Maths planning document
Teagues Bridge Primary school
2023 – Year 4

Written on:	30th March 2020
Reviewed on:	March 2023
Next review:	March 2024
Staff Responsibility	Mr M Hale
Governor responsibility	Drew White

This document supported by the CLIC maths program providing teaching and consolidation of mental strategies for mathematics and the white rose small steps for teaching sequences. Weeks are a guideline and should be adapted for the needs of the children. Time for consolidation is designed for recapping of previous units to ensure learning in committed to the long-term memory. This can also be used to teach areas of misconceptions.

Mathematics Intent

At Teagues Bridge, our intention is **ambitious**. We aim to create strong mathematicians who have the necessary skills and understanding to tackle mathematical challenges in varying contexts, including the ability to reason and apply their knowledge to solving problems. This should mean that children are able to apply their knowledge to everyday life and can **aspire** to achieve anything that they want. We want our pupils to have strong mental manipulation and to use written strategies when appropriate.

Our philosophy for mathematics is replacing an idea that maths is lots of rules and numbers with a study of patterns and connected ideas. In early years they will build a foundation of number understanding and representation through mainly concrete and pictorial representations. The approach will be supported by in depth questioning, throughout the school to develop mastery.

Use of CPA is encouraged to ensure the curriculum is accessible for all children and that they all have the **opportunity** and are able to demonstrate their understanding in a variety of ways. This will enable them to have a good understanding of maths and not just the ability to follow a procedure. We want to **empower** them to want to ask questions and want to find the answers.

Aims: The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.
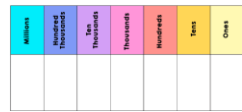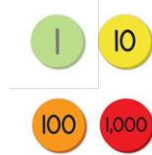
The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.
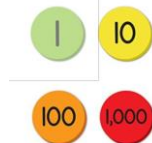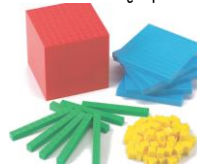
Our lessons are structured to enable all children to achieve and have an **opportunity** to make progress with their learning. Each lesson begins with a **CLIC maths** activity, where they have chance to develop their mental strategies, secure number facts and number manipulation. They then **develop** their mathematical fluency with the teacher modelling and explaining before they have a go themselves. Children then have a **reasoning/ problem solving** activity which is a variation of the previous work to demonstrate they have mastered the objective. Children who are ready can then **challenge** themselves with a task that requires applying the learning to a greater depth. We have our own programme of study which is supported with schemes like White Rose to support.
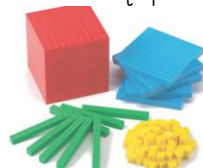
Year 4 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 4
Autumn	Number and place value Counting, reading, writing and partitioning		Addition and subtraction to 1000 (1, 10, 100's) adding and subtracting methods		Multiplication and division – repeated addition of equal groups X6, x7 x 9 x 11 and x12 times tables			Fractions : mixed and improper fractions and equivalent fractions			Measurement : length and perimeter		Measurement: time	
Spring	Number and place value : estimating, comparing/ordering and rounding		Addition and subtraction adding/ subtracting 3 digit addition and subtraction – efficient methods			Multiplication: factors, multiplying and dividing by 10, 100 and 1000		Multiplication and division 3 by 1 written methods		Fractions adding and subtracting		Decimals : tenths and hundredths		Measurement : Perimeter
Summer	Addition and subtraction Methods – efficiency and checking		Multiplication and Division – 3 by 1 digit numbers Efficiency	Fractions : calculating with fractions	Decimals : making a while, comparing , ordering and rounds			Geometry : Shape		Geometry : position and direction		Measurement: Money		Statistics

Year 4: Autumn term

National curriculum objectives	Prior knowledge from year 3	Learning outcomes (including WR steps)	Mathematical aspect	Vocabulary	Manipulatives	Problem solving resources
• Identify, represent and estimate numbers using different representations	Knows the properties of three-digit numbers. Knows how to count in step sizes and estimate numbers up to 1000	[Maths resources for teachers | White Rose Maths](#) Steps 1 =4 I know to represent numbers to 1000 I know to partition numbers to 1000 I know to show numbers to 1000 on a numberline I know how to represent thousands	Place Value – representing and partitioning numbers	tens hundreds thousands partition numeral	Place value charts Place value counters 1 10 100 1,000 Base ten equipment	**Nice or Nasty** * **G** **Dicey Operations** * **G** **The Deca Tree** * **Four-digit Targets** * **Dicey Operations in Line** * **G**
• Recognise the place value of each digit in a	Knows the properties of three-digit numbers.	Steps 5-9		tens hundreds thousands		

4-digit number (thousands, hundreds, tens and ones)	Knows how to count in step sizes and estimate numbers up to 1000	I know to represent numbers to 10,000 I know to partition numbers to 10000 I know to partition numbers to 10,000 in different ways.		partition numeral		
• Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate	Knows bonds to 20 and 100. Knows how to add/subtract multiples of 10, 100 from three-digit numbers.	**Maths resources for teachers | White Rose Maths** Steps 1 – 7 Lo I know to add and subtract 1's, 10's, 100's and 1000's Lo I know to add upto two 4 digit numbers (no exchange) LO I know to add two 4 digit	Addition and subtraction adding/ subtracting 3 digit addition and subtraction – efficient methods	addition total subtraction column method estimate how much strategy efficient accurate	Place value charts Place value counters Base ten equipment Numicon 	**Fifteen Cards** * I **Money Bags** ** **Amy's Dominoes** ** **Sealed Solution** ** **Roll These Dice** ** I

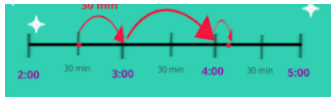|					
		numbers (no exchange) LO I know to add two 4 digit numbers (one exchange) Lo I know to add two 4 digit numbers (more than one exchange) Lo I know to subtract two 4 digit numbers (no exchange) Lo I know to subtract two 4 digit numbers (one exchange) Lo I know to subtract two 4 digit numbers (				

		more than one exchange)				
Both objectives to run through the unit • Recall multiplication and division facts for multiplication tables up to 12 × 12 • Recognise and use factor pairs and commutativity in mental calculations	Knows the 2, 4- and 8-times tables and the doubling patterns. Knows how to multiply using partitioning. Knows the 2, 3, 4- and 8-times tables and the doubling patterns, odds, and evens. Knows tables facts for 2,3,4,5,8,10s.	[Maths resources for teachers | White Rose Maths](#) Steps 1 – 10 Lo I know to multiply by 3 Lo I know to multiply and divide by 6 LO I know the 6x table and division facts LO I know to multiply and divide by 9 LO I know the 9x tables and division facts Lo I know the relationship between 3 , 6 and 9 timestables	Multiplication and division facts x6, x7 , x9, x11 and x12	multiply divide times-table partition array bar model part-whole model remainder factor pair factor commutative lots of groups of	Base ten equipment Numicon multiplication grid	**[Times Tables Shifts](#)** * **G** **[Multiplication Square Jigsaw](#)** * **G** **[Shape Times Shape](#)** * **[Let Us Divide!](#)** *

		Lo I know to multiply and divide by 7 Lo I know 7 timestables and division facts Lo I know 11 timestables and division facts Lo I know 12 timestable and division facts				
• Recognise and show, using diagrams, families of common equivalent fractions	Knows that fractions are relative to the whole and can be represented in different ways.	[Maths resources for teachers | White Rose Maths](#) Steps 1 to 10 Lo I know what the whole represents Lo I know to count beyond 1 in fractions Lo I know to partition a mixed number Lo I know to use number lines with mixed numbers	Fractions: mixed and improper : equivalent fractions	equivalent simplify numerator denominator fraction mixed number improper fraction simplest fraction	fraction tiles Cuisenaire rods Fractions circles Numicon	**Fractional Wall** * **Fractional Triangles** * **Bryony's Triangle** *

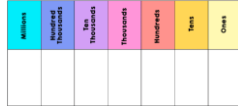|						
		Lo I know to compare and order mixed numbers Lo I know the representation of improper fractions Lo I know to convert mixed numbers to improper fractions Lo I know to convert improper fractions to mixed number fractions Lo I know to represent equivalent fractions on a number line Lo I know equivalent fractions families.				
• Solve problems involving converting from hours to minutes, minutes to seconds, years	Knows the relationships between the units of measure for each aspect.	Maths resources for teachers | White Rose Maths Steps one and two LO I know to measure in Kilometres and metres	Measurement : length	length width centimetre (cm) metre (m) kilometre (km) equivalent to	Ruler Squared paper	**Torn Shapes** * I **Twice as Big?** *

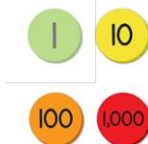|						
to months, weeks to days		LO I know equivalent lengths (kilometres and metres)				
● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetre and metres,	Knows how to add and subtract in the context of measures.	Maths resources for teachers | White Rose Maths Steps 3 to nine lo I know to find perimeters on a grid Lo I know perimeters of a rectangle. Lo I know perimeters of rectilinear shapes Lo I know to find missing lengths in the perimeters of rectilinear shapes lo I know to calculate the perimeter of rectilinear shapes Lo I know to calculate the perimeter of regular polygons	Measurement : perimeter	perimeter distance rectangle square rectilinear shape	Ruler Squared paper	**Twice as Big?** *

		Lo I know to calculate the perimeter of irregular polygons					
• Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days	Knows how to read the time to the 5-minute interval.	[Maths resources for teachers | White Rose Maths](#) Steps 1 and 2 Lo I know to convert between: years, months, weeks and days Lo I know to convert between hours, minutes and seconds	Measurement: time	o'clock half past quarter past quarter to minute hand hour hand duration 24 hour clock 12 hour clock	Clocks Number lines for counting time Digital display clocks	[Matching Time](#) * G
• Read, write and convert time between analogue and digital 12- and 24-hour clocks	Knows how to read the time to the 5-minute interval.	Steps 3 to 5 Lo I know to convert between analogue and digital times		o'clock half past quarter past quarter to minute hand hour hand duration		[Stop the Clock](#) *** G

		Lo I know to convert to the 24hr clock Lo I know to convert from the 24hr clock		24 hour clock 12 hour clock		
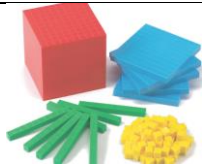
Year 4 Spring term

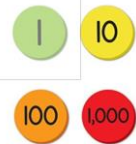| National curriculum objectives	Prior knowledge from year 3	Learning outcomes (including WR steps)	Mathematical aspect	Vocabulary	Manipulatives	Problem solving resources
• Identify, represent and estimate numbers using different representations • Order and compare numbers beyond 1,000	Knows the properties of three-digit numbers. Knows how to count in step sizes and estimate numbers up to 1000.	Maths resources for teachers | White Rose Maths (whiteroseeducation.com) Steps 10 to 12 LO I know to estimate numbers to 10,000 LO To compare numbers to 10,000 LO To order numbers to 10,000	Place value: estimating/ ordering and rounding	tens hundreds thousands rounding order more than (>) less than (<) partition numeral nearest distance	Place value charts Place value counters Base ten equipment	**Nice or Nasty** * **G** **Dicey Operations** * **G** **The Deca Tree** * **Four-digit Targets** * **Dicey Operations in Line** * **G**
Add and subtract numbers with up to four digits using the formal	Knows bonds to 20 and 100. Knows how to add/subtract	Maths resources for teachers | White Rose Maths	Adding and subtracting : 4 digit numbers	addition total subtraction column method	Place value charts Place value counters	**Fifteen Cards** * **I** **Money Bags** **

written methods of columnar addition and subtraction where appropriate	multiples of 10, 100 from three-digit numbers.	Steps 1 – 7 (recap and consolidation of efficient written methods) Lo I know to add and subtract 1's, 10's, 100's and 1000's Lo I know to add upto two 4 digit numbers (no exchange) LO I know to add two 4 digit numbers (no exchange) LO I know to add two 4 digit numbers (one exchange) Lo I know to add two 4 digit numbers (more than one exchange)		estimate how much strategy efficient accurate	Base ten equipment	**Amy's Dominoes** ** **Sealed Solution** ** **Roll These Dice** **

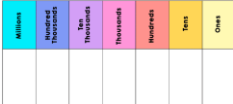|						
		Lo I know to subtract two 4 digit numbers (no exchange) Lo I know to subtract two 4 digit numbers (one exchange) Lo I know to subtract two 4 digit numbers (more than one exchange)				
• Recognise and use factor pairs and commutativity in mental calculations	Knows tables facts for 2,3,4,5,8,10s. Knows the 2, 4- and 8-times tables and the doubling patterns. Knows how to multiply using partitioning.	[Maths resources for teachers | White Rose Maths (whiteroseeducation.com)](#) Step 1 - 2 LO I know factor pairs LO I know how to use factor pairs calculations	Multiplication: multiplying and dividing by 10,100 and 1000	multiply divide times-table partition array bar model part-whole model remainder factor pair factor commutative lots of groups of	Place value charts Place value counters Base ten equipment	**Multiplication Square Jigsaw** * G **Shape Times Shape** * **Let Us Divide!** * **Carrying Cards** * **Light the Lights Again** * G **Multiples Grid** * I **Zios and Zepts** *

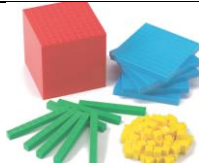|						
						[Times Tables Shifts](#) * **G** **[The Remainders Game](#)** * **G** **[Remainders](#)** **
• Recall multiplication and division facts for multiplication tables up to 12 × 12 • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 (Y5)	Knows how to multiply/divide two-digit numbers by one-digit numbers using expanded or formal written methods of short multiplication and division	Steps 3 – 6 LO I know multiplying by 10 LO I know Multiplying by 100 LO I know dividing by 10 LO I Know dividing by 100	Multiplication and division : Multiplying and dividing by 10 and 100.	Place holder Place value ten times bigger ten times smaller hundred times bigger hundred times smaller	Base ten equipment	**[Table Patterns Go Wild!](#)** ** **I** **[Satisfying Four Statements](#)** *
• Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit,	Knows how to multiply/divide two-digit numbers by one-digit numbers using expanded or formal written methods of short	Step 7 LO I know relating multiplication and division facts	Multiplication : Problem solving	multiply divide times-table partition array bar model part-whole model	Bar model Base ten equipment	**[Table Patterns Go Wild!](#)** ** **I** **[Satisfying Four Statements](#)** * **[The Remainders Game](#)** * **G**

integer scaling problems and harder correspondence problems such as n objects are connected to m objects	multiplication and division			remainder factor pair factor commutative lots of groups of		**Remainders** **
● Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout	Knows how to multiply/divide two-digit numbers by one-digit numbers using expanded or formal written methods of short multiplication and division	Steps 9 – 13 LO I know to multiply 2 digit by 1 digit numbers LO I know to multiply 3 digit by 1 digit numbers LO I know to divide 2 digit by 1 digit numbers LO I know to divide 3 digit by 1 digit numbers	Multiplication and division : formal written method	multiply divide times-table partition array bar model part-whole model remainder factor pair factor commutative lots of groups of	Numicon multiplication grid	**Shape Times Shape** * **Let Us Divide!** * **Carrying Cards** *
● Add and subtract fractions with the same denominator	Knows how to add and subtract within the same denominator.	[Maths resources for teachers | White Rose Maths (whiteroseeducation.com)](#) Fractions	Fractions: adding and subtracting	equivalent simplify numerator denominator	Cuisenaire rods	**Andy's Marbles** ** **Fractions in a Box** ** **Chocolate** ** I
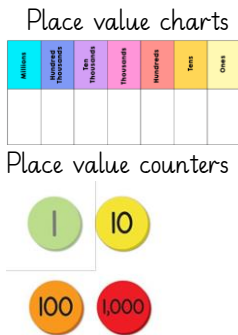
		Step 11 – 15 LO To add fractions of the same denominator LO to add mixed numbers of the same denominator LO To subtract two fractions of the same denominator LO To subtract fractions from whole amounts LO To subtract from mixed numbers		fraction mixed number improper fraction simplest fraction	Fractions circles Numicon 	
• Recognise and write decimal equivalents of any number of tenths or hundredths	Knows how to connect tenths to place value, decimal measures and to division by 10.	Decimals Steps 1 – 4 LO I know to express tenths as fractions. LO I know to express tenths as decimals. Lo I know to express tenths on a place value chart. Lo I know how to express tenths on a number line.	Decimals: tenths and hundredths	tenths hundredths decimal point 0·1 and 0·01 equivalent whole number rounding greater than (>) less than (<) equal to (=) order compare convert decimal place ascending descending	Place value counters Base ten equipment 	**Round the Dice Decimals 1** *
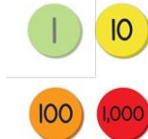
• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Knows how to measure accurately reading the marked divisions in the appropriate units	[Maths resources for teachers | White Rose Maths (whiteroseeducation.com)](#) **Length and perimeter** Steps 3 to 9 LO I know to find perimeters on a grid LO I know to find perimeters of a rectangle LO I know to find perimeters of rectilinear shapes LO I know to find missing lengths of rectilinear shapes LO I know to calculate missing lengths of rectilinear shapes LO I know to calculate the perimeter of regular polygons LO I know to find the perimeter of any regular polygon.	Measurement : perimeter	length width perimeter distance rectangle square rectilinear shape centimetre (cm) metre (m) kilometre (km) equivalent to	Ruler Helix Squared paper	**Torn Shapes** * I **Twice as Big?** *

Year 4 Summer term

National curriculum objectives	Prior knowledge from year 3	Learning outcomes (including WR steps)	Mathematical aspect	Vocabulary	Manipulatives	Problem solving resources
Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate	Adding numbers upto three digits.	Maths resources for teachers | White Rose Maths (whiteroseeducation.com) **Steps 8 – 10** LO I know to use efficient methods Lo I know to estimate addition and subtraction. Lo I know to use the inverse to solve problems	Addition and subtraction	addition total subtraction column method estimate how much strategy efficient accurate	Place value charts Place value counters Base ten equipment Numicon	**Sealed Solution** ** **Roll These Dice** ** I

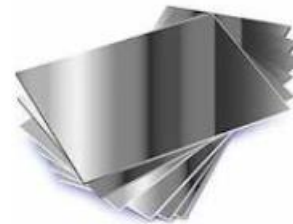|							
• Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	Multiplying 2 x 1 digit numbers Recall of multiplication facts.	[Maths resources for teachers | White Rose Maths (whiteroseeducation.com)](#) *Recap steps 9 -12 where needed* Steps 14 and 15 LO I know to solve correspondence problems LO I know to use efficient multiplication methods	Multiplication and division	multiply divide times-table partition array bar model part-whole model remainder factor pair factor commutative lots of groups of	Numicon multiplication grid	**Times Tables Shifts** * **G** **Table Patterns Go Wild!** ** **I** **Satisfying Four Statements** * **The Remainders Game** * **G** **Remainders** **
• Add and subtract fractions with the same denominator	Knows how to add and subtract within the same denominator.	[Maths resources for teachers | White Rose Maths (whiteroseeducation.com)](#) Recap calculating with fractions LO I know to add fractions	Fractions – calculating fractions	equivalent simplify numerator denominator fraction mixed number improper fraction simplest fraction	Cuisenaire rods Fractions circles	**Andy's Marbles** ** **Fractions in a Box** ** **Chocolate** ** **I**
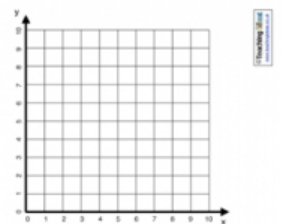
		LO I know to subtract fractions			Numicon	
• Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	Knows how to connect tenths to place value, decimal measures and to division by 10.	Decimals A Steps 5 - 6 Step 5 – I know to divide a one digit number by 10 Step 6 – I know to divide a two digit number by 10	Decimals - A	tenths hundredths decimal point 0·1 and 0·01 equivalent whole number rounding greater than (>) less than (<) equal to (=) order compare convert decimal place ascending descending	Place value charts Place value counters Base ten equipment	**Round the Dice Decimals 1** * I
• Count up and down in hundredths; recognise that hundredths	Knows how to connect tenths to place value, decimal measures	Step 7 – I know how to express hundredths as a fraction	Decimals -A			**Round the Dice Decimals 1** * I

arise when dividing an object by 100 and dividing tenths by 10	and to division by 10.						
• 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	Knows how to connect tenths to place value, decimal measures and to division by 10.	Step 8 – I know how to express hundredths as a decimal Step 9 – I know how to express hundredths on a place value chart	Decimals -A				**Round the Dice Decimals 1** * I
• Recognise and write decimal equivalents of any number of tenths or hundredths	Knows how to connect tenths to place value, decimal measures and to division by 10.	Maths resources for teachers	White Rose Maths (whiteroseeducation.com) Decimals B Steps 1 – 4 LO I know to make a whole with tenths LO I know to I know to make a whole with hundredths	Decimals B	tenths hundredths decimal point 0.1 and 0.01 equivalent whole number rounding greater than (>) less than (<) equal to (=) order	Place value charts Place value counters I 10 100 1,000 Base ten equipment		**Round the Dice Decimals 1** * I

		Lo I know to partition decimals Lo I know to partition decimals in different ways		compare convert decimal place ascending descending		
• Compare numbers with the same number of decimal places up to 2 decimal places	Knows the relative position of numbers.	Step 5 - 6 LO I know to compare decimal numbers Lo I know to order decimal numbers	Decimals B			
• Round decimals with I decimal place to the nearest whole number	Knows the rules of rounding.	Step 7 LO I Know to round decimals to the nearest whole number	Decimals B			
• Recognise and write decimal equivalents of any number of tenths or hundredths • Recognise and write decimal equivalents to 1 4, 1 2 and 3 4	Knows that fractions are relative to the whole and can be represented in different ways.	Step 8 LO I know to express halves and quarters as decimals	Decimals B	equivalent fraction decimal numerator denominator		

• Recognise angles as a property of shape or a description of a turn (Y3)	Knows acute and obtuse in relation to right angles. Knows how to describe position and movement using right angles for quarter turns (Y2)	Maths resources for teachers | White Rose Maths (whiteroseeducation.com) Step 1 – I know how angles can be represented as turns.	Geometry – shape			Fraction Match (maths.org) Fraction Lengths (maths.org)
• Identify acute and obtuse angles and compare and order angles up to two right angles by size	Knows acute and obtuse in relation to right angles.	Step 2 – I know how to identify different angles Step 3 – I know to compare and order angles	Geometry – angles			
• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Knows how to describe and classify shapes using mathematical properties	Step 4 – I know how to describe and classify triangles Step 5 I know how to describe and classify quadrilaterals Step 6 – LO I know how to describe and classify polygons	Geometry – polygons	quadrilateral triangle regular irregular interior angle angle acute obtuse reflect right angle symmetrical isosceles scalene equilateral	Squared paper Regular and irregular shapes 	Fraction Match (maths.org) Fractional Triangles (maths.org) Fraction Lengths (maths.org)

				line of symmetry reflective symmetry		
• Identify lines of symmetry in 2-D shapes presented in different orientations	Know and recognise right angles in 2d shapes.	Step 7 LO I know identifying lines of symmetry on 2D shapes	Geometry symmetry		Mirrors Tracing paper	**Reflector ! Rotcelfer** *** **School Fair Necklaces** ** I
• Complete a simple symmetric figure with respect to a specific line of symmetry	Know and recognise right angles in 2d shapes.	Step 8 LO I know to complete a symmetrical figure	Geometry: symmetry			**Symmetry Challenge** *** I
• Describe positions on a 2-D grid as coordinates in the first quadrant		[Maths resources for teachers | White Rose Maths (whiteroseeducation.com)](#) Steps 1 to 2 LO I know to describe positions using co-ordinates LO I know to plot co-ordinates on a grid	Geometry : Position and direction / coordinates	position horizontal vertical up down left right coordinates square rectangle	Squared paper Compass	**Coordinate Challenge** * **Eight Hidden Squares** **

				plot vertex vertices point grid		
• Plot specified points and draw sides to complete a given polygon	Knows how to describe and classify shapes using mathematical properties.	Step 3 LO I know to draw 2D shapes on a grid	Geometry : Position and direction / coordinates			
• Describe movements between positions as translations of a given unit to the left/right and up/down	Knows how to describe and classify shapes using mathematical properties.	Step 4 Lo I know how to translate shapes on a grid. Step 5 LO I know to describe translations on a grid.	Geometry : translation			
• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Knows how to read varying representations of discrete data. Knows how to use a simple scale. Knows how to interpret and analyse data.	[Maths resources for teachers	White Rose Maths (whiteroseeducation.com)](whiteroseeducation.com) Steps 1 to 4 LO : I know to Interpret charts	Statistics	data line graph pictogram bar chart table altogether more than (>) greatest smallest continuous data discrete data	different charts including : Pictogram Line graph bar chart, y axis X axis Label Title scale	**Venn Diagrams** * **More Carroll Diagrams** * **Plants** ** I

				compare		
• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Knows how to present data in many contexts.	LO I know to make comparisons and find the sum and difference using charts LO I know how to interpret line graphs LO : I know to draw line graphs				