • Convert units of length. • Convert between metric and imperial units. • Convert units of time. • Calculate time using timetables. 	<ul style="list-style-type: none"> • Convert between different units of metric measure (for example, kilometre and metre; centimetres and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. • Solve problems involving converting between units of time.
<p>Unit 15 Measure: Volume</p>	<p>Cubes Cuboids Square numbers Cube numbers Metric measures Metric units Imperial units</p>	<ul style="list-style-type: none"> • Understand cubic centimetres. • Compare volume. • Estimate volume. • Estimate capacity. 	<ul style="list-style-type: none"> • Estimate volume (e.g. using 1cm^3 blocks to build cuboids, including cubes) and capacity (e.g. using water)

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Year 6's Yearly Overview

	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		Number: Addition, subtraction, multiplication and division				Number: Fractions A		Number: Fractions B		Measurement: Converting units	
Spring	Number: Ratio		Number: Algebra		Number: Decimals	Number: Fractions, Decimals and Percentages		Measurement: Area, Perimeter and volume		Statistics		
Summer	Geometry: Shape			Geometry: Position and Direction	Themed Projects, consolidation and problem solving							

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Year 6			
Units	Key Vocabulary	Key knowledge and Skills	End Points
Unit 1 Number: Place Value	Intervals across zero Three decimal places Hundredths Thousandths Ten thousandths Numbers up to ten million	<ul style="list-style-type: none"> • Represent and count numbers to 1,000,000 • Represent and count numbers to 10,000,000 • Read and write numbers to 10,000,000 • Powers of 10 • To use a number line to 10,000,000 • Compare and order and integers • Round any integer • Use negative numbers 	<ul style="list-style-type: none"> • Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit • Round any whole number to a required degree of accuracy • Use negative numbers in context and calculate intervals across zero • Solve number and practical problems that involve all the above

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<p style="text-align: center;">Unit 2 Addition, subtraction, multiplication and division</p>	<p>Estimation Mixed operations Scale factor Long division Whole number Remainders Fractions Rounding Mixed operations</p>	<ul style="list-style-type: none"> • Add and subtract integers • Find common factors • Find common multiples • Understand rules of divisibility • Identify prime numbers to 100 • Identify square and cube numbers • Multiply up to a 4- digit number by a 2- digit number using the formal written method • Solve problems with multiplication • Use formal written methods of short division • Division using factors • Use long division • Use long division with remainders • Solve problems with division • Solve multi step multiplication and division problems • Order of operations (BODMAS) • Use mental calculations and estimation • Solve and reason problems using known facts 	<ul style="list-style-type: none"> • Solve addition and subtraction multi-step problems in contexts deciding which operations and methods to use and why • Multiply multi-digit numbers up to 4 digits by a 2- digit number using the formal written method of long multiplication • Divide numbers up to four digits by a 2-digit whole number using the formal written method of long division. • Divide numbers up to four digits by a 2-digit number using the formal written method of short division • Interpret remainders as whole number remainders or fractions • Interpret remainders by rounding as appropriate for the context • Perform mental calculations, including with mixed operations and large numbers • Identify common factors, common multiples and prime numbers • Use their knowledge of the order of operations to carry out calculations involving the four operations • Solve problems involving addition, subtraction, multiplication and division. • Use estimation to check answers to calculations and determine in context of a problem, an appropriate degree of accuracy.
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<p style="text-align: center;">Unit 3 Fractions</p>	<p>Common factors Common multiples Decimal fraction equivalents Simplest form</p>	<ul style="list-style-type: none"> • Identify equivalent fractions and simplify them. • Plot equivalent fractions on a number line. • Compare and order fractions with the same denominator • Compare and order fractions with the same numerator • Add and subtract simple fractions • Add and subtract any two fractions • Add mixed number fractions • Subtract mixed number fractions • Solve multi-step problems involving fractions. • Multiply fractions by integers • Multiply fractions by fractions • Divide a fraction by an integer • Divide any fraction by an integer • Solve mixed questions with fractions • Find the fraction of an amount • Find the whole of an amount 	<ul style="list-style-type: none"> • Use common factors to simplify fractions • Use common multiples to express fractions in the same denomination • Compare and order fractions, including fractions >1 • Identify common factors, common multiples and prime numbers • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions • Multiply simple pairs of proper fractions, writing the answer in its simplest form • Divide fractions by whole numbers • Solve problems involving addition, subtraction, multiplication and division • Associate a fraction with division and calculate decimal fraction equivalents
<p style="text-align: center;">Unit 4 Converting units.</p>	<p>Compare Kilograms Kilometres Convert Litres Millilitres Metric Imperial</p>	<ul style="list-style-type: none"> • Understand metric measures • Convert metric measures • Calculate with metric measures • Convert miles and kilometres • Compare imperial measures • Use imperial measures 	<ul style="list-style-type: none"> • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation up to 3 dp. • Convert between miles and kilometres
<p style="text-align: center;">Unit 5 Ratio</p>	<p>Ratio Proportion Size Quantity Missing value Integer Multiplication Division</p>	<ul style="list-style-type: none"> • Understand the relationship between addition and multiplication. • Use language related to ratio • Understand ratio symbol • Compare ratio and fractions • Understand scale diagrams • Use scale factors • Identify similar shapes 	<ul style="list-style-type: none"> • Interpret and understand the ratio symbol • Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. • Solve problems involving similar shapes where the scale factor is known or can be found. • Solve problems involving unequal sharing and grouping using knowledge of fractions and

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	<p>Multiply Divide Solve Problem Calculate Percentage Comparison Unequal sharing Grouping Fractions Multiples</p>	<ul style="list-style-type: none"> • Solve ratio problems • Solve proportion problems • Solve ratio and proportion problems in a real-life context 	<p>multiples.</p>
<p>Unit 6 Algebra</p>	<p>Missing number Problem Pairs Number sentence Variables Combination Possibility Enumerate Equation Formulae Generate Linear number sequence</p>	<ul style="list-style-type: none"> • Learn the meaning of input, output, function and rule by solving 1 step algebra problems. • Learn the meaning of input, output, function and rule by solving 2 step algebra problems. • Form algebraic expressions using letters to represent numbers • Substitute numbers in place of letters in an algebraic expression • Use formulae to calculate values • Form equations from diagrams and word descriptions • Solve 1-step equations • Solve 2-step equations • Find pairs of values • Solve problems with two unknowns 	<ul style="list-style-type: none"> • Use simple formulae. • Generate and describe linear number sequences. • Express missing number problems algebraically. • Find pairs of numbers that satisfy an equation with two unknowns. • Enumerate possibilities of combinations of two variables.
<p>Unit 7 Decimals</p>		<ul style="list-style-type: none"> • Identify the place value of decimals within 1 • Understand place value – involving integers and decimals • Round decimals • Add and subtract decimals • Multiply decimals by 10, 100 and 1,000 • Divide decimals by 10, 100 and 1,000 • Multiply decimals by integers 	<ul style="list-style-type: none"> • Identify the value of each digit in numbers given to 3 decimal places. • Multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places. • Multiply 1-digit numbers with up to 2 decimal places by whole numbers. • Use written division methods in cases where the answer has up to 2 decimal places.

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		<ul style="list-style-type: none"> • Divide decimals by integers • Multiply and divide decimals in context 	<ul style="list-style-type: none"> • Solve problems which require answers to be rounded to specified degrees of accuracy.
Unit 8 Fractions, Decimals and Percentages		<ul style="list-style-type: none"> • Identify decimal and fraction equivalents • Understand fractions as division • Understand percentages • Convert fractions to percentages • Identify equivalent fractions, decimals and percentages • Order fractions, decimals and percentages • Calculate the percentage of amount – one step • Calculate the percentage – multi-step • Calculate the percentage – missing values 	<ul style="list-style-type: none"> • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination • Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction • Compare and order fractions, including fractions > 1 • Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison. • Recall and use equivalences between simple fractions, decimals and percentages including in different contexts.
Unit 9 Measurement: Area, Perimeter and Volume		<ul style="list-style-type: none"> • Find the area of shapes • Find the area and perimeter of rectangles and rectilinear shapes • Find the area of a triangle by counting squares • Calculate the area of a right-angled triangle • Find the area of any triangle • Find the area of a parallelogram • Find the volume by counting cubes • Find the volume of a cuboid 	<ul style="list-style-type: none"> • Recognise that shapes with the same areas can have different perimeters and vice versa. • Recognise when it is possible to use formulae for area and volume of shapes. • Calculate the area of parallelograms and triangles. • Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units
Unit 10 Statistics	Pie chart Calculate Mean Average	<ul style="list-style-type: none"> • Draw, read and interpret line graphs. • Draw read and interpret dual bar charts. • Read and interpret pie charts. • Read and interpret pie charts with percentages. • Draw pie charts. • Calculate the mean. 	<ul style="list-style-type: none"> • Interpret and construct pie charts and line graphs and use these to solve problems. • Calculate the mean as an average.

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<p style="text-align: center;">Unit 11 Geometry: Property of shapes</p>	<p>Radius Diameter Circumference Nets</p>	<ul style="list-style-type: none"> • Measure and classify angles • Calculate angles • Calculate vertically opposite angles • Calculate angles in a triangle • Calculate angles in different types of triangles (i.e. equivalent, isosceles) • Calculate missing angles in a triangle • Calculate missing angles in quadrilaterals • Calculate angles in polygons • Understand the terms radius, diameter and circumference • Draw shapes accurately • Investigate nets of 3D shapes 	<ul style="list-style-type: none"> • Draw 2-D shapes using given dimensions and angles. • Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons. • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. • Illustrate and name parts of circles, including radius, diameter and circumference • Know that the diameter is twice the radius. • Recognise, describe and build simple 3-D shapes, including making nets
<p style="text-align: center;">Unit 12 Geometry: Position and Direction</p>	<p>Four quadrants</p>	<ul style="list-style-type: none"> • Identify coordinates in the first quadrant • Read and plot coordinates in four quadrants • Solve problems with coordinates • Translate shapes on a grid • Reflect shapes on a grid 	<ul style="list-style-type: none"> • Describe positions on the full coordinate grid (all 4 quadrants) • Draw and translate simple shapes on the co-ordinate plane and reflect them in the axes.
<p style="text-align: center;">Unit 13 Problem Solving and Investigations</p>		<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Reasoning and problem solving in all aspects of previous learning.

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Progression document showing small steps between year groups.

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Number: Number and Place Value

Steps	Year Group					
	1	2	3	4	5	6
1	Sort objects (Within 10)	Recognise and count numbers within 20	Represent numbers to 100	Represent numbers to 1,000	Roman numerals to 1,000	Represent and count numbers to 1,000,000
2	Count objects (Within 10)	Count in groups of 10 to 100	Partition numbers to 100	Partition numbers to 1,000	Represent and count numbers to 10,000	Represent and count Numbers to 10,000,000
3	Count objects from a larger group (Within 10)	Recognise tens and ones up to 100	Place 10s and 1s on the number line to 100	Use a number line to 1,000	Represent and count numbers to 100,000	Read and write numbers to 10,000,000
4	Represent objects (Within 10)	Represent tens and one in a place value chart up to 100	Count in hundreds up to 1,000	Count in thousands up to 10,000	Represent and count numbers to 1,000,000	Understanding the importance of 10 up to 10,000,000
5	Recognise numbers as words	Partition numbers to 100	Represent numbers to 1,000	Represent numbers to 10,000	Read and write numbers to 1,000,000	To use a number line to 10,000,000
6	Count on from any number (Within 10)	Write numbers in words to 100 in words	Partition numbers to 1,000	Partition numbers to 10,000	Understanding the importance of 10 up to 1,000,000	Compare and order any integers
7	Find 1 more than any number (Within 10)	Flexibly partition numbers to 100	Flexibly partition numbers to 1,000	Flexibly partition numbers to 10,000	Find 10/100/1,000/10,000 /100,000 more or less	Round any integer

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8	Count back from any number (within 10)	Write numbers in words to 100 in expanded form	Represent hundreds, tens and ones	Find 1, 10, 100, 1,000 more or less than a number	Partition numbers to 1,000,000	Use negative numbers
9	Find 1 less from any number (Within 10)	Place 10s on the number line to 100	Find 1, 10, 100 more or less than a number up to 1,000	Use a number line to 10,000	Use a number line to 1,000,000	
10	Compare groups by matching	Place 10s and 1s on the number line to 100	Use a number line up to 1,000	Estimate on a number line to 10,000	Compare and order numbers to 100,000	
11	Use the vocabulary fewer, more, same (Within 10)	Estimate numbers on a number line up within 100	Estimate on a number line to 1,000	Compare numbers to 10,000	Compare and order numbers to 1,000,000	
12	Use the vocabulary and symbols less than, greater than and equal to (Within 10)	Compare objects up to 100	Compare numbers to 1,000	Order numbers to 10,000	Round to the nearest 10, 100 or 1,000 within 1,000,000	
13	Compare numbers (within 10)	Compare numbers up to 100	Order numbers to 1,000	Explore Roman numerals to 100	Round within 100,000	
14	Order objects and numbers (within 10)	Order objects and numbers up to 100	Count in 50's up to 1,000	Round to the nearest 10 within 10,000		
15	Use a number line (Within 10)	Count in 2s 5s and 10s		Round to the nearest 100 within 10,000		
16	Recognise and count numbers within 20	Count in 3s		Round to the nearest 1,000 within 10,000		
17	Understand the value of 10			Round to the nearest 10, 100 or 1,000 within 10,000		

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18	Understand the value of 11, 12 and 13					
19	Understand the value of 14, 15, 16					
20	Understand the value of 17, 18, 19					
21	Understand the value of 20					
22	Find 1 more and 1 less from a given number (Within 20)					
23	The number line to 20					
24	Use a Number Line (up to 20)					
25	Estimate on a number line (up to 20)					
26	Compare numbers to 20					
27	Order numbers (up to 20)					

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28	Count from 20 to 50					
29	Know the value of 20, 30, 40 and 50					
30	Count by making groups of 10					
31	Count groups of tens and ones (up to 50)					
32	Partitioning tens and ones (up to 50)					
33	Use a Number Line (up to 50)					
34	Estimate on a number line (up to 50)					
35	Find 1 more and 1 less from a given number (within 50)					
36	Count from 50 - 100					
37	Count in groups of 10 to 100					

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38	Partition numbers to 100					
39	Use a number line (up to 100)					
40	To find one more and one less than a number (up to 100)					
41	Compare numbers with the same numbers of tens					
42	Compare any two numbers					

NUMBER AND PLACE VALUE VOCABULARY

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	Forwards/ Backwards	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:
	Numerals	Ones	Hundreds	Thousands	Ten thousand	Intervals across zero
	Words	Tens	Three-digit	Four- digit	Hundred thousand	Three decimal places
	Multiples	Two- digit	Ten more	Negative number	Millions	Hundredths
	Equal to	Estimate	One hundred more	One thousand more	Context	Thousandths
	More than/ Less than	Place Value	Ten less	One thousand less	Steps of powers	Ten thousandths
	Fewer	Solve Problems	One hundred less	Decimal	Decimal equivalents	Numbers up to ten million
	Most/ Least	Greater than >	Roman numeral	Decimal place	Two decimal places	
	Identify	Less than <	Numbers up to one thousand	Rounding	Thousandths	
	Represent	Nearest ten		Place holder	Numbers up to one million	

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	Digit	Number facts		Nearest 10, 100 & 1,000		
	Calculate	Partition		One place		
	Odd	Count in steps		Whole number		
	Even	Zero		Integer		
	Pattern	Compare		Tenths		
	Numbers to 100	Determine		Hundredths		
		Value				

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Number: Addition and Subtraction

Steps	Year Group					
	1	2	3	4	5	6
1	Identify parts and wholes	To know number bonds to 10	Apply number bonds within 10	Add and subtract 1s, 10s, 100s and 1,000s	Apply mental strategies to solve addition and subtraction problems	Add and subtract integers
2	To use part- whole models (within 10)	Identify related addition and subtraction facts families (Within 20)	Add and subtract 1s	Add up to two 4-digit numbers using the formal written method – no exchange	Add whole numbers with more than four digits	Solve multi-step problems
3	Write addition number sentences (Within 10)	Use related number facts	Add and subtract 10s	Add two 4-digit numbers using the formal written method – one exchange	Subtract whole numbers with more than four digits	Know the order of the operations
4	Identify and recognise addition fact families	Recall number bonds to 100 (tens)	Add and subtract 100s	Add two 4-digit numbers using the formal written method – more than one exchange	Round to check answers	Solve mental calculations and estimation

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5	Investigate number bonds (within 10)	Add and subtract 1s up to 100	Recognise addition and subtraction patterns	Subtract two 4-digit numbers using the formal written method – no exchange	Use and apply inverse operations (to 4-digit numbers)	Reason from known facts
6	Investigate systematic number bonds (within 10)	Add by making 10 then counting on	Add 1s across a 10 to a three-digit number	Subtract two 4-digit numbers using the formal written method – one exchange	Solve multi-step addition and subtraction problems	
7	Calculate number bonds to 10	Add three 1-digit numbers	Add 10s across a 100	Subtract two 4-digit numbers using the formal written method – more than one exchange	Compare addition and subtraction calculations	
8	Add numbers together (within 10)	Add to the next multiple of 10	Subtract 1s across a 10 to a three-digit number	Apply a variety of strategies to solve subtraction problems	Find missing numbers in addition and subtraction number sentences	
9	Add by counting on more (within 10)	Add across a 10	Subtract 10s across a 100	Estimate answers to addition and subtraction problems (to 4-digit numbers)		
10	Solve addition problems (within 10)	Subtract across 10	Make connections between addition and subtraction	Use and apply inverse operations (to 4-digit numbers) to check answers		
11	Find a part of a whole (within 10)	Subtract from a 10	Add two numbers using the formal written method (no exchange)			

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12	Find a part by subtracting (Within 10)	Subtract a 1- digit number from a 2- digit number (across 10)	Subtract two numbers using the formal written method (no exchange)			
13	Identify and recognise addition and subtraction fact families (within 10)	Recognise 10 more, 10 less than a number	Add two numbers using the formal written method (across a 10)			
14	Subtraction – take away/cross out (How many left?)	Add and subtract 10s	Add two numbers using the formal written method (across a 100)			
15	Subtract by taking away (within 10)	Add two 2-digit numbers (not across a 10)	Subtract two numbers using the formal written method (across a 10)			
16	Subtract on a number line (within 10)	Add two 2-digit numbers (across a 10)	Subtract two numbers using the formal written method (across a 100)			
17	Add or subtract 1 or 2 from a given number (within 10)	Subtract two, 2- digit numbers (not across a 10)	Add 2-digit and 3- digit numbers using the formal written method			
18	Add by counting on (within 20)	Subtract two, 2- digit numbers (across a 10)	Subtract a 2-digit number from a 3- digit number using the formal written method			

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19	Add ones using number bonds (within 20)	Solve mixed addition and subtraction number problems	Find complements to 100 (Fluency practice)			
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19	Find and make number bonds (within 20)	Compare number sentences	Estimate answers to addition and subtraction problems (to 3-digit numbers)			
20	Calculate doubles by adding the same amount (within 20)	Solve missing number problems (beyond 20)	Use and apply inverse operations (to 3-digit numbers)			
21	Recognise near doubles (within 20)		Select the correct operation to solve addition and subtraction problems			
22	Subtract ones using number bonds (Within 20)					
23	Subtract by counting back (Within 20)					
24	Subtract by finding the difference (Within 20)					
25	Identify related addition and subtraction facts families (Within 20)					

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26	Solve missing number problems					
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	(within 20)					
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ADDITION AND SUBTRACTION VOCABULARY

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	One step problem	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:
	Concrete object		Three-digit number	Two step problems		Estimation
	Pictorial representation	Tens	Hundreds	Context	Increasingly large numbers	Mixed operations
	Missing number	Order	Estimate	Four-digit	More than 4 digits	
	Problem	Inverse	Number facts		Rounding	
	Read	Relationship	Columnar addition		Determine	
	Write	Calculation	Columnar Subtraction		Context	
	Interpret	Solve problems			Multi-step problems	
	Equals =	Missing number problems	Formal Written method			
	Signs	Quantities	Mental method			
	One-digit	Measures	Method			
	Two-digit	Operation				
	Ones	Apply				

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	Mental	Whole number				
	Mentally					

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Number: Multiplication and Division

Steps	Year Group					
	1	2	3	4	5	6
1	Count in 2s	Recognise equal groups	Use grouping to solve multiplication problems	Recall and apply multiples of 3	To recall multiples of any number	Find common factors
2	Count in 10s	Make equal groups	Use arrays to solve multiplication problems	Multiply and divide by 6	Identify common multiples	Find common multiples
3	Count in 5s	Add equal groups	Recall and apply multiples of 2	Recall the 6 times-table and derive division facts	Find factors of a number	Understand rules of divisibility
4	Recognise equal groups	Recognise repeated addition as multiplication Introduce the multiplication symbol	Recall and apply multiples of 5 and 10	Multiply and divide by 9	Identify common factors	Identify prime numbers to 100
5	Add equal groups	Calculate multiplication sentences	Use sharing and grouping to solve multiplication and division problems	Recall the 9 times-table and derive division facts	Recognise prime numbers	Identify square and cube numbers
6	Make arrays	Use arrays to solve multiplication problems	Multiply by 3	Understand the relationship between 3, 6 and 9 times-tables	Recognise square numbers	Multiply up to a 4-digit number by a 2-digit number using

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						the formal written method
7	Make doubles	Use grouping to make equal groups	Divide by 3	Multiply and divide by 7	Recognise cube numbers	Solve problems with multiplication
8	Make equal groups by grouping	Use sharing to make equal groups	Recite and apply the 3 times-table	Recall the 7 times-table and derive division facts	Multiply by 10, 100 and 1,000	Use formal written methods of short division
9	Make equal groups by sharing	Recite and apply the 2 times tables	Multiply by 4	Recall the 11 times-table and derive division facts	Divide by 10, 100 and 1,000	Division using factors
10		Divide by 2	Divide by 4	Recall the 12 times-table and derive division facts	Use multiples of 10, 100 and 1,000	Introduction to long division
11		Understand doubling and halving as multiplication and division	Recite and apply the 4 times-table	Multiply by 1 and 0	Multiply up to a 4-digit number by a 1-digit number	Use long division with remainders
12		Identify odd and even numbers	Multiply by 8	Divide a number by 1 and itself	Multiply a 2-digit number by a 2-digit number using a variety of representations	Solve problems with division
13		Recite and apply the 10 times table	Divide by 8	Multiply three numbers	Multiply a 2-digit number by a 2-digit number using the formal written method	Solve multi-step multiplication and division problems

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14		Divide by 10	Recite and apply the 8 times-table	Find factor pairs	Multiply a 3-digit number by a 2-digit number using the formal written method	Use the order of operations
15		Recite and apply the 5 times table	Understand the relationship between the 2, 4 and 8 times-tables	Multiply by 10	Multiply a 4-digit number by a 2-digit number using the formal written method	Use mental calculations and estimation
16		Divide by 5	Identify multiples of 10	Multiply by 100	Solve problems with multiplication	Solve and reason problems using know facts
17		Understand the relationship between 5 and 10 times-tables	Recognise and use related calculations	Divide by 10	To use formal short written methods of division	
18			Reason about multiplication	Divide by 100	Divide a 4-digit number by a 1-digit number using the formal written method	
19			Multiply a 2-digit number by a 1-digit number – no exchange	Recognise and use related multiplication and division facts	Divide with remainders using the formal written method	
20			Multiply a 2-digit number by a 1-digit number – with exchange	Use informal written methods for multiplication	Apply a variety of strategies to solve division problems efficiently	

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21			Understand the relationship between multiplication and division	Multiply a 2-digit number by a 1-digit number using the grid method	Solve problems with multiplication and division	
22			Divide a 2-digit number by a 1-digit number – no exchange	Multiply a 3-digit number by a 1-digit number		

22			Divide a 2-digit number by a 1-digit number – flexible partitioning	Divide a 2-digit number by a 1-digit number (1)		
23			Divide a 2-digit number by a 1-digit number – with remainders	Divide a 2-digit number by a 1-digit number (2)		
24			Solve problems by scaling	Divide a 3-digit number by a 1-digit number		
25			Solve correspondence problems	Solve correspondence problems		
26				Apply a variety of strategies to solve multiplication problems		

MULTIPLICATION AND DIVISION VOCABULARY

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	Multiples	Same as previous year group, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:
	Twos	Multiplication facts	Missing number problem	Derived facts	Decimals	Scale factor
	Fives	Division facts	Estimate	Factors	Four-digit	Long division
	Tens	Multiplication tables	Inverse	Factor pairs	Long multiplication	Whole number

	Number	Odd numbers	Formal written method	Scaling problems	Short division	Remainders
	Multiply	Even numbers	Mathematical statement	Three-digit	Remainders	Fractions
	Divide	Share	Recall		Context	Rounding
	Multiplication	Equally	Integer		Common factors	Mixed operations
	Division	Repeated multiplication/ division	Two- digit		Common multiples	
	One step problem	Calculate	One- digit		Prime numbers	
	Answer	Arrays			Prime factors	
	Concrete object				Composite numbers	
	Pictorial representation				Square number	
	Arrays				Cube number	
	Count				Notation	
	Equals				Squares	
	Write				Cubes	

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Number: Fractions, Decimals and Percentages

Steps	Year Group					
	1	2	3	4	5	6
1	Recognise half of an object or shape	Introduction to parts and whole	Understand the denominators of unit fractions	Understand the whole	Find fractions equivalent to a unit fraction	Identify equivalent fractions and simplify them
2	Find half of an object or shape	Find equal and unequal parts	Compare and order unit fractions	Count in fractions beyond 1	Find fractions equivalent to a non-unit fraction	Plot equivalent fractions on a number line
3	Recognise half of a quantity	Recognise half of an object or shape	Understand the numerators of non-unit fractions	Partition a mixed number fraction	Recognise equivalent fractions	Compare and order fractions with the same denominator
4	Find a half of a quantity	Find a half of an object	Understand the whole	Plot mixed number fractions on a number line	Convert improper fractions to mixed number fractions	Compare and order fractions with the same numerator
5	Recognise a quarter of an object or shape	Recognise a quarter of an object or shape	Compare and order non-unit fractions	Compare and order mixed number fractions	Convert mixed numbers to improper fractions	Add and subtract simple fractions
6	Find quarter of an object or shape	Find a quarter of an object or shape	Identify fractions of scales	Understand improper fractions	Compare fractions less than 1	Add and subtract any two fractions
7	Recognise quarter of a quantity	Recognise a third of an object or shape	Plot fractions on a number line	Convert mixed numbers to improper fractions	Order fractions less than 1	Add mixed number fractions

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8	Find quarter of a quantity	Find a third of an object or shape	Count in fractions on a number line	Convert improper fractions to mixed numbers	Compare and order fractions greater than 1	Subtract mixed number fractions
9		Find the whole of an amount	Identify equivalent fractions on a number line	Plot equivalent fractions on a number line	Add and subtract fractions with the same denominator	Solve multi-step problems involving fractions
10		Identify unit fractions	Identify equivalent fractions as bar models	Find equivalent fraction families	Add fractions within 1	Multiply fractions by integers
11		Identify non-unit fractions	Add fractions	Add two or more fractions	Add fractions with total greater than 1	Multiply fractions by fractions
12		Recognise the equivalence of a half as two-quarters	Subtract fractions	Add fractions and mixed numbers fractions	Use addition involving mixed number fractions	Divide a fraction by an integer
13		Recognise three - quarters	Partition the whole	Subtract two fractions	Add two mixed numbers	Divide any fraction by an integer
14		Find three – quarters of an object and a shape	Find unit fractions in a set of objects	Subtract fractions from whole amounts	Subtract fractions	Calculate mixed questions with fractions
15		Count in fraction up to a whole	Find non-unit fractions in a set of objects	Subtract fractions from mixed numbers	Subtract from a mixed number fraction	Fraction of an amount
16			Use reasoning to explain fractions of amounts	Identify tenths as fractions	Subtract from a mixed number fraction – breaking the whole	Find the whole of an amount

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17				Identify tenths as decimals	Subtract two mixed numbers	Identify the place value of decimals within 1
18				Place tenths on a place value chart	Multiply a unit fraction by an integer	Understand Place value – involving integers and decimals
19				Plot tenths on a number line	Multiply a non-unit fraction by an integer	Round decimals
20				Divide a 1-digit number by 10 (involving decimals)	Multiply a mixed number by an integer	Add and subtract decimals
21				Divide a 2-digit number by 10 (involving decimals)	Calculate a fraction of a quantity	Multiply decimals by 10, 100 and 1,000
22				Identify hundredths as fractions	Find a fraction of an amount	Divide decimals by 10, 100 and 1,000
23				Identify hundredths as decimals	Find the whole of an amount	Multiply decimals by integers
24				Place hundredths on a place value chart	Use fractions as operators	Divide decimals by integers
25				Divide a 1- or 2-digit number by 100 (Involving decimals)	Recognise decimals up to 2 decimal places	Multiply and divide decimals in context

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26				Make a whole with tenths	Identify equivalent fractions and decimals (tenths)	Identify decimal and fraction equivalents
27				Make a whole with hundredths	Identify equivalent fractions and decimals (hundredths)	Understand fractions as division
28				Partition decimals	Find equivalent fractions and decimals	Understand percentages
29				Flexibly partition decimals	Identify thousandths as fractions	Convert fractions to percentages
30				Compare decimals	Identify thousandths as decimals	Identify equivalent fractions, decimals and percentages
31				Order decimals	Place thousandths on a place value chart	Order fractions, decimals and percentages
32				Round decimals to the nearest whole numbers	Order and compare decimals (same number of decimal places)	Calculate the percentage of an amount – one step
33				Recognise halves and quarters as decimals	Order and compare any decimals with up to 3 decimal places	Calculate the percentage – multi-step
34					Round to the nearest whole number	Calculate the percentage Percentages – missing values

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35					Round to 1 decimal place	
36					Understand what makes a percentage	
37					Compare Percentages to fractions	
38					Compare Percentages to decimals	
39					Identify equivalent fractions, decimals and percentages	
40					Use known facts to add and subtract decimals within 1	
41					Add decimals to make a whole number	
42					Add and subtract decimals across 1	
43					Add decimals with the same number of decimal places	
44					Subtract decimals with the same number of decimal places	

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45					Add decimals with the different number of decimal places	
46					Subtract decimals with the different number of decimal places	
47					Use efficient strategies for adding and subtracting decimals	
48					Recognise decimal sequences	
49					Multiply decimals by 10, 100 and 1000	
50					Divide decimals by 10, 100 and 1000	
51					Calculate missing values by multiplying and dividing decimals	

FRACTIONS, DECIMALS AND PERCENTAGES VOCABULARY

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	Fraction	Same as previous year group, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:
	Half	Simple fractions		Hundredths	Thousandths	Common factors
	Equal parts	Equivalent	Tenths	Decimal	Multiples	
	One whole	Equivalence	Unit fractions Non- unit fractions	Decimal place	Three decimal places	Common multiples Decimal fraction equivalents
	Object	Count	Numerator Denominator	One decimal place	Per cent	Simplest form
	Shape		Compare	Two decimal places	Number of parts per hundred Percentages	
	Quantity		Order	Round decimals	Decimal fraction	
	Quarter		Add	Whole number	Mixed numbers	
			Subtract	Common equivalent fractions	Improper fraction Proper fraction	
			Solve problems	Decimal equivalents	Convert	
				Dividing	Mathematical statements	
				Ones	Multiply Percentage and decimal equivalents	
				Tenths		
				Hundredths		
				Simple measure		
				Money problems		

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Number: Negative Numbers

Number: Negative Numbers						
Steps	Year Group					
	1	2	3	4	5	6
1					Understand negative numbers	
2					Count through zero in ones	
3					Count through zero in multiples	
4					Compare and order negative numbers	
5					Calculate the difference between negative numbers	
NEGATIVE NUMBERS VOCABULARY						
					Zero Minus Negative Sub zero	

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					Forwards/backwards Positive Compare Calculate	
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Number: Ratio and Proportion

Steps	Year Group					
	1	2	3	4	5	6
1						Understand the relationship between addition and multiplication
2						Use language related to ratio
3						Understand ratio symbol
4						Compare ratio and fractions
5						Understand scale diagrams
6						Use scale factors

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7						Identify similar shapes
8						Solve ratio problems
9						Solve proportion problems
10						Solve ratio and proportion problems in a real-life context

RATIO AND PROPORTION VOCABULARY

						Ratio Proportion Size Quantity Missing value Integer Multiplication Division
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						Multiply
						Divide
						Solve
						Problem
						Calculate
						Percentage
						Comparison
						Unequal sharing
						Grouping
						Fractions
						Multiples

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Number: Algebra						
Steps	Year Group					
	1	2	3	4	5	6
1						Learn the meaning of input, output, function and rule by solving 1-step algebra problems
2						Learn the meaning of input, output, function and rule by solving 2-step algebra problems
3						Form algebraic expressions using letters to represent numbers
4						Substitute numbers in place of letters in an algebraic expression
5						Use formulae to calculate values

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6						Form equations from diagrams and word descriptions
7						Solve 1-step equations
8						Solve 2-step equations
9						Find pairs of values
10						Solve problems with two unknowns

ALGEBRA VOCABULARY

	Solve One-step problem Missing number Check Calculate problem Sequence Chronological	Same as previous year group, plus: Inverse Relationship Compare Order Arrange Pattern	Same as previous year groups, plus:	Same as previous year groups, plus: Perimeter Algebra Algebraically	Same as previous year groups, plus: Properties Rectangles Deduce Related facts Missing lengths Missing angles	Same as previous year groups, plus: Missing number Problem Pairs Number sentence Variables Combination
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						Possibility Enumerate Equation Formulae Generate Linear number sequence
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Measurement: Length, Height, Area and Perimeter

Steps	Year Group					
	1	2	3	4	5	6
1	Compare lengths and heights	Measure in centimetres	Measure in metres and centimetres	Understand what area is.	Calculate perimeter of rectangles	Find shapes with the same area
2	Measure length using objects	Measure in metres	Measure in millimetres	Calculate the area by counting squares	Calculate the perimeter of rectilinear shapes	Find the area and perimeter of rectangles and rectilinear shapes
3	Measure length in centimetres	Compare lengths and heights	Measure in centimetres and millimetres	Make shapes from a given area	Calculate the perimeter of polygons	Find the area of a triangle by counting squares
4		Order lengths and heights	Compare objects using metres, centimetres and millimetres	Compare areas	Calculate the area of rectangles	Calculate the area of a right-angled triangle
5		Solve problems using the four operations with lengths and heights	Calculate equivalent lengths (metres and centimetres)	Measure in kilometres and metres	Find the area of compound shapes	Find the area of any triangle
6			Calculate equivalent lengths (centimetres and millimetres)	Calculate equivalent lengths (kilometres and metres)	Estimate area	Find the area of a parallelogram

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7			Compare lengths	Calculate perimeter on a grid		Find the volume by counting cubes
8			Add lengths	Calculate the perimeter of a rectangle		Find the volume of a cuboid
9			Subtract lengths	Measure the perimeter of rectilinear shapes		
10			Understand what perimeter is	Find missing lengths in rectilinear shapes		
11			Measure perimeter	Calculate perimeter of rectilinear shapes		
12			Calculate perimeter	Calculate perimeter of regular polygons		
13				Calculate the perimeter of polygons		

LENGTH, HEIGHT, AREA AND PERIMETER VOCABULARY

	Length	Same as previous year group, plus:	Same as previous year group, plus:	Same as previous year group, plus:	Same as previous year group, plus:	Same as previous year group, plus:
	Height	Greater than >	millimetres	Estimate		
	Long	Less than <	perimeter	Rectilinear figure		
	Short					

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	Longer Shorter Tall Double Half	Equals = Metres Centimetres	simple 2-D shapes add subtract	Area Rectilinear shapes Convert		
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Measurement: Mass, Volume, Capacity and Temperature

Steps	Year Group					
	1	2	3	4	5	6
1	Compare objects using the terms heavier and lighter	Compare mass	Read and use scales		Understand cubic centimetres	Calculating Volume by counting cubes
2	Measure mass	Measure in grams	Measure mass in grams		Compare volume	Calculate the volume of a cuboid
3	Compare mass	Measure in kilograms	Measure mass in kilograms and grams		Estimate volume	
4	Understand the term Full and empty	Apply the four operations with mass	Calculate equivalent masses (kilograms and grams)		Estimate capacity	
5	Compare volume	Compare volume and capacity	Compare mass			
6	Measure capacity	Measure in millilitres	Add and subtract mass			
7	Compare capacity	Measure in litres	Measure capacity and volume in millilitres			

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8		Apply the four operations with volume and capacity	Measure capacity and volume in litres and millilitres			
9		Read and understand Temperature	Calculate equivalent capacities and volumes (litres and millilitres)			
10			Compare capacity and volume			
11			Add and subtract capacity and volume			

MASS, VOLUME, CAPACITY AND TEMPERATURE VOCABULARY

	Heavy	Same as previous year groups, plus:	Same as previous year groups, plus:		Same as previous year groups, plus:	Same as previous year groups, plus:
	Light	Temperature	Kilometre		Cubes	Cubic centimetres (cm ³)
	Heavier than	Thermometers	Millimetres		Cuboids	Cubic metres (m ³)
	Lighter than	Metres			Square numbers	Cubic millimetre (mm ³)
	Volume	Centimetres			Cube numbers	Cubic kilometre (Km ³)
	Full	Kilograms			Metric measure	
	Empty	Grams			Metric units	
	More than	Degrees			Imperial units	

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	Less than	Celsius				
	Half	Litres				
	Half full	Millilitres				

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Number: Money						
Steps	Year Group					
	1	2	3	4	5	6
1	Unitise amounts	Count money – pence	Recognise pounds and pence	Record money using decimals		
2	Recognise coins and their value	Count money – pounds (notes and coins)	Convert pounds and pence	Convert between pounds and pence		
3	Recognise notes and their value	Count money – pounds and pence	Add money	Compare amounts of money		
4	Count in coins	Choose notes and coins to make an amount	Subtract money	Estimate using money		
5		Identify the same amount of money	Calculate change	Calculate with money		
6		Compare amounts of money		Solve problems with money		
7		Calculate with money				

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8		Recognise different ways to make a pound				
9		Calculate change				
10		Solve two-step problems involving money				
MONEY VOCABULARY						
	Coins Notes	Same as previous year groups, plus: Pounds (£) Pence (p) Change	Same as previous year groups, plus: Add money Subtract money	Same as previous year groups, plus: Decimals Solve Estimate Covert		

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Measurement: Time						
Steps	Year Group					
	1	2	3	4	5	6
1	Understand the terms before and after	Tell the time to o'clock and half past	Recognise Roman numerals to 12	Compare units of time (years, months and days)		
2	Know days of the week	Tell the time to quarter past and quarter to	Tell the time to 5 minutes	Compare and convert hours, minutes and seconds		
3	Know months of the year	Tell time past the hour	Tell the time to the minute	Convert between analogue and digital times		
4	Compare units of time (hours, minutes and seconds)	Tell time to the hour	Read time on a digital clock	Convert to the 24-hour clock		
5	Tell the time to the hour	Tell the time to 5 minutes	Understand and use am and pm	Convert from the 24-hour clock		
6	Tell the time to the half hour	Understand how many minutes in an hour	Compare units of time (years, months and days)			

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7		Understand how many hours in a day	Convert days and hours			
8			Find hours and minutes – use start and end times			
9			Calculate durations (hours and minutes)			
10			Convert minutes and seconds			
11			Select appropriate units of time			
			Solve problems with time			
	TIME VOCABULARY					
	Quicker Slower Earlier Later Sequence events	Same as previous year groups, plus: Five past Ten past Quarter past Twenty past	Same as previous year groups, plus: Duration Time taken Nearest minute Record	Same as previous year groups, plus: Compare Convert		

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	Chronological order	Twenty-five past	Seconds			
	Before	Half past	a.m.			
	After	Twenty-five to	p.m.			
	Next	Twenty to	noon			
	First	Quarter to	Midnight			
	Today	Ten to	analogue			
	Yesterday	Five to	clock			
	Tomorrow		roman numerals			
	Morning		12-hour			
	Afternoon		24-hour			
	Evening		Leap year			
	Record					
	Hours					
	Minutes					
	Hour					
	Half past					
	O clock					
	Hands					

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	Clock face					
	Seconds					
	Dates					
	Days					
	Weeks					
	Months					
	Years					

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Measurement: Converting Units						
Steps	Year Group					
	1	2	3	4	5	6
1					Convert amounts using kilograms and kilometres	Understand metric measures
2					Convert amounts using millimetres and millilitres	Convert metric measures
3					Convert units of length	Calculate with metric measures
4					Convert between metric and imperial units	Convert Miles and kilometres
5					Convert units of time	Compare Imperial measures
6					Calculate time using timetables	

CONVERTING UNITS VOCABULARY

					Compare kilograms Kilometres Convert Litres Millilitres Metric Imperial
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Geometry: Shape

Steps	Year Group					
	1	2	3	4	5	6
1	Recognise and name 3-D shapes	Recognise 2-D and 3-D shapes	Recognise turns and angles	Understand angles as turns	Understand and use degrees	Measure and classify angles
2	Sort 3-D shapes	Count sides on 2-D shapes	Recognise right angles in shapes	Identify angles	Classify angles	Calculate angles
3	Recognise and name 2-D shapes	Count vertices on 2-D shapes	Compare angles	Compare and order angles	Estimate angles	Calculate vertically opposite angles
4	Sort 2-D shapes	Draw 2-D shapes	Measure and draw 2D shapes accurately	Identify and name triangles	Measure angles up to 180°	Calculate angles in a triangle
5	Identify patterns with 2-D and 3-D shapes	Identify lines of symmetry on shapes	Understand the terms horizontal and vertical	Identify and name quadrilaterals	Draw lines and right angles accurately	Calculate angles in a triangle – special cases
6		Use lines of symmetry to complete shapes	Understand the terms parallel and perpendicular	Identify and name polygons	Calculate angles around a point	Calculate missing angles in a triangle
7		Sort 2-D shapes	Recognise and describe 2-D shapes	Identify lines of symmetry	Calculate angles on a straight line	Calculate angles in quadrilaterals

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8		Count faces on 3-D shapes	Draw polygons	Complete a symmetric figure	Calculate lengths and angles in shapes	Calculate angles in polygons
9		Count edges on 3-D shapes	Recognise and describe 3-D shapes		Identify and describe regular and irregular polygons	Understand the terms radius, diameter and circumference
10		Count vertices on 3-D shapes	Make 3-D shapes using cubes		Recognise and describe 3D shapes	Draw shapes accurately
11		Sort 3-D shapes				Investigate nets of 3D shapes
12		Make patterns with 2-D and 3-D shapes				

SHAPE VOCABULARY

	2-D Shapes	Same as previous year group, plus:	Same as previous year group, plus:	Same as previous year group, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:
	3-D Shapes	Properties	Angle	Lines of symmetry	Angles	Radius
	Two- Dimensional	Compare	Turn	Symmetric figure	Measure	Diameter
	Three- Dimensional	Common	Right angles	Classify	Degrees	Circumference
	Cuboid	Line symmetry	Quarter of a turn	Geometric shapes	Missing lengths	Nets
	Cube	Vertical line	Half-turn	Quadrilaterals	Missing angles	

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	Pyramid	Edges	Three quarters of a turn	Acute angle	Regular polygons	
	Cone	Faces	Complete turn	Obtuse angle	Irregular polygons	
	Cylinder	Vertices	Horizontal lines		Degrees	
	Sphere	Pentagon	Vertical lines		Estimate	
		Hexagon	Perpendicular lines		Compare	
		Heptagon	Parallel lines		Reflex angle	
		Octagon			Point	
		Nonagon			Straight line	
		Decagon			Multiples	
		Kite				
		Rhombus				
		Polygon				
		Square-based pyramid				
		Triangular pyramid				
		Triangular prism				

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		Rectangular prism				
		Pentagonal prism				
		Hexagonal prism				
		Octagonal prism				
		Octahedron				
		Dodecahedron				
		Tetrahedron				
		Rectangular pyramid				
		Pentagonal pyramid				
		Hexagonal pyramid				
		Octagonal pyramid				

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Number: Position and Direction

Steps	Year Group					
	1	2	3	4	5	6
1	Describe turns	Use the language of position		Describe position using coordinates	Read and plot coordinates	Read and plot coordinates in the first quadrant
2	Describe position – left and right	Describe movement		Plot coordinates on a grid	Solve problems with coordinates	Read and plot coordinates in four quadrants
3	Describe position – forwards and backwards	Describe turns		Draw 2-D shapes on a grid	Translation	Solve problems with coordinates
4	Describe position – above and below	Describe movements and turns		Translate using a grid	Translate points with coordinates	Translate shapes on a grid
5	Identify and use ordinal numbers	Identify patterns involving turns		Describe translation on a grid	Draw lines of symmetry	Reflect shapes on a grid
6					Reflect in horizontal and vertical lines	
POSITION AND DIRECTION VOCABULARY						
	Same as previous year group, plus:	Same as previous year groups, plus:		Same as previous year groups, plus:	Same as previous year groups, plus:	Same as previous year groups, plus:

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	Half turn	Rotation		Co-ordinates	Reflection	Four quadrants
	Quarter turn	Right angle		Quadrant		
	Three-quarter turn	Clockwise		Grid		
	Left	Anti-clockwise		Translate		
	Right	Order		Translation		
	Up	Arrange		Axis		
	Down	Sequence		X- axis		
				Y-axis		
				Spaces		
				Unit		
				Plot		
				Point		
				Polygon		

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Statistics						
Steps	Year Group					
	1	2	3	4	5	6
1		Make tally charts	Interpret pictograms	Interpret charts	Draw line graphs	Draw, Read and interpret Line graphs
2		Read and interpret tables	Draw pictograms	Compare charts and calculate sum and difference	Read and interpret line graphs	Draw, Read and interpret Dual bar charts
3		Read and interpret Block diagrams	Interpret bar charts	Interpret line graphs	Read and interpret tables	Read and interpret pie charts
4		Draw pictograms	Draw bar charts	Draw line graphs	Read and interpret two-way tables	Read and interpret pie charts with percentages
5		Interpret pictograms	Collect and represent data		Read and interpret timetables	Draw pie charts

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6		Draw pictograms (representing 2, 5 and 10)	Read and interpret two-way tables			Calculate the mean
7		Interpret pictograms (representing 2, 5 and 10)				
STATISTICS VOCABULARY						
		Interpret Construct Pictogram Tally chart Block diagrams Horizontal Vertical x- axis y-axis Key Title	Same as previous year groups, plus: Present Presented Graph Statistics Bar charts Tables Solve One- step questions Two- step questions Information	Same as previous year groups, plus: Time graphs Comparison Problems	Same as previous year groups, plus: Timetables Line graph	Same as previous year groups, plus: Pie chart Calculate Mean Average

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		Chart title				
		Simple tables				
		Ask				
		Answer				
		Questions				
		Counting				
		Objects				
		Category				
		Sort				
		Quantity				
		Total				
		Compare				
		Data				