Etherley Lane Primary School – Maths

Year Group	Areas covered						Knowledge non-negotiables	Terminology	Educational Visits
Reception	*Number* Introduction to Ten Town. Recognise numerals 1-10. Recognise numerals of personal significance. Count objects up 5, then 10. Select the correct numeral to represent 1-10. Use language 'fewer' and 'more' to compare, add and subtract. Say 1 more than a given number. *Shape, space and measure* Use names for 2D and 3D shapes Select a named shape. Recreate patterns and build models.	*Number* Ten Town Count an irregular arrangement of objects (up to 10 and beyond). Estimate amounts of objects and check using counting. Use vocabulary linked to adding and subtracting. *Shape, space and measure* Order two or three items by length or height, weight and capacity. Use language related to time and money. Measure short periods of time in simple ways.	*Number* Ten Town Records, using marks that they can interpret and explain. Children begin to identify own mathematical problems based on own interests and fascinations. *Shape, space and measure* Children use everyday language to talk about size, weight, capacity, position, time, money and distance. Recognition of some coins. Begin to read o'clock and half past.	*Number* Ten Town Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. *Shape, space and measure* Children recognise, create and describe patterns with 2 or 3 colours/ shapes/ objects/ actions. Children use mathematical vocabulary. Sort 3D shapes.	*Number* Ten Town Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing. *Shape, space and measure* Children explore characteristics of everyday objects and shapes and use mathematical language to describe them.	*Number* Ten Town Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing. Real-life problem-solving. *Shape, space and measure* Children explore characteristics of everyday objects and shapes and use mathematical language to describe them. Beebots.	ELG11 – Numbers Children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing. ELG12 – Shape, space and measures Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.	**Counting** number zero, one, two, three… to twenty and beyond zero, ten, twenty… one hundred none how many…? count, count (up) to count on (from, to) count back (from, to) count in ones, twos… tens… more, less, many, few odd, even every other how many times? pattern, pair guess how many, estimate nearly, close to, about the same as just over, just under too many, too few, enough, not enough **Comparing and ordering numbers** the same number as, as many as *Of two objects/amounts:* greater, more, larger, bigger less, fewer, smaller *Of three or more objects/amounts:* greatest, most, biggest, largest least, fewest, smallest one more, ten more one less, ten less compare order	

| | | | | | | | size
first, second, third… tenth
last, last but one
before, after
next
between
above, below

Adding and subtracting

add, more, and
make, sum, total
altogether
score
double
one more, two more, ten more…
how many more to make… ?
how many more is… than…?
take (away), leave
how many are left/left over?
how many have gone?
one less, two less… ten less…
how many fewer is… than…?
difference between
is the same as

Solving problems

Reasoning about numbers or shapes
pattern
puzzle
answer
right, wrong
what could we try next?
how did you work it out?
count, sort
group, set
match | |

							same, different	
							list	
							Problems involving 'real life' or money	
							compare	
							double	
							half, halve	
							pair	
							count out, share out	
							left, left over	
							money	
							coin	
							penny, pence, pound	
							price	
							cost	
							buy	
							sell	
							spend, spent	
							pay	
							change	
							dear, costs more	
							cheap, costs less, cheaper	
							costs the same as	
							how much...? how many...?	
							total	
							Measures (general)	
							measure	
							size	
							compare	
							guess, estimate	
							enough, not enough	
							too much, too little	
							too many, too few	
							nearly, close to, about the same as	
							just over, just under	
							Length	
							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, near, close **Mass** weigh, weighs, balances heavy/light, heavier/lighter, heaviest/lightest balance, weight, scales **Capacity** full half full empty holds container **Time** time *days of the week:* Monday, Tuesday… day, week birthday, holiday morning, afternoon, evening, night bedtime, dinnertime, playtime today, yesterday, tomorrow before, after next, last now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest	

								new, newer, newest takes longer, takes less time hour, o'clock clock, watch, hands **Exploring patterns, shape and space** shape, pattern flat curved, straight round hollow, solid corner face, side, edge, end sort make, build, draw **3D shapes** cube pyramid sphere cone **2D shapes** *circle* *triangle* *square* *rectangle* *star* **Patterns and symmetry** size bigger, larger, smaller symmetrical pattern repeating pattern match **Position, direction and movement**	

								position	
								over, under	
								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	
								corner	
								direction	
								left, right	
								up, down	
								forwards, backwards, sideways	
								across	
								close, far, near	
								along	
								through	
								to, from, towards, away from	
								movement	
								slide	
								roll	
								turn	
								stretch, bend	
								Instructions	
								listen	
								join in	
								say	
								think	
								imagine	
								remember	

								start from start with start at, look at point to show me, put, place fit arrange rearrange change, change over split separate, carry on, continue repeat what comes next? find choose collect, use make build tell me describe pick out talk about explain show me, read write trace copy complete finish, end fill in shade colour tick, cross draw draw a line between join (up) ringcost count work out	

							answer check **General** same number/s different number/s missing number/s number facts number line, number track number square number cards counters, cubes, blocks, rods die, dice dominoes pegs, peg board same way, different way best way, another way in order, in a different order not all, every, each	
Year 1	**Maths White Rose Planning** Number: Place Value (within10) Number: Addition and Subtraction (within 10) Time	**Maths White Rose Planning** Geometry: Shape, Number: Place Value (within 20), Consolidation Time	**Maths White Rose Planning** Addition and Subtraction (within 20) Number Place Value (within 50)(Multiples of 2, 5, and 10 included) Time	**Maths White Rose Planning** Measurement: Length and Height Measurement: Weight and Volume Consolidation Time	**Maths White Rose Planning** Number: Multiplication and Division (Reinforce multiples of 2,5, and 10 to be included) Number Fractions Geometry: Position and Direction Time	**Maths White Rose Planning** Number: Place Value (within 100) Measurement: Time Consolidation	**Number and Place Value** • Count to and across 100, forward & backwards, beginning with 0 or 1 from any number. • Count in multiples of 2,5, and 10 • Count, read and write numbers to 100 in numerals. • Say what is one more or one less than any number. **Calculations** • Represent and use number bonds and related subtraction facts within 20.	**Number and Place Value** Ten more/less, digit, numeral, figure(s), compare, (in) order/a different order, size, value, between, halfway between, above, below, tens, ones **Addition and Subtraction** Number bonds, number line, add, more, plus, make, sum, total, altogether, inverse, double, near double, equals, is the same as (including equals sign), difference between, subtract, take away, minus	

							• Add and subtract 1-digit and 2-digit numbers to 20, including zero. • Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. • Solve one-step problems involving multiplication and division, by using concrete objects, pictorial representations and arrays. **Fractions** • Recognise, find, and name a half, quarter of an object, shape or quantity. **Measurement** • Compare, describe and solve practical problems for lengths and heights; mass/weight; capacity and volume; and time. • Measure and begin to record lengths and heights; mass/weight; capacity and volume; and time. • Recognise and know the value of different denominations of coins and notes. • Tell the time to the hour and half past and draw the hands on a clock face to show time. • Tell the time to half past the hour. • Sequence events in chronological order using language.	How many more to make …? How many more is … than … ?, How much more is … ?, How many fewer is … than … ?, How much less is … ? **Multiplication and Division** Once, twice, three, five times, multiple of times Multiply, multiply by, repeated addition, array, row, column, double, halve, share, share equally, group in pairs, threes, etc., equal groups of, divide, divided by, left over **Measure** Time, days of the week, seasons, day, week, 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, faster, fastest, slow, slower, slowest, slowly, old, older, oldest, new, newer, newest Takes longer, takes less time, hour, o'clock, half past, clock, watch, hands, how long ago?, How long will it be to … ?, How long will it take to … ?, How often?, always, never, often, sometimes, usually, once, twice, first, second,	

									Geometry (position and direction) • Describe position, directions and movement, including half, quarter and three-quarter turns. Geometry (properties of shape) • Recognise and name 2D shapes (rectangle, including squares, circles, and triangles). • Recognise and name 3D shapes (cuboids, including cubes, pyramids and spheres).	third, etc., estimate, close to, about the same as, just over, just under, too many, too few, not enough, enough Length, width, height, depth, long, longer, longest, short, shorter shortest, tall, taller, tallest, high, higher, highest, Low, wide, narrow, deep, shallow, thick, thin, far, near, close, metre, ruler, metre stick How much?, How many?, money, coin, penny, pence, pound, price, cost, buy, sell, spend, spent, pay, change, dear(er), costs more, costs less, cheaper, costs the same as, total Geometry (position and direction) Before, after, beside, next to, opposite, apart, between, middle, edge, centre, corner, direction, journey, left, right, up, down, forwards, backwards, sideways, across, close, far, near, along, through, to, from, towards, away from, movement, slide, roll, turn, whole turn, half turn, stretch, bend Geometry (properties of shape) Corner (point, pointed), face, side, edge, make, build, draw Fractions	

								Whole, equal parts, four equal parts, one half, two halves, a quarter, two quarters	
								Problem Solving Change, change over, split, separate, carry on, continue, repeat, what comes next?, find, choose, collect, use, make, build	
								Tell me, describe, pick out, talk about, explain, show me, read, write, record, trace, copy, complete, finish, end, fill in, shade, colour, tick, cross, draw, draw a line between, join (up), ring, arrow	
								Cost, count, work out, answer, check same number(s)/different number(s)/missing number(s)	
								Number facts, number line, number track, number square, number cards, abacus, counters, cubes, blocks, rods, die, dice, dominoes, pegs, peg board	
								Same way, different way, best way, another way, in order, in a different order, not all, every, each	

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Year 2								
Place value - counting to and across 100, forwards and backwards from any given number. Count read and write numbers in numerals and in steps of 2, 5, 10 and 3. **Multiplication and Division** -odd and even numbers **Addition and Subtraction** -solve problems using concrete objects and pictorial representations. Recall and use facts to 20 to relate to 100. **Fractions** -to recognise half of an object, shape or quantity, **Money** -recognise and know coin and note values. **Shape** -recognise and name 2D shapes (rectangles, circles triangles) **Measurement** - compare, measure, record and solve problems involving -length	**Place value** -identify 1 more/1 less from any given number, using objects and pictorial rep. read and write numbers 1-20 in words and numbers. **Shape** -recognise and name 3D shapes (cuboids, pyramids and spheres) **Addition and Subtraction -**apply mental and written methods. Addition can be communicative and subtraction cannot. **Fractions** -to recognise quarter of an object, shape or quantity, **Statistics** -interpret simple pictograms, tally charts, block diagrams and tables. **Time** -telling the time to hour, half past, quarter past and quarter to. **Measurement** - compare, measure, record and solve problems involving -capacity and volume, time.	**Place value** - recognise the place value of each digit in a 2-digit number. Estimating numbers. Compare and order numbers using >, < = symbols. **Addition and Subtraction** -apply inverse number operations to find missing numbers. **Multiplication and Division**, -solving one-step problems by using concrete objects, arrays and pictorial representations. **Fractions** - recognise, find and name ¼, 1/3,2/4 and ¾ of a length, shape, set of objects or quantity. **Measurement** - estimate, measure length	**Place value** -read and write numbers in words and numerals. Problem solve using number facts and place value. **Multiplication and Division** -x2 x5 x10 x3 tables using knowledge to apply to find division facts. Statistics, Shape, **Fractions** -write simple fractions ½ of 6 = 3. **Measurement** - compare, measure, record and solve problems involving -capacity and volume, time. **Shape** -2D shapes - no. of sides/lines of symmetry. 3D shape -no. of edges, vertices and faces. **Statistics** –construct simple pictograms, tally charts, block diagrams and tables.	**Place value** - identify 1 more/1 less from any given number, read and write numbers 1-20 in words and numbers. **Position and Direction** - whole turn, half turn, quarter and three-quarter turns. **Fractions** - recognise equivalent fractions 2/4 = ½. **Shape** -2D shape -shapes on the surface of a 3D shape. **Money** - recognise £ (pound) and p (pence) combining amounts. Find different coin combinations. **Time** -compare and sequel intervals of time	**Place value** - identify the place value of each digit in a 2-digit number. Estimating numbers. Compare and order numbers using > , < = symbols **Position and Direction** -order objects in patterns and sequences. **Shape** -compare and sort 2D and 3D shapes and everyday objects **Money** -solving problems including giving change.	**Number and Place Value** • Count in steps of 2, 3 and 5. • Read and write numbers to at least 100 in numerals and in words. • Compare and order numbers from 0 up to 100; using < > = signs • Recognise the place value of each digit in a 2 digit number. • Use place value and number facts to solve problems. **Calculations** • Recall and use addition and subtraction facts to solve problems. • Add and subtract mentally and using objects, including two, 2 digit numbers. • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. • Recall and use multiplication and division facts for the 2, 5, 10x tables, including recognising odd and even numbers. • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context. • Show that multiplication of two numbe4rs can be done in any order (commutative)	**Number and Place Value** Numbers to one hundred, hundreds, partition, recombine, more/less **Addition and Subtraction** *See Year 1* **Multiplication and Division** *See Year 1* **Measure** Quarter past/to, metres, kilometres, grams, kilograms, millimetres, litres, temperature, degrees **Geometry (position and direction)** Rotation, clockwise, anticlockwise, straight line, ninety degree turn, right angle **Geometry (properties of shape)** Size, bigger, larger, smaller, symmetrical, line of symmetry, fold, match, mirror line, reflection, pattern, repeating pattern **Fractions** Three quarters, one third, a third, equivalence, equivalent **Data /Statistics** Count, tally, sort, vote, graph, block graph, pictogram, represent,	

								and division of one number by another cannot. **Fractions** • Recognise, find, name and write 1/3, ¼, 2/4, and ¾ of a length, shape, set of objects or quantity. • Write simple fractions EG ½ of 6 = 3 **Measurement** • Compare and order lengths, mass, volume/capacity and record the results using > < and =. • Chose and use standard units to estimate and measure length/height, mass, temperature, and capacity. • Recognise and use the symbols for £ and p and combine amounts to make particular value and give change. • Tell and write the time to five minutes, including quarter to/past and draw the hands on a clock face to show these times. • Compare and sequence intervals of time. **Geometry properties of shape** • Compare and sort common 2D shapes and everyday objects. • Compare and sort common 3D shapes and everyday objects.	group, set, list, table, label, title, most popular, most common, least popular, least common **Problem Solving** Predict, describe the pattern, describe the rule, find, find all, find different, investigate	
	and height, mass and weight **Time** -sequencing events vocab. - morning, afternoon, evening, today, yesterday, tomorrow, before and after.									

							Geometry – Position and Direction • Order and arrange combinations of mathematical objects in patterns and sequences. • 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). Statistics • Interpret and construct simple pictograms, tally charts, block diagrams, simple tables. • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.		
Year 3	Number and place value Addition and subtraction Problem solving and reasoning. Times Tables	Addition and subtraction Multiplication and division. Problem solving and reasoning. Times Tables	Multiplication and division. Measurement – Money Statistics Problem solving and reasoning. Times Tables	Measurement – length and perimeter Fractions Problem solving and reasoning. Times Tables	Fractions Measurement – Time Problem solving and reasoning. Times Tables	Geometry – Properties of Shapes Measurement – Mass and Capacity Problem solving and reasoning. Times Tables	Number and Place Value • Count in multiplies of 4, 8, 50 and 100. • Compare and order numbers from 0 up to 1000 • Use place value and number facts to solve problems. Calculations • Add and subtract numbers mentally including HTU +U, HTU+T, HTU+H. • Add and subtract numbers up to 3 digits, using formal written methods.	**Number and Place Value** Numbers to one thousand **Addition and Subtraction** Column addition and subtraction **Multiplication and Division** Product, multiples of four, eight, fifty and one hundred, scale up **Measure** Leap year, twelve-hour/twenty-four-hour clock, Roman numerals I to XIII	

								- Estimate the answer to a calculation and use the inverse operations to check. - Recall and use multiplication and division facts for the 3x, 4x and 8x tables. **Fractions** - Count up and down in tenths. - Recognise tenths are from dividing objects and quantities in to 10 equal parts and dividing by 10. - Compare and order simple fractions. - Recognise and show, using diagrams, equivalent fractions with small denominators. - Find and write fractions of a set of objects - Add and subtract fractions less than 1. **Measurement** - Measure, compare, add and subtract using standard units: length, mass, volume/capacity. - Measure the perimeter of a simple 2D shape. - Read and write the time from an analogue clock including roman numbers and 12/24 hour clocks - Estimate and read time to the nearest minute. **Geometry properties of shape**	**Geometry (position and direction)** Greater/less than ninety degrees, orientation (same orientation, different orientation) **Geometry (properties of shape)** Horizontal, perpendicular and parallel lines **Fractions** Numerator, denominator, unit fraction, non-unit fraction, compare and order, tenths **Data Statistics** Chart, bar chart, frequency table, Carroll diagram, Venn diagram, axis, axe **Problem Solving**	

							• Identify horizontal, vertical, perpendicular and parallel lines. • Identify whether angles are greater/less than right an angle. • Interpret and present data suing bar charts, pictograms and tables.		
Year 3/4	Place Value Addition and Subtraction	Multiplication and Division	Multiplication and Division Money	Statistics Fractions and Decimals Length, Perimeter and Area	Fractions and Decimals Time	Properties of Shape Position and Direction Mass and Capacity	See Year 3 Objectives **Year 4 Objectives** **Number and Place Value** • Count backwards through zero to include negative numbers. • Recognise the place value of each digit in a 4 digit number. • Round any number to the nearest 10, 100, 1000 **Calculations** • Recall multiplication and division facts up to 12 x 12 • Use place value, known and derived facts to multiply and divide mentally. • Recognise and use factor pairs and commutativity un mental calculations. • Multiply using short written method. **Fractions, Decimals, Percentages** • Recognise and use hundredths. • Recognise and write decimal equivalents • Round decimals with one decimal place to the nearest whole number	See Year 3 Above Year 4 **Number and Place Value** Tenths, hundredths, decimal (places), round (to nearest), thousand more/less than, negative integers, count through zero, Roman numerals I to C **Addition and Subtraction** *See Year 3* **Multiplication and Division** Multiplication facts (up to 12x12), division facts, inverse, derive **Measure** Convert **Geometry (position and direction)** Co-ordinate, translate, quadrant, X-axis, Y-axis, perimeter, area **Geometry (properties of shape)** Quadrilaterals, triangles, right, acute and obtuse angles **Fractions and Decimals** Equivalent decimals and fractions	

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							• Compare numbers up to two decimal places. **Measurement** • Convert between different units of measure including money. • Find the area of a rectilinear shapes by counting squares. • Solve problems converting units of time. **Geometry** • Compare and classify geometric shapes including quadrilateral and triangles. • Complete a simple symmetric figure with respect to a specific line of symmetry. • Describe positions on a 2D grid as coordinates in the first quadrant. • Describe translations using a given up/down and left/right. • Interpret and present discrete and continuous data on appropriate graphical methods.	**Data/ Statistics** Continuous data, line graph **Problem Solving**	
Year 4/5	Place Value, Addition and Subtraction , Multiplication and division . Times tables practice	Length, perimeter and area Problem solving Times Table Practice	Fractions, Decimals Problem solving Times Tables practice	Percentages Problem solving Times tables practice	Money, Time, position and direction, covering units Times tables practice	Statistics, Properties of shapes and volume. Times tables practice	See Year 4 and Year 5 Objectives	See Year 4 and Year 5 Vocab list	

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Year 5								
Year 5	Addition and subtraction focus on establishing a robust understanding of place value and using this in the development of addition and subtraction calculation strategies. Decimals; multiplication and division multiplying and dividing to get decimal numbers, and then on mental strategies in multiplication and division. Time; length calculating time intervals and on measuring lengths in cm and mm including perimeters.	Multiplication and division; fractions focus on multiplication and division, and extend children's understanding of fractions. Angles focuses on the concept of angles as degrees of 'turn', and on comparison, identification and measurement of angles. Whole numbers, decimals and fractions comparing and ordering whole numbers and decimals, and on equivalence in relation to proper fractions and decimals.	Place value understanding of place value in larger whole numbers and in decimals; this is used to enable children to round any number to the nearest required power of ten. Multiplication and division calculation strategies for multiplication and division, and on identifying patterns and rules. 2D shapes; measures exploring the properties of triangles, naming and identifying the different types; and then on SI units of measure, reading scales and conversion problems. Addition and subtraction focuses on column addition of decimal numbers, and on mental subtraction of decimal numbers.	Multiplication and division written methods for multiplication and division; 2D shapes; angles; measures polygons and angles, particularly in relation to quadrilaterals; metric/imperial units Fractions revising proper fractions and equivalent fractions Addition and subtraction to larger / more problem solving	Addition and subtraction focuses on adding and subtracting numbers in the context of money and contextual problems. Fractions; multiplication focuses on multiplying and converting fractions; and on short and long multiplication of whole numbers. Place value and decimals focuses on place value in decimals, including multiplying and dividing by 10 and 100. Coordinate geometry; 2D and 3D shapes focuses on plotting, reflecting and translating shapes on coordinate grids; and on extending understanding of properties of 2D and 3D shapes.	Multiplication and division and fractions focus on factors and multiples calculations with fractions; and on further developing written methods of multiplication and division. Area and perimeter; volume calculating areas, perimeters and volumes, Fractions, decimals and percentages fractions and decimals, and solving problems by finding percentages of amounts Revision : line graphs; calculating time intervals; finding cubes of numbers; using factors to multiply; and solving scaling problems	**Number and Place Value** • Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. • Read Roman numerals to 1000 including years. **Calculations** • Recognise square and cube numbers and notation ($cm2$ and $cm3$) • Use rounding to check answers to calculations. • Identify multiples and factors. • Know and use the vocabulary of prime numbers, prime factors and composite numbers. • Multiply and divide whole numbers and those involving decimals by 10, 100, and 1000. • Multiply numbers up to 4 digit by 1-digit or 2-digit number4 using a formal written method, including long multiplication for 2-digit numbers. **Fraction, Decimals, Percentages** • Recognise mixed numbers and improper fractions and covert. • Compare and order fractions whose denominators are multiples of the same number.	**Number and Place Value** Powers of 10 **Addition and Subtraction** Efficient written method **Multiplication and Division** Factor pairs, composite numbers, prime number, prime factors, square number, cubed number, formal written method **Measure** Volume, imperial units, metric units **Geometry (position and direction)** Reflex angle, dimensions **Geometry (properties of shape)** Regular and irregular polygons **Fractions** Proper fractions, improper fractions, mixed numbers, percentage, half, quarter, fifth, two fifths, four fifths, ratio, proportion **Problem Solving**	

| | | | | | | involving fractions and measures. | Add and subtract fractions with denominators that are multiples of the same number.
• Multiply proper fractions and mixed numbers by whole numbers.
• Read and write decimals as fractions.
• Round decimals with two decimal places to the nearest whole number and one decimal place.
• Read, write, order and compare numbers with up to 3 decimal places.
• Recognise the percent symbol (%) and understand that percent relates to 'number parts per hundred'

Measurement
• Understand and use approximate equivalences between metric units and common imperial units.
• Measure and calculate the perimeter of composite rectilinear shapes in cm and m.
• Calculate and compare the area of rectangles and including using standard units (cm2 and cm3) to estimate the area of irregular shapes.

Geometry
• Use the properties of rectangles to deduce related facts and find missing length and angles. | | |

							• Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • Identify 3D shapes, including cubes and other cuboids, from 2D representations. • Know angles are measured in degrees, estimate and compare acute, obtuse and reflex angles. • Draw given angles and measure them in degrees. • Identify angles at a point and one whole turn, at a point on a straight line and a half turn. • Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language. • Complete, read and interpret information in the tables, including times tables.		

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Year 6	Place value, negative numbers, 4 operations, word problems	Fractions simplifying, equivalent, compare and order, 4 operations	Number- decimals, percentages, measurement	Number- algebra, ratio, geometry and statistics	Geometry – Properties of shape Geometry- Position and direction	Post SATS Project work	**Numbers and Place Value**	**Number and Place Value**	
							• Use negative numbers in context, and calculate intervals across zero.	Numbers to ten million	
							Calculations	**Addition and Subtraction**	
							• Divide numbers using the formal written method of long division, and interpret remainders as appropriate.	Order of operations	
							• Use order of operations to carry out calculations involving the four operations.	**Multiplication and Division**	
							• Use common factors to simplify fractions.	Common factors and common multiples	
							• Multiply simple pairs of proper fractions.	**Measure**	
							Fractions, Decimals, Percentages	**Geometry (position and direction)**	
							• Use common factors to simplify fractions.	Four quadrants (for co-ordinates)	
							• Compare and order fractions.	**Geometry (properties of shape)**	
							• Add and subtract fractions with different denominators and mixed numbers.	Vertically opposite (angles), circumference, radius, diameter	
							• Multiply simple pairs of proper fractions.	**Fractions, decimals and percentages**	
							• Calculate decimal fractions equivalents for simple fractions.	Degree of accuracy, simplify	
							• Multiply a number with up to two decimal places by whole numbers.	**Algebra**	
							• Use written division methods where the answer has up to two decimal places.	Linear number sequence, substitute, variables, symbol, known values	
								Data/Statistics	
								Mean, pie chart, construct	
								Problem Solving	

								- Solve problems involving the calculations of percentages. - Recall and use simple equivalences between fractions, decimals and percentages. **Ratio and proportion** - Solve problems using ratio using multiplication and division. - Solve problems involving similar shapes where the scale factor is known. - Solve problems involving proportion, using knowledge of fractions and multiples. **Algebra** - Use a simple formulae - Generate and describe linear number sequences. - Express missing number problems algebraically. **Measurement** - Convert units of measure between smaller and larger units and convert miles and kilometres. **Geometry** - Calculate the area of parallelograms and triangles. - Calculate, estimate and compare volumes of cubes and cuboids. - Illustrate and name parts of circles.		

							- Finds missing angles in triangles, quadrilaterals and regular polygons and recognise vertically opposite and missing angles. - Draw positions on the full coordinate grid, draw and translate simple shapes on the coordinate plane and reflect them in the axes. **Statistics** - Interpret and construct pie charts and line graphs. - Calculate and interpret the mean as an average.		