

		Cycle 1			
Autumn Themes	Cross curricular maths	Class teaching	Maths Groups	Skills	Non-negotiables
Team building (2 weeks)	None Problem solving (handshakes)	Place value	<u>Place value</u> to 3 and 4 digits Compare and order numbers up to 1000 Counting in multiples of 2, 5, 10, 4,8,50 and 100 Building numbers from diennes	Age appropriate tables Counting and crossing barriers up to 1000 Odd and even numbers up to 100	Being able to say what comes one before or one after any number up to 1000 (and explain) Apply knowledge of odd and even to solve problems with numbers over 100 Counting on and back in 2s, 5s, 10s from any number up to 1000.
Anglo Saxons(3 weeks)	Timeline – ordering dates Find 10 more and 100 more (years) Read and write numbers in numerals Maps of - Coordinates, directional language, compass points Measure the perimeter of simple 2D shapes (build farmhouse and pen) Identify, represent and estimate numbers using different representations (armies, ships arrows etc.)	<u>2D shape</u> Draw and identify 2D shapes Geometric shapes AA compare quadrilaterals and triangles.	<u>Addition and subtraction</u> Mental HTU + U, HTU + T, HTU + H Written methods up to HTU Estimation and inverse Know addition and subtraction facts to 20 and pairs of numbers to 100	Tell and write time from an analogue clock (Roman numerals). Including vocab; o'clock, am/pm, morning/afternoon, noon/midnight Number bonds	Yr3 Add & subtract: Numbers with 2-digits and 3-digits using school calculation policy Find a small difference by counting on
Light and Dark (4 weeks)	Measuring length of shadow Data – table/graph of shadows Graphs - length of shadows Symmetry – reflective Measuring lengths of shadows in cm/m and conversions Rangoli patterns – translating shape Duration of events – nights and day (24hour time line). Time – Including vocab; o'clock, am/pm, morning/afternoon, noon/midnight, days and night, 24		<u>Word problems and problem solving</u> add and subtract mass and capacity. Missing number problems, using place value. Missing numbers solved by inverse Including simple time problems Continue sequences of numbers	Conversion – cm / m	Find multiples of 10 or multiples of 100 more/less than a given number under 1000 Tell time using 12 hour clock telling the time to nearest minute.

	hour time line Seconds in a minute, minutes in an hour. Calendar work – Days in a month, year and leap year.				
Hot and Cold (4 weeks)	Data – plotting temperatures Graphs over a year Travel brochures – distances, cost, money, miles. Money facts – how many pennies in £3, 20p in £1, 10p in £1. Which coins to use? (money play) (Before travel agent. Add and subtract amount of money including giving change. Negative numbers		<u>Multiplication and division</u> Written methods TU x U Including missing numbers. Division written methods including missing numbers.	Multiply and divide by 10 Mental – 3, 4 and 8 times tables and related divisions	Multiply: 2-digit by 1-digit Multiply any TU by 10 and explain the effect Divide 2 digit by 1 digit including remainders using grouping for division e.g. 50/2or3or5 Recall & use multiplication & division facts for 3, 4, 8 & 9 tables.
Sound (3 weeks)	Fractions - notation of music	Identify horizontal and vertical lines and pairs of parallel and perpendicular lines Make 3D shapes using modelling material. Recognise 3D shapes in different orientations and describe them Use and interpret Venn and Carroll diagrams	<u>Fractions and decimals</u> Recognise, find and write unitary fractions of shapes Equivalent fractions of shape and number	Finding quarters of even numbers Count up and down in tenths Doubles and halves using partitioning	Find quarters by halving and halving again +/- fractions with same denominator to make a whole one. Compare & order fractions with same denominator. Halve even numbers up to 100 Count up/down in tenths.
Celebrations (1 week)		Measuring using different equipment e.g. rulers, scales and measuring cylinders	<u>Place Value</u> Counting in different intervals. Finding 10, 100 more and less than a number Compare and order numbers Know 0 as a place holder	Rounding	Recognise PV of any 3-digit number. Round 3 digit numbers to the nearest 10 and 100 Compare & order numbers up to 1000. Being able to say what comes one before or one after any number up to 1000 (and explain)

Spring Themes					
Rocks soils volcanoes (5 weeks)	<p>Ordering measures – heights of volcanoes</p> <p>Weighing and measuring ingredients using scales</p> <p>Data – reading tables of information and interpreting these</p> <p>Drawing graphs to compare permeability of soils</p> <p>Coordinates on maps</p>	<p><u>2D shape and symmetry</u></p> <p>Draw 2D shapes and recognise these in different orientations, and using vocabulary of regular and irregular, use</p> <p>Find lines of symmetry in shapes, and draw reflections of shapes using mirrors</p>	<p><u>Addition and subtraction in contexts</u></p> <p>Compare add and subtract Solve one step and two step questions using information presented in bar charts, pictograms and tables</p> <p>Measure add and subtract length, mass, and capacity Measure the perimeter of simple 2D shapes</p>	Number bonds	<p>Find a small difference by counting on</p> <p>Add & subtract: Numbers with 2-digits and 3-digits using school calculation policy</p> <p>Recall all number bonds to 100</p>
How is new life welcomed into the world (1 week)		<p><u>Direction</u></p> <p>Recognise angles as a property of a shape of a description of a turn</p> <p>Recognise right angles as a property of a shape or a description of a turn</p> <p>use ordinal numbers distinguish between left and right and between clockwise and anticlockwise and use these when giving directions</p>	<p><u>Time</u></p> <p>Tell and write the time from an analogue clock and using Roman numerals to XII</p> <p>Read the time with increasing accuracy</p>		<p>Tell time using 12 hour clock telling the time to nearest minute.</p>

<p>Animals and humans 2 (2 weeks)</p>	<p>Correspondence problems</p> <p>Symmetry, 2d shapes in different orientations. Complete a symmetric figure (animal symmetry)</p>	<p><u>3D shapes</u></p> <p>Use mathematical names for 3D shapes</p> <p>Make and talk about shapes referring to properties and features such as edge, face, corner</p> <p>Draw nets of shapes, and recognise 3D shapes from their nets</p> <p>Investigate which nets make cubes and other 3D shapes</p>	<p><u>Fractions and decimals</u></p> <p>Recognise that tenths arise from dividing an object into ten equal parts and in dividing one digit numbers of quantities into ten</p> <p>Recognise and use fractions as numbers: unit fractions and non unit fractions with small denominators</p> <p>Calculate fractions of shape and numbers</p> <p>Add and subtract fractions with the same denominator</p>	<p>Add and subtract fractions with the same denominator</p> <p>Compare and order fractions</p>	<p>+/- fractions with same denominator to make a whole one.</p> <p>Compare & order fractions with same denominator.</p>
<p>Publisher and PowerPoint (2 weeks)</p>		<p><u>Angles</u></p> <p>Recognise angles as a property of shape or a description of a turn. Identify whether angles are greater than or less than a right angle</p> <p>Recognise obtuse and acute angles.</p> <p>Use an angle measurer</p>	<p><u>Multiplication and Division in contexts</u></p> <p>Solve scaling problems including positive integer scaling problems</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know</p>		<p>Multiply: 2-digit by 1-digit</p> <p>Yr3 Multiply any TU by 10 and explain the effect</p> <p>Divide 2 digit by 1 digit including remainders using grouping for division e.g. 50/2or3or5</p> <p>Recall & use multiplication & division facts for 3, 4, 8 & 9 tables.</p>

Summer Themes					
Ancient Egypt (3 weeks)	Measure length (m/cm/mm) Accurate use of a ruler, measuring and drawing lines to the nearest half cm or mm. Make and recognise 3D shapes and describe them	<u>Conversions</u> between units of measurements	<u>Problem solving</u> Using inverse to solve problems, including balancing problems Understand a variety of mathematical vocabulary to solve problems Interpret and present data, and solve problems using graphs and bar charts		
Who inspires me (3 weeks)		<u>Area and perimeter</u> Use m squared for area, counting squares and solving area investigations <u>Time converting</u> between digital and analogue clocks, reading clocks with missing numbers <u>Symmetry</u> Draw reflections of shapes with lines of symmetry at 45 degrees (AA rotation and translation	<u>Addition, Subtraction, Multiplication and Division</u> solve word problems, and other		Add & subtract: Numbers with 2-digits and 3-digits using school calculation policy Multiply: 2-digit by 1-digit Yr3 Multiply any TU by 10 and explain the effect Divide 2 digit by 1 digit including remainders using grouping for division e.g. 50/2or3or5
What does it mean to be a Sikh (1 week)		<u>Angles and turns</u> Identify right angles, recognise that 2 right angles make half a turn, three make three quarters of a turn and four make a complete turn.	Solving inverse problems Number bonds		

Local Geography Study (2 weeks)	Measure length Data handling, using tables, representing information graphs and interpreting data	<u>Shape</u> problem solving with 2D and 3D shapes, pegboards	Continue sequences of numbers		
Changes (1 week)		Investigation and problem solving	Review and revision		