



Autumn Term 1			Autumn Term 2		
Number & Place Value	Addition & Subtraction	Geometry - Shape	Multiplication & Division	Measurement - Money	Fractions
<p>-Identify, represent and estimate numbers with concrete and pictorial representation.</p> <p>-Count in steps of 2 from 0, and in tens from 0, forward and backward.</p> <p>-Recognise the place value of each digit in a two-digit number with concrete and pictorial representation.</p> <p>-Read and write numbers to at least 50 in numerals and words.</p> <p>-Use place value to compare and order numbers from 0 up to 20.</p> <p>-Use <, > and = signs to compare numbers up to 20 with concrete and pictorial representation.</p> <p>-Use place value and number facts to solve problems that involve all of the above.</p>	<p>-Recall and use addition and subtraction to 20 fluently.</p> <p>-Add and subtract numbers to 50 using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones a two-digit number and tens.</p> <p>-Begin to recognise that addition of two numbers can be done in any order (commutative).</p> <p>-Recognise the inverse relationship between addition and subtraction.</p> <p>-Solve simple problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers and quantities.</p>	<p>-Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.</p> <p>-Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.</p> <p>-Identify 2-D shapes on the surface of 3-D shapes, (e.g. a circle on a cylinder and a triangle on a pyramid).</p> <p>-Compare and sort common 2-D and 3-D shapes and everyday objects.</p>	<p>-Recall and use multiplication and division facts for the 2 times table, including recognising odd and even numbers.</p> <p>-Calculate mathematical statements for multiplication and division within the 2 times table and begin to write them using the multiplication (x), division (÷) and equals (=) signs.</p> <p>-Begin to recognise that numbers in the 2 times table can be done in any order (e.g. $2 \times 6 = 12$ therefore $6 \times 2 = 12$).</p> <p>-Recognise that multiplication and division are linked (working within the 2 times table).</p> <p>-Identify multiples of 2. Recognise that multiples of 2 are always even.</p> <p>-Solve problems in contexts when multiplying by 2, including doubling and halving.</p> <p>-Solve problems involving multiplication and division, using materials, arrays, repeated addition and mental methods for all of the above.</p>	<p>-Recognise and use symbols for pounds (£) and pence (p). Combine amounts to make a particular value.</p> <p>-Find different combinations of coins that equal the same amounts of money.</p> <p>-Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</p>	<p>-Recognise, find, name and write $1/2$, $1/3$, and $1/4$ of a length, shape or set of objects.</p> <p>-Write simple fractions with numbers up to and including 20 (e.g. $1/2$ of 6 = 3, $1/2$ of 12 = 6).</p>
<p>Vocabulary:</p> <p>Number number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred, two hundred ... one</p>	<p>Vocabulary:</p> <p>addition add, more, and make, sum, total altogether double near double half, halve one more, two more ... ten more ...</p>	<p>Vocabulary:</p> <p>Properties of shape: shape, pattern, flat curved, straight round hollow, solid sort make,</p>	<p>Vocabulary:</p> <p>multiplication multiply multiplied by multiple groups of times once, twice, three times ... ten times repeated</p>	<p>Vocabulary:</p> <p>money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap,</p>	<p>Vocabulary:</p> <p>fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of</p>

<p>thousandnone how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours and so on equal to equivalent to is the same as more, less most, least tally many odd, even multiple of sequence continue predict few pattern pair, rule > greater than < less than Place value ones tens, hundreds digit one-,two- or three-digit number place, place value stands for, represents exchange the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, great- est one more, ten more one less, ten less equal to compare order size first, second, third ... twentieth twenty-first, twenty- second ... last, last but one before, after nextbetween halfway between above, below</p>	<p>one hundred more how many more to make ...? how many more is ...than ...? how much more is ...? sub- tract take away how many are left/leftover? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between equals is the same as number bonds/ pairs/facts tens boundary</p>	<p>build, draw surface size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry pattern, repeating pattern match 2-D shape corner, side point, pointed rectangle (including square), rectangular circle, circular triangle, triangular pentagon hexagon octagon, 3-D shape face, edge, vertex, vertices cube, cuboid pyramidsphere cone cylinder</p>	<p>addition division dividing, divide,divided by, divided into grouping sharing, share,share equally left, left over one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row,column number patterns multiplication table multiplication fact, division fact</p>	<p>costs less, cheaper costs the same as how much ...? how many ...? total</p>	<p>a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts</p>
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Spring Term 1			Spring Term 2		
Number & Place Value	Addition & Subtraction	Measurement – Length/Height	Measurement – Capacity/Volume	Statistics	Measurement - Mass
<p>-Identify, represent and estimate numbers to 100 using different representations, including the number line.</p> <p>-Recognise the place value of each digit in a two-digit number (tens and ones).</p> <p>-Read and write numbers to at least 100 in numerals and words.</p> <p>-Use place value to compare and order numbers from 0 up to 100. Use $<$, $>$ and $=$ signs to compare numbers up to 100.</p> <p>-Count fluently in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward.</p> <p>-Use place value and number facts to solve problems that involve all of the above.</p>	<p>-Recall and use addition and subtraction facts to 20 fluently, deriving and using related addition facts up to 100 (e.g. $3 + 7 = 10$; $30 + 70 = 100$, $10 - 7 = 3$; $100 - 70 = 30$).</p> <p>-Add and subtract numbers to 100 using concrete objects, pictorial representations, and mentally, including: -a two-digit number and ones -a two-digit number and tens -adding three one-digit numbers.</p> <p>-Recognise that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>-Begin to demonstrate the concept of adding and subtracting in columns, using concrete and pictorial representation in place of digits.</p> <p>-Recognise and begin to use the inverse relationship between addition and subtraction.</p> <p>-Solve simple problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.</p>	<p>-Choose and use appropriate standard units to estimate and measure length/height in any direction (cm/m) to the nearest appropriate unit using rulers and tape measures.</p> <p>-Compare and order lengths/heights, and record the results using $>$, $<$ and $=$.</p>	<p>Choose and use appropriate standard units to estimate and measure temperature ($^{\circ}\text{C}$) and capacity (litres/ml) to the nearest appropriate unit using thermometers and measuring vessels.</p> <p>-Compare and order volume/capacity and record the results using $>$, $<$ and $=$.</p>	<p>-Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</p> <p>-Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</p> <p>-Ask and answer questions about totaling and comparing categorical data.</p>	<p>-Choose and use appropriate standard units to estimate and measure mass (g/kg) to the nearest appropriate unit using scales.</p> <p>-Compare and order mass and record the results using $>$, $<$ and $=$.</p>

<p>Vocabulary:</p> <p>See Autumn Term</p>	<p>Vocabulary:</p> <p>See Autumn Term</p>	<p>Vocabulary:</p> <p>length, width, height, depth long, short, tall, high, low wide, narrow, deep, shallow, thick, thin longer, shorter, taller, higher... and so on longest, shortest, tallest, highest... and so on far, further, furthest, near, close metre (m), centimetre (cm) ruler, metre stick, tape meas-ure</p>	<p>Vocabulary:</p> <p>capacity full, half full empty holds, contains litre (l), half-litre, millilitre (ml) container</p>	<p>Vocabulary:</p> <p>count, tally, sort, vote graph, block graph, pictogram represent group, set same, different list, table label, title most popular, most common least popular, least common</p>	<p>Vocabulary:</p> <p>weigh, weighs, balances heavy/light, heavier/lighter, heaviest/lightest kilogram (kg), half-kilogram, gram (g) balance, scales, weight</p>
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Summer Term 1		Summer Term 2		
Fractions	Measurement - Time	Geometry – Position/Direction	Addition & Subtraction	Multiplication & Division
<p>-Recognise, find, name and write $1/3$, $1/4$, $2/4$, and $3/4$ of a length, shape or set of objects.</p> <p>-Write simple fractions (e.g. $1/2$ of 6 = 3) and recognise the equivalence of $2/4$ and $1/2$.</p>	<p>-Compare and sequence intervals of time.</p> <p>-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.</p> <p>-Know the number of minutes in an hour and the number of hours in a day.</p>	<p>-Order and arrange combinations of mathematical objects in patterns and sequences.</p> <p>-Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).</p>	<p>-Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers adding three one-digit numbers.</p> <p>-Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>-Record addition and subtraction in columns to support their understanding of place value in preparation for formal written methods with larger numbers.</p> <p>-Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p> <p>-Apply their increasing knowledge of mental and written methods to solve simple problems with addition and subtraction, using concrete objects and pictorial representations (including those involving numbers, quantities and measures).</p>	<p>-Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>-Calculate mathematical statements for multiplication and division within the 2, 5 and 10 multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs.</p> <p>-Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p> <p>-Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>
<p>Vocabulary:</p> <p>See Autumn Term</p>	<p>Vocabulary:</p> <p>time days of the week: Monday, Tuesday... days of the week: Monday, Tuesday... seasons: spring, summer, autumn, winter day, week, fortnight, month, year weekend, birthday, holiday morning, afternoon, evening, night, midnight bedtime, dinnertime, playtime today, yesterday, tomorrow before, after next, last now, soon, early, late quick, quicker, quickest, quickly fast,</p>	<p>Vocabulary:</p> <p>position over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back before, after beside, next to opposite apart between middle, edge centre corner direction journey, route left, right up, down higher, lower</p>	<p>Vocabulary:</p> <p>See Autumn Term</p>	<p>Vocabulary:</p> <p>See Autumn Term</p>

faster, fastest slow, slower, slow- est, slowly old, older, oldest new, new-er, newest takes longer, takes less timehow long ago? how long will it be to...? how long will it take to...? hour, mi- nute, second o'clock, half past, quarter to, quarter past clock, watch, hands digital/analogue clock/watch, timer how often? always, never, often, some-times, usually once, twice

forwards, backwards, sideways
across close, far, near along
through to,from, towards, away
from clockwise, anti- clockwise
movement slide roll whole turn,
half turn, quarter turn right angle
straight line stretch, bend

Fluency Memory Joggers:

Within the daily maths session, 5/10 minutes is used to ensure the children have varied and fluent practise of basic skills. Previous maths domains are visited.

Mini Maths Meet:

A daily 10 minute focus (outside of the maths session) on a specific aspect of maths/ basic skills/ problem solving/ reasoning which is explored in depth. Eg. 6×3 .

Problem Solving & Reasoning:

Problem Solving & Reasoning:

PSR takes place within sessions & also in a discrete PSR session once a week.

Year 2 Skills:

	Skills
Problem Solving	Engage with mathematical activities and problems, making links and moving between different representations (concrete, pictorial, abstract).
	Independently choose to scaffold thinking using concrete, pictorial or abstract representations, if required.
	Independently choose to represent thinking using concrete, pictorial or abstract representations, as appropriate.
	Independently find a starting point to break into a problem.
	With support work systematically.
	Independently find possibilities.
	Independently check work (e.g. look for other possibilities, repeats, missing answers and errors).
	Pattern spot and predict what will come next in a pattern/sequence (numbers, shapes, spatial).
With support, investigate statements and conjectures.	

	Skills
Reasoning	Explain with reasons and beginning to use given sentence stems and connectives to expand.
	Listen to others' explanations, make sense of them and compare and evaluate.
	Begin to edit and improve their own and a peer's explanation.
	Investigate 'what if?' questions.

