EYFS

Number & Numerical Patterns

Progression Map

On Entry | Autumn | Spring | Summer

To understand position. (through words) **NP**

Link numerals and amounts up to 5. **N**

Talk about and explore 2D and 3D shapes using informal and mathematical language. **NP**

Know one more/one less than numbers to 5. **N**

Recognise different representations of numbers to 10. (including numerals) **N**

Subitise amounts up to 5. Begin to recognise larger numbers as '5 and …. more' **N**

Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. **NP**

Explore the composition of numbers to 10 using manipulatives. **N**

Verbally count beyond 20, recognising the pattern of the counting system. **NP**

Automatically recall some doubles. **N**

Fast recognition of up to 3 objects. (subitising) **N**

Show finger numbers up to 5. **N**

Carefully count objects to 10 (1:1 correspondence) **N**

Know one more/one less than numbers to 10 and understand the relationship between consecutive numbers. **N**

Represent patterns within numbers up to 10, including evens and odds and how quantities can be distributed equally. **NP**

Recite numbers to 5. **N**

Carefully count objects to 5. **N**

Solve real world mathematical problems with numbers up to 5. **N**

Compare amounts using the language 'more' and 'fewer'. **NP**

Compare length, weight and capacity. **NP**

Automatically recall some number bonds to 5. **N**

To know that the last number reached when counting a small set of objects tell you how many there are in total. **N**

Create ABAB patterns + correct an error in a repeating pattern. **NP**

Compose and decompose shapes so that children recognise a shape can have other shapes within it. **NP**

Automatically recall some number bonds within 10. **N**

Kibworth CE Primary School

Let Your Light Shine

Early Learning Goals

Communication and Language

Listening, Attention and Understanding

- Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions.
- Make comments about what they have heard and ask questions to clarify their understanding.
- Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.

Speaking

- Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.
- Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate.
- Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.

Understanding the World

Past and Present

- Talk about the lives of the people around them and their roles in society.
- Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class.
- Understand the past through settings, characters and events encountered in books read in class and storytelling.

People, Culture and Communities

- Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps.
- Know some similarities and differences between different religious and cultural communities in this country, drawing on their experiences and what has been read in class.
- Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and (when appropriate) maps.

The Natural World

- Explore the natural world around them, making observations and drawing pictures of animals and plants.
- Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.
- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

Personal, Social and Emotional Development

Self-Regulation

- Show an understanding of their own feelings and those of others, and begin to regulate their behaviour accordingly.
- Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate.
- Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.

Managing Self

- Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.
- Explain the reasons for rules, know right from wrong and try to behave accordingly.
- Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.

Building Relationships

- Work and play cooperatively and take turns with others.
- Form positive attachments to adults and friendships with peers.
- Show sensitivity to their own and to others' needs.

Expressive Arts and Design

Creating with Materials

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Share their creations, explaining the process they have used.
- Make use of props and materials when role playing characters in narratives and stories.

Being Imaginative and Expressive

- Invent, adapt and recount narratives and stories with peers and their teacher.
- Sing a range of well-known nursery rhymes and songs.
- Perform songs, rhymes, poems and stories with others, and (when appropriate) try to move in time with music.

Mathematics

Number

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Physical Development

Gross Motor Skills

- Negotiate space and obstacles safely, with consideration for themselves and others.
- Demonstrate strength, balance and coordination when playing.
- Move energetically, such as running, jumping, dancing, hopping, skipping and climbing.

Fine Motor Skills

- Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases.
- Use a range of small tools, including scissors, paintbrushes and cutlery.
- Begin to show accuracy and care when drawing.

Literacy

Comprehension

- Demonstrate understanding of what has been read to them by retelling stories and narratives using their own words and recently introduced vocabulary.
- Anticipate (where appropriate) key events in stories.
- Use and understand recently introduced vocabulary during discussions about stories, non-fiction, rhymes and poems and during role play.

Word Reading

- Say a sound for each letter in the alphabet and at least 10 digraphs.
- Read words consistent with their phonic knowledge by sound-blending.
- Read aloud simple sentences and books that are consistent with their phonic knowledge, including some common exception words.

Writing

- Write recognisable letters, most of which are correctly formed.
- Spell words by identifying sounds in them and representing the sounds with a letter or letters.
- Write simple phrases and sentences that can be read by others.

Mathematics in EYFS:
What Maths Subject Leaders Need to Know

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which statements from the 2020 Development Matters are prerequisite skills for mathematics within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for mathematics.

The most relevant statements for mathematics are taken from the following areas of learning:

- Communication and Language
- Mathematics

Mathematical Vocabulary			
Three and Four-Year-Olds	Communication and Language		• Use a wider range of vocabulary. • Understand 'why' questions, like: "why do you think the caterpillar is so fat?"
Reception	Communication and Language		• Learn new vocabulary. • Use new vocabulary throughout the day.
ELG	Communication and Language	Speaking	• Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.

Number and Place Value			
Counting			
Three and Four-Year-Olds	Mathematics		• Recite numbers past 5. • Say one number name 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').
Reception	Mathematics		• Count objects, actions and sounds. • Count beyond ten.
ELG	Mathematics	Numerical Patterns	• Verbally count beyond 20, recognising the pattern of the counting system.
Identifying, Representing and Estimating Numbers			
Three and Four-Year-Olds	Mathematics		• Fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Show 'finger numbers' up to 5. • Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.
Reception	Mathematics		• Subitise. • Link the number symbol (numeral) with its cardinal number value.

ELG	Mathematics	Number	• Subitise (recognising quantities without counting) up to 5.
Reading and Writing Numbers			
Three and Four-Year-Olds	Mathematics		• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.
Reception	Mathematics		• Link the number symbol (numeral) with its cardinal number value.
Compare and Order Numbers			
Three and Four-Year-Olds	Mathematics		• Compare quantities using language: 'more than', 'fewer than'.
Reception	Mathematics		• Compare numbers.
ELG	Mathematics	Numerical Patterns	• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
Understanding Place Value			
Reception	Mathematics		• Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 10.
ELG	Mathematics	Number	• Have a deep understanding of numbers to 10, including the composition of each number.
Solve Problems			
Three and Four-Year-Olds	Mathematics		• Solve real world mathematical problems with numbers up to 5.

Addition and Subtraction			
Mental Calculations			
Reception	Mathematics		• Automatically recall number bonds for numbers 0-10.
ELG	Mathematics	Number	• Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
Solve Problems			
ELG	Mathematics	Numerical Patterns	• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.
Reception	Mathematics		• Subitise. • Link the number symbol (numeral) with its cardinal number value.

Measurement			
Describe, Measure, Compare and Solve (All Strands)			
Three and Four-Year-Olds	Mathematics		• Make comparisons between objects relating to size, length, weight and capacity.
Reception	Mathematics		• Compare length, weight and capacity.

Telling the Time		
Three and Four-Year-Olds	Mathematics	• Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then…'

Properties of Shapes		
Recognise 2D and 3D Shapes and their Properties		
Three and Four-Year-Olds	Mathematics	• 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'. • Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. • Combine shapes to make new ones – an arch, a bigger triangle, etc.
Reception	Mathematics	• Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
Compare and Classify Shapes		
Reception	Mathematics	• Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.

Position and Direction		
Position, Direction and Movement		
Three and Four-Year-Olds	Mathematics	• Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'.
Reception	Understanding the World	• Draw information from a simple map.
Patterns		
Three and Four-Year-Olds	Mathematics	• Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern.
Reception	Mathematics	• Continue, copy and create repeating patterns.

Statistics		
Record, Present and Interpret Data		
Three and Four-Year-Olds	Mathematics	• Experiment with their own symbols and marks, as well as numerals.

Notes

Maths Medium term plan

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk9
Autumn 1	Place value Within 10 Sort objects Count objects Represent objects Count, read and write forwards from any number 0 to 10 Count, read and writing backwards from any number 0 to 10 Count one more Count one less One to one corresponde nce to start to compare groups	Place value Within 10 Compare groups using language such as equal, more/greater, less/fewer Introduce = , > and < symbols Compare numbers Order groups of objects Order numbers Ordinal numbers (1st, 2nd, 3rd ….) The number line	Addition number bonds to 10 Part whole model Addition symbol Fact families – Addition facts Compare number bonds Addition: Adding together Addition: Adding more Finding a part	Addition number bonds to 10 Find number bonds for numbers within 10 Systematic methods for number bonds within 10 Number bonds to 10	Add and subtract Within 10 Find number bonds for numbers within 10 Systematic methods for number bonds within 10 Number bonds to 10	Add and subtract Within 10 Subtraction: Taking away, how many left? Crossing out Subtraction: Taking away, how many left? Introducing the subtraction symbol			
Autumn 2	Place value to 20 Count forwards and backwards and write numbers to 20 in numerals and words Numbers from 11 to 20 Tens and ones	Place value to 20 Count forwards and backwards and write numbers to 20 in numerals and words Numbers from 11 to 20 Tens and ones	Place value to 20 Count one more and one less Compare groups of objects Compare numbers Order groups of objects Order numbers	Add and subtract to 10 to include odd and even numbers Subtraction: Finding a part, breaking apart Fact families – The 8 facts	Add and subtract to 10 Subtraction: Counting back Subtraction: Finding the difference	Add and subtract to 10 Comparing addition and subtraction statements a + b > c Comparing addition and subtraction statements a + b > c + d	Assessment Week	Measurement Length and height Compare lengths and heights Taller than/shorter than etc. Long/wide etc Shape and space Recognise and name 3D shapes Sort 3D shapes Recognise and name 2D shapes Sort 2D shapes Patterns with 3D and 2D shapes	Measurement Length and height Non-standard units of measure Standard units of measure cm how to use a ruler to measure Shape and space Recognise and name 3D shapes Sort 3D shapes Recognise and name 2D shapes Sort 2D shapes Patterns with 3D and 2D shapes

Maths Medium term plan

Spring 1	Add and subtract to 20 Add by counting on Find & make number bonds Add by making 10 Number bon ds to 20	Add and subtract to 20 To include doubling Add by counting on Find & make number bonds Add by making 10 Number bon ds to 20	Add and Subtraction – Not crossing 10 Subtraction – Crossing 10 (1) Subtraction – Crossing 10 (2) Related Facts Compare Number Sentences subtract to 20	Add and subtract to 20 Not crossing 10 Subtraction – Crossing 10 (1) Subtraction – Crossing 10 (2) Related Facts Compare Number Sentences subtract to 20	Measurement weight and volume Introduce weight and mass Measure mass/clarify the meaning of the word Compare mass	Place value within 50 Numbers to 50 Tens and ones Represent numbers to 50 One more one less	Place value within 50 Compare objects within 50 Compare numbers within 50 Order numbers within 50		
Spring 2	Place value within 50/100 (multiples of 2,5, and 10)	Geometry position and direction Describe turns Describe Position half turn full turn Describe Position quarter turn	Measurement Weight and volume Introduce capacity Measure capacity Compare capacity	Assessment Week	Add and subtract to 20 Related Facts Recap number bonds to 20 Compare Number Sentences subtract/addition to 20				
Summer 1	Multiplicatio n and division Count in 10s Make equal groups Add equal groups	Multiplication and division Make arrays Make doubles	Multiplication and division Make equal groups - grouping Make equal groups - sharing	Fractions Halving shapes or objects Halving a quantity					
Summer 2	Fractions Find a quarter of a shape or object Find a quarter of a quantity	Assessment Week	Place value within 100 Counting to 100 Partitioning numbers Comparing numbers (1) Comparing numbers (2) Ordering numbers One more, one less	Money Recognising coins Recognising notes Counting in coins	Time Before and after dates Time to the hour	Time Time to the half hour Writing time Comparing time			

Maths Medium term plan

Key- colour code

	Place value		Mass and capacity (measure and compare)
	Add and subtract		Geometry – Position and direction
	Statistics		Assessment Week
	Shape		Fractions
	Mult and div		Money
	Measures- Length/perimeter/area		Algebra
	Time		Decimals and percentages
	Decimals and percentages		Number – Ratio

Maths Medium Term Plan Year Two

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk9
Autumn 1	**Place value** Read and write numbers to at least 100 in numerals and in words. Recognise the place value of each digit in a two digit number (tens, ones)	**Place value** Identify, represent and estimate numbers using different representations including the number line.	**Place value** Compare and order numbers from 0 up to 100; use <, > and = signs. Use place value and number facts to solve problems.	**Place value** Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.	**Add and Subtract** Recall and use addition and subtraction facts to 20 fluently.	**Add and Subtract** Derive and use related facts up to 100.			
Big Maths		Estimation-What is my number?		Partitioning-Different ways of making the same number		Number bonds to 20			
Autumn 2	**Add and Subtract** Recognise and use the inverse relationship between addition and subtraction and use this to	**Add and Subtract** Add numbers using concrete objects, pictorial representations, and mentally, including: adding three one-digit numbers and a	**Add and Subtract** Subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones.	**Add and Subtract** Add and subtract a two-digit number and tens;	**Assessment Week**	**Add and Subtract** Adding two two-digit numbers;	**Add and Subtract** Subtracting two two-digit numbers;	**Statistics** Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of	

Maths Medium Term Plan Year Two

	check calculations and solve missing number	two-digit number and ones.						objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.	
Big Maths									
Spring 1	**Multiplication and division** Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	**Multiplication and division** Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.	**Multiplication and division** Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.	**Multiplication and division** Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.	**Money** Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money.	**Money** Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.			
Big Maths	Home Learning								
Spring 2	**Multiplication and division**	**Multiplication and division** Recall and use	**Multiplication and division** RECAP AFTER	**Fractions** Recognise, find, name and write	**Fractions** Recognise, find, name and write				

Maths Medium Term Plan Year Two

	Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.	multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.	HOME LEARNING	fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape.	fractions of sets of objects or quantities. Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.						
Big Maths											
Summer 1	**Measure** Compare and order mass, volume/capacity and record the results using >, < and = Choose and use appropriate standard units to estimate and measure length/hei	**Addition and Subtraction** Recap	**Shape** Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Identify 2-D shapes on the surface of 3-D shapes, [for	**Multiplication and Division** Recap	**Fractions** Recap	**Assessment Week** (SATs Papers)	**Position and Direction** Order and arrange combinations of mathematical objects in patterns and sequences				

Maths Medium Term Plan Year Two

	ght in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.		example, a circle on a cylinder and a triangle on a pyramid.] Compare and sort common 2-D and 3-D shapes and everyday objects.						
Big Maths	SATs								
Summer 2	**Time** Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.	**Time** Know the number of minutes in an hour and the number of hours in a day. Compare and sequence intervals of time.	**Spirited Arts Week**	**Problem Solving BIG MATHS** To solve problems involving addition and subtraction.	**Problem Solving BIG MATHS** To solve problems involving multiplication and division.				

Maths Medium Term Plan Year Two

Big Maths											

Key- colour code

	Place value		Mass and capacity (measure and compare)
	Add and subtract		Geometry – Position and direction
	Statistics		Assessment Week
	Shape		Fractions
	Mult and div		Money
	Measures- Length/perimeter/area		Algebra
	Time		Decimals and percentages
	Decimals and percentages		Number – Ratio

Measure

Year 3

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9
Autumn 1	Place value Consolidate two-digit place value knowledge. 1/10 more/less.	Place value Place value of 3-digit numbers, order and compare.	Place value 1/10/100 more/less.	Add and subtract Mental Re-cap mental addition and subtraction using two-digit numbers. Mental addition and subtraction using three-digit numbers.	Add and subtract written Re-cap two-digit written method for column addition. Teach column addition for three-digit numbers.	Add and subtract written Re-cap column subtraction for two-digit numbers. Teach column subtraction for three-digit numbers.	Add and subtract Reasoning and problem-solving. Addition and subtraction – inverse.		
Autumn 2	Multiplication Mental methods Understanding arrays and groups for 2, 5 and 10.	Multiplication Mental methods for 3, 4, 6, 8,.	Multiplication Written method – expanded column method.	Division Mental methods – recapping sharing and grouping. 2, 5, 10	Division Mental methods – sharing and grouping for 3, 4, 6, 8,	Division. Written methods for division – grouoing on a number line.	Assessments	Consolidation Mental maths and written methods.	Consolidation Mental maths and written methods.
Spring 1	Money Value Converting between pounds and pence.	Money Re-cap addition and subtraction.	Fractions Fraction of a shape Unit and non-unit fractions	Fractions Tenths as a fraction and decimal Fraction of an amount	Fractions Equivalent Fractions	Fractions Adding and subtracting fractions			
Spring 2	2D Shape Recap names and properties	3D Shape Recap names and properties	Consolidation	Assessments	Turns, angles and lines Clockwise/ anti-clockwise Half turn, quarter turn, three-quarter turn Left/right/forward/backward/up/down	Turns, angles and lines Acute, right-angles and obtuse Parallel and perpendicular lines	Length and perimeter Measuring sides accurately and mental addition.		
Summer 1	Measurement – length and perimeter and converting.	Time Recap O'clock, half past, quarter past and quarter to.	Time Nearest 5mintues and minute	Time Digital and analogue Problem solving					
Summer 2	Mass and Capacity Reading scales	Mass and Capacity – converting measurements	Consolidation	Assessments	Statistics Tables, pictogram, bar charts, tally Answering questions and reading data	Consolidation			

Year 3

Place value- 11 days 10

Add and subtract – 24 days 16

Mult and division – 33 days 24

Fractions – 21 days 20

Shape – 8 days 8

Statistics- 4 days 8

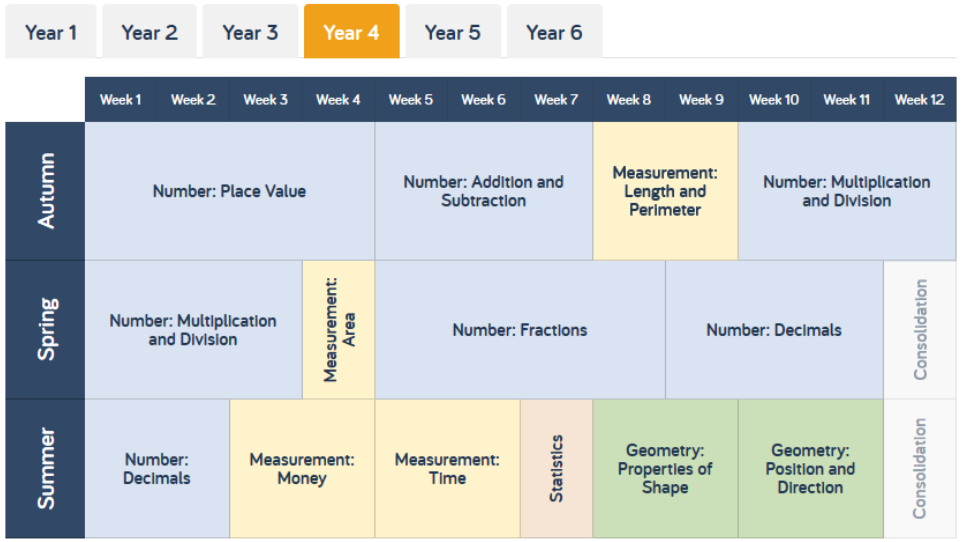
Length and perimeter – 9 days 12

Time- 8 days 12

Mass and capacity- 10 days 12 days

Money – 3 days 8days

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
Autumn	Place Value			Rounding		Addition		Subtraction		Measurement: Time		Multiplication	
Spring	Division		Fractions			Decimals			Measurement: Length and Money				
Summer	Geometry: Properties of Shapes		Geometry: Symmetry		Measurement: Area and Perimeter		Geometry: Position and Direction		Measurement: Time		Measurement: Statistics		



Maths Year 5

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk9
Autumn 1	Consolidate Year 4	Number and Place value	Number and Place value	Number and Place value	Addition and subtraction	Addition and subtraction Problem solving focus			
		Numbers to 10,000 Round to the nearest 10, 100 and1000. Numbers to 100,000 Compare and order numbers to 100,000	Round numbers within 100,000 Counting in 10s, 100s, 1000s and 10,000s Numbers to 1 million.	Compare and order numbers to 1 million Round numbers to 1 million. Negative numbers. Roman numerals to 1,000.	Add whole numbers up to and over 4 digits. Subtract whole numbers up to and over 4 digits. Rounding to estimate and approximate. **Reference back to place value.**	Multi-step problem solving. Introduce RURCC. Inverse operations. **Reference back to place value.**			
Big Maths		Henry VIII and his Jewels – Combinations /systematic		Pentominoes – logical thinking	Tarsia –addition and subtraction				
Consolidation	Place Value	Place Value	Place Value	Place Value, Addition and Subtraction	Place Value, Addition and Subtraction	Place Value, Addition and Subtraction			
Autumn 2	Multiplication and division.	Multiplication and division	Multiplication and division	Multiplication and division	Multiplication and division	Angles	Angles	Assessment week	Reviewing assessment week.
	Multiples and factors. Prime Numbers. Multiply by 10, 100 and 1000. Divide by 10, 100 and 1000.	Multiples and factors. Prime Numbers. Multiply by 10, 100 and 1000. Divide by 10, 100 and 1000.	Multiply 4-digits by 1-digit Multiply 2-digits (area model) Multiply 2-digits by 2-digits Multiply 3-digits by 2-digits **Place value**	Multiply 4-digits by 1-digit Multiply 2-digits (area model) Multiply 2-digits by 2-digits Multiply 3-digits by 2-digits **Place value**	Divide 4-digits by 1-digit Divide with remainders	Missing numbers on straight lines and around a point.	Missing angles in shapes.		
Big Maths		Prime numbers investigation		Planning a day at the theme park - calculation		Angles Investigation (Start the week with)		12 Days of Christmas – calculation+algebra	

Maths Year 5

Consolidation	Common denominator fractions, Addition, subtraction, multiplication and division	Addition, subtraction, multiplication and division	Common denominator fractions Addition, subtraction, multiplication and division	Addition, subtraction, multiplication and division	Common denominator fractions Addition, subtraction, multiplication and division	Calcualtion, angles	Calcualtion, angles	Calcualtion, angles	Calcualtion, angles
Spring 1	Angles	Fractions	Fractions	Fractions	Time (Year 3 &4 consolidation) FDP				
	Using a protractor to measure and draw angles.	Equivalent fractions – decimal equivalents. Mixed numbers and improper fractions. Ordering and comparing.	Addition and subtraction with fractions.	Fractions of numbers and multiplying fractions.	Can tell the time. Solve problems involving time.				
Big Maths	Space Logic		Magic V - addition, subtraction + parametres.		Constellations (angles)				
Consolidation	Multiplication and division	Place value and calculation	Place value and calculation	Place value and calculation	Fraction calculation				
Spring 2	FDP	FDP	FDP	2D shape Area and Perimeter	2D shape Area and Perimeter				
	Decimals as fractions **Division with decimals. Problem solving with decimals**	Understanding percentages Percentages as fractions. **Equivalent FDP**	**Problem solving**	Find perimeter and area of 2D, rectilinear shapes using knowledge of rectangles.	Find perimeter and area of 2D, rectilinear shapes using knowledge of rectangles.				

Maths Year 5

	and fractions (RURCC)											
Big Maths		Tarsias - calculation Nets investigation		Building Pyramids – 3d volume area perimeter								
Consolidation	FDP	FDP	Calculation	Calculation								
Summer 1	3D and volume	3D and volume	Time	Time	Stats	Converting units of measure						
	Recognise 2D representation of 3D shapes. Understand language. Reasoning What is volume? Compare volume Estimate volume Estimate capacity **Cubed numbers**	**Recognise 2D representation** of 3D shapes. Understand language. Reasoning What is volume? Compare volume Estimate volume Estimate capacity **Cubed numbers**	Can tell the time. Solve problems involving time. Read and interpret time tables. Solve problems involving time tables.	Can tell the time. Read and interpret time tables. Solve problems involving time tables..	Read and interpret tables Two way tables. Read and interpret line graphs Draw line graphs Use line graphs to solve problems **Negative numbers Place value to millions. Problem solving.** .	Read and interpret tables Two way tables. Read and interpret line graphs Draw line graphs Use line graphs to solve problems **Negative numbers Place value to millions. Problem solving.** Kilograms and kilometres Milligrams and						

Maths Year 5

						millilitres Metric units Imperial units **Multiplying and dividing by 10, 100 and 1000.**				
Big Maths	Summer sales!		Problem writing							
Consolidation	Stats	X / 10 100 1000	Conversions	Conversions						
Summer 2		Reading scales	Mass and Weight	Translation And reflection						
		Read a variety of scales. Understand increments and how to find the increments. **Division Fractions of numbers (increments).**	Convert between mass and weight Understanding measure in g and kg. Conversion between the two **Multiplying and dividing by 10, 100 and 1000.**	Position in the first quadrant Reflection with coordinates Translation with coordinates **Properties of shapes.** Position in the first quadrant Reflection with coordinates Translation with coordinates						
Big Maths		Maths art		Mathpretician						
Consolidation	Shape	Time/measurement	Negative numbers	Fractions						

Key- colour code

	Place value		Mass and capacity (measure and compare)
	Add and subtract		Geometry – Position and direction
	Statistics		Assessment Week
	Shape		Fractions
	Mult and div		Money

BIG MATHS IDEAS-
Autumn 1-
Autumn 2-
Spring 1-
Spring 2-
Summer 1-
Summer 2-

Maths Year 5

	Measures- Length/perimeter/area		Algebra
	Time		Decimals and percentages
	Decimals and percentages		Number – Ratio

Maths Year 6

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk9
Autumn 1	**Place Value** 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 of the above **Decimals** Identify the value of each digit in numbers given to three decimal places and multiply numbers by 10, 100 and 1000 giving answers up to 3dp. .		**Calculation** Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why. 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 the context of a problem, an appropriate degree of accuracy. **Decimals** Multiply one digit numbers with up to 2dp by whole numbers. Use written division methods in cases where the answer has up to two decimal places. Solve problems which require answers to be rounded to specified degrees of accuracy		Year 6 Castleton	**Calculation** Multiply multi-digit number up to 4 digits by a 2 digit number using the formal written method of long multiplication. Divide numbers up to 4 digits by a 2 digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions or by rounding as appropriate for the context. Divide numbers up to 4 digits by a 2 digit number using the formal written method of short division, interpreting remainders according to context. Perform mental calculations, including with mixed operations and large numbers.	HALF TERM		
Consolidation	Mental Addition	Mental Subtraction	Doubling	Halving	Multiplication Facts	Known facts			
Investigative Maths		**Murder Mystery** Systematic working		**Tarsia Multiplication** Long multiplication Calculation Missing numbers Problem solving					
Autumn 2	**Fractions** Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. Compare and order fractions, including fractions > 1 Generate and describe linear number sequences (with fractions) Add and subtract fractions with different			**FDP** Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example] Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	Assessment week	**Geometry- Properties of Shapes** Draw 2D shapes using given dimensions and angles. Compare and classify geometric shapes	**Geometry- Position and Direction** Describe positions on the full coordinate grid (all four quadrants). Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.		**Geometry and Statistics** Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice

Maths Year 6

	denominations and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example x =] Divide proper fractions by whole numbers [for example ÷ 2 =] **Number: Percentages** 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 FDP including in different contexts.			**Number: Percentages** 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 FDP including in different contexts.		based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.			the radius.
Consolidation									
Investigative Maths				**WW2 Code breaking** Reasoning		**Battle of Britain** Fractions of amounts Reasoning	Xmas cards: working systematically	**Dunkerque Evacuation** Logic and Reasoning	
Spring 1	**Geometry and Measures – Angles** Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	**Geometry and Measures – Angles** Interpret and construct pie charts and line graphs and use these to solve problems. Calculate the mean as an average.	**Assessment Week**	**Measurement Volume** 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 cm3, m3 and extending to other units (mm3, km3)		**Measurement** 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 to up to 3dp. Convert between miles and kilometres. **Time**			
Consolidation	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice			
Investigati			Drawing and Measuring Pie Charts		Drawing perfect shapes		Maths/Art		

Maths Year 6

ve Maths			(Charles Darwin)										
Spring 2	**Data Handling**		Assessment Week	**Number: Algebra** 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.	**Number: ratio** Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts..								
Consolidation	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice	Arithmetic Practice						
Investigative Maths		Hotel and swimming pool design											
Summer 1	**Revision** Time at the beginning or end of the term for consolidation ,gap filling, seasonal activities, assessments, etc.												
Big Maths													
Summer 2		Maths/Art Circles and Designs											
Investigative Maths				Enterprise									

Key- colour code

	Place value		Mass and capacity (measure and compare)
	Add and subtract		Geometry – Position and direction
	Statistics		Assessment Week
	Shape		Fractions
	Mult and div		Money

Investigative MATHS IDEAS-
Autumn 1-
Autumn 2-
Spring 1-
Spring 2-
Summer 1-
Summer 2-

Maths Year 6

	Measures- Length/perimeter/area		Algebra
	Time		Decimals and percentages
	Decimals and percentages		Number – Ratio