

YPS Maths	Autumn		Spring		Summer	
<b>R</b>	<ul style="list-style-type: none"> <li>▪ <b><u>Early Mathematical experiences</u></b> <ul style="list-style-type: none"> <li>- Classifying objects based on one attribute</li> <li>- Matching equal and unequal sets</li> <li>- Comparing and ordering objects and sets</li> </ul> </li> <li>▪ <b><u>Pattern and early number</u></b> <ul style="list-style-type: none"> <li>- Recognise, describe and extend colour and size patterns</li> <li>- Count and represent numbers 1 to 3</li> <li>- Estimate and check by counting</li> </ul> </li> <li>▪ <b><u>Numbers within 6</u></b> <ul style="list-style-type: none"> <li>- Count up to 6 objects</li> <li>- One more and one fewer</li> <li>- Order numbers 1 to 6</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Addition and subtraction within 6</u></b> <ul style="list-style-type: none"> <li>- Explore zero</li> <li>- Explore addition and subtraction</li> </ul> </li> <li>▪ <b><u>Measures</u></b> <ul style="list-style-type: none"> <li>- Estimate, order, compare and explore capacity, weight and lengths</li> </ul> </li> <li>▪ <b><u>Shape and sorting</u></b> <ul style="list-style-type: none"> <li>- Describe and sort 3-D shapes</li> <li>- Describe position</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Numbers within 10</u></b> <ul style="list-style-type: none"> <li>- Count up to 10 objects</li> <li>- Represent, order and explore numbers to 10</li> <li>- One more or fewer, one greater or less</li> </ul> </li> <li>▪ <b><u>Calendar and time</u></b> <ul style="list-style-type: none"> <li>- Days of the week</li> <li>- Seasons</li> <li>- Sequence daily events</li> </ul> </li> <li>▪ <b><u>Addition and subtraction within 10</u></b> <ul style="list-style-type: none"> <li>- Explore addition as counting on</li> <li>- Explore subtraction as taking away</li> </ul> </li> <li>▪ <b><u>Grouping and sharing</u></b> <ul style="list-style-type: none"> <li>- Counting and sharing in equal groups</li> <li>- Grouping into fives and tens</li> <li>- Relationship between grouping and sharing</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Number patterns within 15</u></b> <ul style="list-style-type: none"> <li>- Count up to 15 objects and recognise different representations</li> <li>- Order and explore number patterns to 15</li> <li>- One more or fewer</li> </ul> </li> <li>▪ <b><u>Doubling and halving</u></b> <ul style="list-style-type: none"> <li>- Doubling and halving and the relationship between them</li> </ul> </li> <li>▪ <b><u>Shape and pattern</u></b> <ul style="list-style-type: none"> <li>- Describe and sort 2-D and 3-D shapes</li> <li>- Recognise, complete and create patterns</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Securing addition and subtraction facts</u></b> <ul style="list-style-type: none"> <li>- Commutativity</li> <li>- Explore addition and subtraction</li> <li>- Compare two amounts</li> </ul> </li> <li>▪ <b><u>Number patterns within 20</u></b> <ul style="list-style-type: none"> <li>- Count up to 10 and beyond with objects</li> <li>- Represent, compare and explore numbers to 20</li> <li>- One more or fewer</li> </ul> </li> <li>▪ <b><u>Number patterns beyond 20</u></b> <ul style="list-style-type: none"> <li>- One more, one less</li> <li>- Estimate and count</li> <li>- Grouping and sharing</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Money</u></b> <ul style="list-style-type: none"> <li>- Coin recognition and values</li> <li>- Combinations to total 20p</li> <li>- Change from 10p</li> </ul> </li> <li>▪ <b><u>Measures</u></b> <ul style="list-style-type: none"> <li>- Describe capacities</li> <li>- Compare volumes</li> <li>- Compare weights</li> <li>- Estimate, compare and order lengths</li> </ul> </li> <li>▪ <b><u>Exploration of patterns within number</u></b> <ul style="list-style-type: none"> <li>- Explore number and strategies</li> <li>- Recognise and extend patterns</li> <li>- Apply number, shape and measures knowledge</li> <li>- Count forwards and backwards</li> </ul> </li> </ul>
<b>Vocabulary</b>	Pattern, colour, size, big, small, long, short, next, before, extend, colour names, count, how many, same, different, more, fewer, first, next, after, greater, less	Zero, nothing, none, part, whole, plus, altogether, is equal to, subtract, minus, big, bigger, biggest, small, smaller, smallest, full, empty, half full, heavy, heavier, heaviest, light, lighter, lightest, balance,	Same, different, altogether, one more, one greater, one fewer, one less, order, greater, greatest, more, less, increasing, decreasing, first, second, third, before, after, between, time,	Number, order, more, fewer, greater, less, same, equal, one more than, one greater than, number line, one fewer than, between, before, after, guess, check, share, sequence, groups of, double, altogether, how	Part, whole, plus, altogether, is equal to, first, then, now, subtract, minus, take away, more, fewer, same, different, compare, greater than, less than, double, two equal parts, half, share between,	1p, 2p, 5p, 10p, 20p, 50p, £1, coins, more, less, money, pence, penny, pennies, how much, altogether, left, cost, full, nearly full, half full, empty, nearly empty, half empty, the same, most, least,

		long, longer, longest, short, shorter, shortest, same length, vertex, vertices, face, edge, over, under, above, below, top, bottom, on, in, in front, behind, front, back, beside, next to, between	season, month, day, calendar, week, days of the week, first, next, last, before, after, morning, afternoon, evening, night-time, longer, shorter, plus, is equal to, take away, groups of, each group, equal groups, pair, groups of two, bead string, share, equal, unequal, same number, how many	many, count, half, equal, part-whole model, side, edge, vertex, vertices, curved, straight, sort, corner, square, circle, triangle, rectangle, pattern, next, same, different, curved face, flat face, straight edge, curved edge,	order, one group of ten, pattern, before, after, count on, estimate, check	heavy, heavier, heaviest, light, lighter, lightest, weight, about, length, how long, longer, longest, short, shorter, shortest, compare, tall, taller, tallest, group, share, odd, even, make ten, pattern, above, below
<b>Yr 1</b>	<ul style="list-style-type: none"> <li>▪ <b><u>Numbers to 10</u></b> <ul style="list-style-type: none"> <li>- Represent, compare and explore numbers within 10</li> <li>- One more and one less</li> <li>- Doubling and halving</li> </ul> </li> <li>▪ <b><u>Addition and subtraction within 10</u></b> <ul style="list-style-type: none"> <li>- Represent and explain addition and subtraction</li> <li>- Commutativity</li> <li>- Addition and subtraction facts</li> </ul> </li> <li>▪ <b><u>Shape patterns</u></b> <ul style="list-style-type: none"> <li>- Identify, describe, sort and classify 2-D and 3-D shapes</li> <li>- Investigate repeating patterns</li> <li>- Use and follow instructional and positional language</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Numbers to 20</u></b> <ul style="list-style-type: none"> <li>- Identify, represent and order numbers to 20</li> <li>- Doubling and halving</li> <li>- One more and one less</li> </ul> </li> <li>▪ <b><u>Addition and subtraction within 20</u></b> <ul style="list-style-type: none"> <li>- Represent and explain addition and subtraction strategies using 'Make Ten'</li> <li>- Use known facts to add and subtract</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Time</u></b> <ul style="list-style-type: none"> <li>- Read, write and tell the time to o'clock and half past on an analogue clock</li> <li>- Sequencing daily activities</li> <li>- Whole and half turns linked to time</li> </ul> </li> <li>▪ <b><u>Exploring calculation strategies within 20</u></b> <ul style="list-style-type: none"> <li>- Model, explain and choose addition and subtraction strategies</li> </ul> </li> <li>▪ <b><u>Numbers to 50</u></b> <ul style="list-style-type: none"> <li>- Represent, sequence and compare 2-digit numbers</li> <li>- Count in 2s, 5s and 10s</li> <li>- Describe and complete number patterns</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Addition and subtraction within 20</u></b> <ul style="list-style-type: none"> <li>- Illustrate, explain and link addition and subtraction with equations</li> <li>- Apply 'Make Ten' strategy</li> <li>- Use language to quantify and compare difference</li> </ul> </li> <li>▪ <b><u>Fractions</u></b> <ul style="list-style-type: none"> <li>- Identify <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math> of a shape or object</li> <li>- Find <math>\frac{1}{2}</math> or <math>\frac{1}{4}</math> of a quantity</li> </ul> </li> <li>▪ <b><u>Measures: Length and Mass</u></b> <ul style="list-style-type: none"> <li>- Compare and measure lengths and mass using cm and kg</li> <li>- Doubling and halving</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Numbers 50 to 100 and beyond</u></b> <ul style="list-style-type: none"> <li>- Read, write, represent, compare and order numbers to 100</li> <li>- One more/fewer, ten more/fewer</li> <li>- Identify number patterns</li> </ul> </li> <li>▪ <b><u>Addition and subtraction</u></b> <ul style="list-style-type: none"> <li>- Explore addition and subtraction with regrouping</li> <li>- Investigate number bonds within 20</li> </ul> </li> <li>▪ <b><u>Money</u></b> <ul style="list-style-type: none"> <li>- Name coins and notes and understand their value</li> <li>- Represent the same value using different coins</li> <li>- Find change</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Multiplication and division</u></b> <ul style="list-style-type: none"> <li>- Explore arrays</li> <li>- Share equally into groups</li> <li>- Doubling</li> <li>- Link halving to fractions</li> </ul> </li> <li>▪ <b><u>Measures: Capacity and Volume</u></b> <ul style="list-style-type: none"> <li>- Compare capacities, volumes and lengths</li> <li>- Explore litres</li> <li>- Apply understanding of fractions to capacity</li> </ul> </li> </ul>
<b>Vocabulary</b>	Number, as many, same, more, fewer, same value,	Represent, count on, number line, before, after,	Month, year, date, after, before, birthday, first,	Compare, difference, fewer, more, greater than,	Groups of ten, tens, ones, count on, place value,	Array, groups, equal groups, altogether,

	<p>part, whole, number bond, represent, equal parts, equal, double, half, halve, inverse, one more, one less, difference, compare, order, greater, greatest, less, least, equation, add, plus, addition, symbol, sign, is equal to, count on, altogether, efficient, partition, subtract, minus, subtraction, number line, count back, related, total, face, surface, edge, vertex, vertices, straight, curved, flat, side, corner, pattern, repeating pattern, before, next, after, bigger, smaller, between, next to, on top of, behind, under, between, left, right, above, in front of, forwards, backwards, quarter turn, algorithm</p>	<p>order, more than, less than, difference, one more, one less, ten, ones, greater, fewer, compare, greatest, least, value, increase, decrease, pattern, double, half, equal, first, now, then, equation, number track, number line, number bond, known fact, is equal to, add, subtract, partition, 'make ten' strategy, model, strategy</p>	<p>next, then, morning, midday, afternoon, evening, second, minute, hour, clock, longer, shorter, minute hand, second hand, time, o'clock, half past, half way between, straight up, straight down, halfway, turn, whole, half, quarter, clockwise, anti-clockwise, part, whole, number bond, known fact, related fact, double, near double, partition, addition, subtraction, 'make ten', equal, is equal to, equation, efficient, strategy, order, more, less, group of ten, pattern, tens, ones, digit, left, right, place value, value, compare, groups of five, groups of two, increasing, decreasing</p>	<p>less than, 'make ten', subtract, equation, add, represent, part, whole, equal, unequal, divide, share, half, quarter, three-quarter, turn, clockwise, anti-clockwise, length, height, long, longer, longest, short, shorter, shortest, tall, taller, tallest, higher, lower, measure, measurement, about, nearly, roughly, close to, metre stick, metre, estimate, half the length of, double the length of, mass, balance, heavy, heavier, heaviest, light, lighter, lightest, weigh, weight</p>	<p>Dienes, hundreds, place value chart, number bond, part-whole model, multiple of ten, one more, ten more, one less, ten less, one fewer, ten fewer, greater than, less than, equal to, value, compare, most, least, increase, decrease, sequence, pattern, add, subtract, number bond, difference between, 'make ten', regroup, more, less, cost, coin, gold, silver, copper, value, worth, pence, penny, pennies, pound, notes, buy, sell, afford, altogether, change</p>	<p>rectangle, share, fair, divide, groups of, lots of, skip count, known, unknown, double, half, halve, whole, fraction, equal parts, quarter, compare, capacity, greater, smaller, about, unit, volume, litre, standard unit, distance, measure, length, weighing scales, weigh, grams</p>
<b>Yr 2</b>	<ul style="list-style-type: none"> <li>▪ <b><u>Numbers within 100</u></b> <ul style="list-style-type: none"> <li>- Read, write, represent, partition, compare and order numbers up to 100</li> <li>- Explore patterns including odds and evens, tens and ones</li> </ul> </li> <li>▪ <b><u>Addition and subtraction of 2-digit numbers</u></b> <ul style="list-style-type: none"> <li>- Apply number bonds to add and subtract</li> <li>- Represent and explain addition and</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Measures: Length</u></b> <ul style="list-style-type: none"> <li>- Draw and measure lengths in centimetres</li> <li>- Use &lt;, &gt; and = to compare and order lengths in metres and centimetres</li> </ul> </li> <li>▪ <b><u>Graphs</u></b> <ul style="list-style-type: none"> <li>- Represent and interpret pictograms, block diagrams, tables and tally charts</li> </ul> </li> <li>▪ <b><u>Multiplication and division</u></b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Time</u></b> <ul style="list-style-type: none"> <li>- Tell the time on an analogue clock: quarter past, quarter to and five-minute intervals</li> <li>- Calculate durations of time in minutes and seconds</li> <li>- Sequence daily events</li> <li>- Know the minutes in an hour and hours in a day</li> </ul> </li> <li>▪ <b><u>Fractions</u></b> <ul style="list-style-type: none"> <li>- Explore part-whole relationships</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Money</u></b> <ul style="list-style-type: none"> <li>- Recognise coins and notes</li> <li>- Use £ and p accurately</li> <li>- Add and subtract amounts</li> <li>- Calculate change</li> </ul> </li> <li>▪ <b><u>Face, shapes and patterns</u></b> <ul style="list-style-type: none"> <li>- Explore, sort and describe 2-D shapes</li> <li>- Explore lines of symmetry in 2-D shapes</li> <li>- Identify 2-D shapes on 3-D shapes</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Numbers within 1000</u></b> <ul style="list-style-type: none"> <li>- Represent numbers in different ways</li> <li>- Compare using symbols</li> <li>- Read scales</li> </ul> </li> <li>▪ <b><u>Measures: Capacity, Volume and Mass</u></b> <ul style="list-style-type: none"> <li>- Read and measure temperature</li> <li>- Estimate, measure and understand litres and millilitres</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Exploring calculation strategies</u></b> <ul style="list-style-type: none"> <li>- Apply addition and subtraction strategies to solve equations</li> <li>- Illustrate and explain addition and subtraction using column method</li> </ul> </li> <li>▪ <b><u>Exploring multiplicative thinking</u></b> <ul style="list-style-type: none"> <li>- Pattern seek with multiples of 2, 3, 4, 5 and 10 using an array</li> </ul> </li> </ul>

	subtraction of two 2-digit numbers - Add three 1-digit numbers ▪ <b><u>Addition and subtraction word problems</u></b> - Introduction to bar models as a representation - Create, label and sketch bar models	- Explore multiplication and division through arrays - Explore division as grouping and as sharing - Connect multiplication and division facts using commutativity and inverse - Calculate the times tables of 2, 5 and 10 using different strategies	- Understand fractions as part of a whole or a whole set - Explore equivalent fractions ▪ <b><u>Addition and subtractions of 2-digit numbers</u></b> - Illustrate, represent and explain addition and subtraction involving regrouping - Use strategies including: 'Make Ten', 'Round and Adjust' and near doubles	- Compare and sort 2-D and 3-D shapes ▪ <b><u>Lines and turns</u></b> - Use language to describe position, direction and rotation to follow a route	- Compare and order capacities - Weigh and compare masses in kilograms and grams	- Use known facts to derive facts from the 3 and 4 times tables - Connect multiplication and division facts using commutativity and inverse
<b>Vocabulary</b>	Group, strategy, altogether, left over, tens, ones, 1-digit number, 2-digit number, value, worth, partition, represents, compare, greatest, smallest, greater than, less than, equal to, increasing, decreasing, order, forwards, backwards, even, odd, part, whole, if I know... then I know..., number bonds, near doubles, doubles, add, subtract, bar model, known, unknown, more, fewer, difference	Measure, length, long, longer, longest, short, shorter, shortest, metre, estimate, centimetre, ruler, exactly, the same as, about, data, sort, collect, interpret, table, pictogram, block diagram, tally, scaled, whole, part, equal, unequal, array, value, left over, commutativity, divide, share, groups, multiply, double, half, multiple, pattern	Time, day, hour, morning, midday, noon, afternoon, evening, night, midnight, minute, scale, hour hand, minute hand, o'clock, half past, quarter past, quarter to, past, to, earlier, later, duration, start, finish, equal parts, fraction, share, divide, whole, half, quarter, third, numerator, denominator, vinculum, equivalent, is equal to, the same as, number bonds, 'make ten', partition, regroup, tens, ones, number line, bar model, Dienes, round and adjust, multiple of ten, double, near double	Pence, value, compare, greater, lower, pounds, coin, note, value, altogether, total, change, left, vertex, side, straight, curved, straight, curved, right angle, symmetry, reflection, half, exact, identical, sort, classify, properties, Venn diagram, face, edge, vertex, vertices, apex, length, width, depth, pattern, repeating, size, branching database, above, below, under, in front of, next to, behind, in between, left, right, on, clockwise, anti-clockwise, half, quarter, three-quarter, full turn, rotation	Hundreds, tens, ones, place value chart, regrouping, part-whole, Dienes, compare, greater than, less than, more, fewer, scale, interval, mark, unit of measure, temperature, thermometer, degrees Celsius, heat, hot, cold, warmer, cooler, capacity, volume, estimate, one litre, millilitre, mass, weight, kilogram, gram, unit, standard unit, heavier than, lighter than	'Make ten', number bonds, partition, round and adjust, known facts, near doubles, part, whole, add, subtract, known, unknown, column, equation, is equal to, regroup, place value, multiply, skip counting, product, multiple, group, divide, share, equal, commutative, multiplication, division, problem solving, half of, one quarter of, one third of
<b>Yr 3</b>	▪ <b><u>Number sense and exploring calculation strategies</u></b>	▪ <b><u>Graphs</u></b> - Collect, interpret and present data using charts and tables	▪ <b><u>Multiplication and division</u></b> - Understanding multiplicative	▪ <b><u>Time</u></b> - Tell, record, write and order the time: analogue and digital	▪ <b><u>Angles and shape</u></b> - Identify angles including right angles	▪ <b><u>Applying multiplicative thinking</u></b>

	<ul style="list-style-type: none"> <li>- Read, write, order and compare numbers to 100</li> <li>- Calculate mentally using known facts, round and adjust, near doubles, adding on to find the difference</li> <li>- Derive new facts from a known fact</li> <li>▪ <b><u>Place value</u></b> <ul style="list-style-type: none"> <li>- Read, write, represent, partition, order and compare 3-digit numbers</li> <li>- Find 10 and 100 more or less</li> <li>- Round to the nearest multiple of 10 and 100</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Addition and subtraction</u></b> <ul style="list-style-type: none"> <li>- Develop and use a range of mental calculation strategies</li> <li>- Illustrate and explore formal written methods – column method</li> </ul> </li> <li>▪ <b><u>Length and perimeter</u></b> <ul style="list-style-type: none"> <li>- Measure, draw and compare lengths</li> <li>- Add and subtract lengths</li> <li>- Calculate perimeter</li> </ul> </li> </ul>	<p>relationships: commutativity and inverse</p> <ul style="list-style-type: none"> <li>- Exploring multiplication and division facts for 2, 3, 4, 5, 6, 8 and 10</li> <li>▪ <b><u>Calculating with multiplication and division</u></b> <ul style="list-style-type: none"> <li>- Multiply and divide by 10</li> <li>- Multiply a 2-digit number by a 1-digit number</li> <li>- Divide a 2-digit number by a 1-digit number</li> <li>- Explore correspondence problems</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Use the 12-hour clock with a.m. and p.m.</li> <li>- Measure, calculate and compare durations</li> <li>▪ <b><u>Fractions</u></b> <ul style="list-style-type: none"> <li>- Explore part-whole relationships</li> <li>- Understand fractions as part of a whole or a whole set and as a number</li> <li>- Add, subtract, compare and order fractions</li> </ul> </li> </ul>	<p>and recognise as a quarter of a turn</p> <ul style="list-style-type: none"> <li>- Identify and draw parallel and perpendicular lines</li> <li>- Draw/make, classify and compare 2-D and 3-D shapes</li> <li>- Measure the perimeter</li> <li>▪ <b><u>Measures</u></b> <ul style="list-style-type: none"> <li>- Read scales with different intervals when measuring mass and volume</li> <li>- Weigh and compare masses and capacities with mixed units</li> <li>- Estimate mass and capacity</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Representing multiplication and division problems</li> <li>- Solve a one-step problem</li> <li>▪ <b><u>Exploring calculation strategies and place value</u></b> <ul style="list-style-type: none"> <li>- Add and subtract mentally</li> <li>- Find 10, 100 and 1000 more or less</li> <li>- Order and compare beyond 1000</li> <li>- Round numbers</li> </ul> </li> </ul>
<b>Vocabulary</b>	Add, plus, subtract, minus, is equal to, number bond, odd, even, known fact, derive, commutative, inverse, digit, numeral, greater, fewer, more, less, place value, compare, order, calculation strategy, partition, part, whole, regroup, 'make ten', near double, round and adjust, efficient, change, difference, adding on, 'make 100', total, hundreds, tens, ones, increase, decrease, rounding, nearest, multiple of ten, multiple of 100	Data, information, pictogram, symbol, key, represents, row, column, table, bar chart, axis, axes, scale, tally, addition, plus, subtraction, minus, inverse, partition, place value, digit, regroup, commutative, column method, bar model, difference, quantity, known, unknown, length, height, width, measure, ruler, centimetre, millimetre, accurate, estimate, greater than (>), less than (<), equal to (=), perimeter, total distance	Multiplication, division, bar model, groups of, array, column, row, equal parts, equivalent, commutative, factor, product, inverse, derive, known fact, multiplication fact, division fact, partition, regroup, quotient, divisor, dividend, grouping, sharing	Scale, recorded time, hour hand, minute hand, _ minutes to _ minutes past _, analogue, interval, clockwise, anti-clockwise, am, pm, chronological order, digital, passed, since, time interval, schedule, timetable, part, whole, divide, equal, unequal, vinculum, numerator, denominator, quantity, unit fraction, non—unit fraction, equivalent	Angle, turn, property, side, edge, face, vertex, vertices, right angle, obtuse, acute, horizontal, vertical, perpendicular, parallel, equal distance, quadrilateral, symmetry, reflect, line of symmetry, indicators, scale, interval, measure, weight, mass, weight, gram, kilogram, capacity, volume, litres, millilitres, measuring container	Bar model, multiplication, commutative, factor, product, times, equal parts, division, group, share, strategy, efficient, near multiple, near double, adding on, counting back, 'make ten', difference, partitioning, place value, thousands, hundreds, tens, ones, representations, digits, ascending, descending

Yr 4	<ul style="list-style-type: none"> <li>▪ <b><u>Reasoning with large numbers</u></b> <ul style="list-style-type: none"> <li>- Read, write, represent, order and compare 4-digit numbers</li> <li>- Find 10, 100 or 1000 more or less</li> <li>- Round numbers to the nearest 10, 100 or 1000</li> </ul> </li> <li>▪ <b><u>Addition and subtraction</u></b> <ul style="list-style-type: none"> <li>- Select appropriate strategies to add or subtract</li> <li>- Illustrate and explain appropriate addition and subtraction strategies including column method with regrouping</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Multiplication and division</u></b> <ul style="list-style-type: none"> <li>- Identify and explore patterns in multiplication tables including 7 and 9</li> <li>- Distributive property including multiplying three 1-digit numbers</li> <li>- Explore mental multiplication and division strategies using place value and known and derived facts</li> <li>- Use short multiplication</li> </ul> </li> <li>▪ <b><u>Discrete and continuous data</u></b> <ul style="list-style-type: none"> <li>- Read, interpret and construct pictograms, bar charts and time graphs</li> <li>- Compare tables, pictograms and bar charts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Calculating with multiplication and division</u></b> <ul style="list-style-type: none"> <li>- Explore division using partitioning</li> <li>- Use short division</li> </ul> </li> <li>▪ <b><u>Fractions</u></b> <ul style="list-style-type: none"> <li>- Explore different representations and interpretations of fractions</li> <li>- Identify equivalent fractions</li> <li>- Represent fractions greater than one as mixed numbers and improper fractions</li> <li>- Add and subtract fractions with the same denominator including fractions greater than one</li> </ul> </li> <li>▪ <b><u>Time</u></b> <ul style="list-style-type: none"> <li>- Use the 12-hour and 24-hour clock and converting analogue to digital</li> <li>- Convert between units of time</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Decimals</u></b> <ul style="list-style-type: none"> <li>- Identify decimal equivalents to tenths, quarters and halves</li> <li>- Compare and order numbers with the same numbers of decimal places</li> <li>- Multiply and divide by 10 and 100 including decimals</li> </ul> </li> <li>▪ <b><u>Area and perimeter</u></b> <ul style="list-style-type: none"> <li>- Find the perimeter of rectangles and rectilinear shapes</li> <li>- Find the area of rectangles and rectilinear shapes</li> <li>- Investigate area and perimeter</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Solving measures and money problems</u></b> <ul style="list-style-type: none"> <li>- Convert units of measure</li> <li>- Select appropriate units to measure</li> <li>- Use strategies to investigate problems including trial and improvement, organising using lists and tables, working systematically</li> </ul> </li> <li>▪ <b><u>Shape and symmetry</u></b> <ul style="list-style-type: none"> <li>- Classify, compare and order angles</li> <li>- Compare and classify 2-D shapes</li> <li>- Identify lines of symmetry</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Position and direction</u></b> <ul style="list-style-type: none"> <li>- Describe and plot using coordinates</li> <li>- Describe translations</li> </ul> </li> <li>▪ <b><u>Reasoning with pattern and sequences</u></b> <ul style="list-style-type: none"> <li>- Explore Roman numerals up to 100</li> <li>- Explore the place value of other number systems</li> <li>- Investigate number sequences and patterns</li> </ul> </li> <li>▪ <b><u>3-D shapes</u></b> <ul style="list-style-type: none"> <li>- Use understanding of 3-D shapes</li> <li>- Identify 3-D shapes from 2-D representations</li> </ul> </li> </ul>
Vocabulary	Place value, thousands, hundreds, tens, ones, digits, value, compare,	Multiplication, times, multiple, even, odd, same, different, patterns, digits,	Divide, divided by, groups of, share, partition, regroup, derived facts,	Fractions, decimals, decimal point, ones, tenths, equivalent, whole	Mass, kilograms, grams, capacity, litres, millilitres, length, kilometres, metres,	Coordinates, axes, x-axis, y-axis, translation, up, down, left, right, units, Roman

	order, inequalities, greater than, less than, add, subtract, regroup, round, multiple, nearest, approximate, add, plus, minus, subtract, commutative, inverse, known fact, part, whole, sum, difference, partition, known facts, strategy, column method	factor, product, place holder, groups of, array, multiplied by, distributive law, repeated addition, scaling, quotient, divisor, dividend, scale, data, compare, tally, frequency table, pictogram, axis, horizontal, vertical, bar chart, time graph	numerator, denominator, vinculum, whole, part, divide, equal parts, representation, bar model, fraction wall, equivalent, factors, multiples, mixed numbers, improper fractions, time, digital, analogue, minute, house, past, to, 12-hour, 24-hour, second, years, months, weeks, days	number, round, nearest, multiple, hundredths, equivalent, multiply, divide, length, breadth, width, perimeter, metres (m), centimetres (cm), millimetres (mm), double, area, distance, centimetres squared, square centimetres, metres squared, square metres	centimetres, millimetres, units, equivalent, equal, strategy, problem-solving, solution, angle, order, turn, right angle, obtuse, acute, side, vertex, vertices, quadrilateral, equilateral triangle, scalene triangle, isosceles triangle, symmetry, symmetrical	numerals, I=1, V=5, X=10, L=50, C=100, sequence, increasing, decreasing, rule, term, pattern, face, edge, vertex, vertices
<b>Yr 5</b>	<ul style="list-style-type: none"> <li>▪ <b><u>Reasoning with large whole integers</u></b> <ul style="list-style-type: none"> <li>- Read, write, order and compare numbers up to one million</li> <li>- Round numbers within one million to the nearest multiple of powers of ten</li> <li>- Read Roman numerals up to M (1000)</li> </ul> </li> <li>▪ <b><u>Integer addition and subtraction</u></b> <ul style="list-style-type: none"> <li>- Use rounding to estimate</li> <li>- Use a range of mental calculation strategies to add and subtract integers</li> <li>- Illustrate and explain the written method of column addition and subtraction</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Line graphs and timetables</u></b> <ul style="list-style-type: none"> <li>- Complete, read and interpret data presented in line graphs</li> <li>- Read and interpret timetables including calculating intervals</li> </ul> </li> <li>▪ <b><u>Multiplication and division</u></b> <ul style="list-style-type: none"> <li>- Identify multiples and factors</li> <li>- Investigate prime numbers</li> <li>- Multiple and divide by 10, 100 and 1000</li> <li>- Multiply and divide using derived facts</li> <li>- Use written methods to multiply and divide</li> <li>- Use a range of mental calculation strategies</li> </ul> </li> <li>▪ <b><u>Perimeter and area</u></b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Fraction and decimals</u></b> <ul style="list-style-type: none"> <li>- Read, write, order and compare decimals</li> <li>- Round decimals to the nearest whole number</li> <li>- Represent, identify, name, write, order and compare fractions (including improper fractions and mixed numbers)</li> <li>- Calculate fractions of amounts</li> </ul> </li> <li>▪ <b><u>Angles</u></b> <ul style="list-style-type: none"> <li>- Classify, compare and order angles</li> <li>- Measure and draw angles with a protractor</li> <li>- Understand and use angle facts to calculate missing angles</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Fractions and percentages</u></b> <ul style="list-style-type: none"> <li>- Add and subtract fractions with denominators that are multiples of the same number</li> <li>- Multiply fractions (including mixed numbers) by a whole number</li> <li>- Explore percentage, decimal and fraction equivalence</li> </ul> </li> <li>▪ <b><u>Transformations</u></b> <ul style="list-style-type: none"> <li>- Identify coordinates in all four quadrants</li> <li>- Explore translation and reflection</li> <li>- Calculate intervals across zero as a context for negative numbers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Converting units of measure</u></b> <ul style="list-style-type: none"> <li>- Convert between metric units of length, mass and capacity and units of time</li> <li>- Know and use approximate conversion between imperial and metric</li> </ul> </li> <li>▪ <b><u>Calculating with whole numbers and decimals</u></b> <ul style="list-style-type: none"> <li>- Use mental strategies to add and subtract involving decimals</li> <li>- Use formal written strategies to add, subtract and multiply involving decimals</li> <li>- Multiply and divide decimal numbers by 10, 100 and 1000</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>2-D and 3-D shapes</u></b> <ul style="list-style-type: none"> <li>- Classify 2-D shapes and reason about regular and irregular polygons</li> <li>- Explore properties of diagonals of quadrilaterals</li> <li>- Classify 3-D shapes</li> <li>- Identify 2-D representations of 3-D shapes</li> </ul> </li> <li>▪ <b><u>Volumes</u></b> <ul style="list-style-type: none"> <li>- Use cube numbers and notation</li> <li>- Estimate volume</li> <li>- Convert units of volume</li> </ul> </li> <li>▪ <b><u>Problem solving</u></b> <ul style="list-style-type: none"> <li>- Explore negative numbers and calculating intervals across 0</li> <li>- Calculating the mean</li> </ul> </li> </ul>

	- Select efficient calculation strategies	- Investigate area and perimeter of rectilinear shapes - Estimate the area of non-rectilinear shapes			- Derive addition, subtraction and multiplication facts involving decimals	- Interpret remainders - Investigate numbers including consecutive and palindromic
<b>Vocabulary</b>	Hundred thousands, ten thousands, thousands, hundreds, tens, ones, value, digit, place holder, round, nearest, multiple, approximate, greater than, less than, numeral, add, subtract, inverse, commutative, partition, number bond, derive, strategy, efficient, estimate, column, regrouping	Graph, data, information, axes, increase, decrease, x-axis, y-axis, present, change, time, line graph, estimate, scale, grid line, interval, parallel, perpendicular, approximate, title, table, column, row, sum, difference, line segment, plot, chart, timetable, schedule, factor, multiple, product, odd, even, squared, composite number, prime number, place holder, multiply, divide, zero, digit, dividend, divisor, quotient, area model, long multiplication, short division, remainder, length, breadth, width, distance, perimeter, millimetre, centimetre, metre, kilometre, areas, surface, dimension, square metres, square centimetres,	Numerator, denominator, vinculum, equal parts, represent, congruent, equivalent, multiple, factor, tenth, hundredth thousandth, place value, mixed number, improper fraction, decimal point, decimal place, angle, turn, right angle, acute, obtuse, reflex, degrees, polygon, internal, protractor, straight line	Fraction, part, whole, numerator, denominator, vinculum, multiple, equivalent, mixed number, improper fraction, quantity, multiplication, division, product, percent, percentage, equal parts, hundredths, proportion, translate, translation, grid, position, congruent, move, up, down, left, right, x-axis, y-axis, axes, reflect, mirror line, reflection, horizontal, vertical	Unit, measure, second, minute, hour, interval, time, day, week, fortnight, month, year, calendar, length, breadth, height, distance, millimetre (mm), centimetre (cm), metre (m), kilometre (km), equivalent, weight mass, scales, gram (g), kilogram (kg), tonne, pound (lb), approximately, whole, parts, equal parts, fraction, decimal, place value, tenth, hundredth, thousandth, place holder, multiply, divide, times greater, times smaller, derived facts, distributive property	Horizontal, vertical, parallel, line of symmetry, perpendicular, plane, dimension, polygon, regular, irregular, side, length, angle, degrees, vertex, vertices, square number, squared, cube number, cubed, product, equal factors, property, volume, centimetre cubed, positive integer, negative integer, consecutive, difference, average, mean, add, divide, equal parts, palindrome, digit sum
<b>Yr 6</b>	<ul style="list-style-type: none"> <li>▪ <b><u>Integers and decimals</u></b></li> <li>- Represent, read, write, order and compare numbers up to ten million</li> <li>- Round numbers, make estimates and use this to solve problems in context</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Calculation problems</u></b></li> <li>- Understand the use of brackets</li> <li>- Use knowledge of the order of operations to carry out calculations</li> <li>- Generate and describe linear number sequences</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Missing angles and length</u></b></li> <li>- Compare and classify a range of geometric shapes</li> <li>- Use angle facts to find unknown angles</li> <li>▪ <b><u>Coordinates and shapes</u></b></li> <li>- Draw a range of geometric shapes using</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Percentages and statistics</u></b></li> <li>- Calculate and compare percentages of amounts</li> <li>- Connect percentages with fractions</li> <li>- Explore the equivalence of fractions, decimals and percentages</li> <li>- Calculate the mean</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>SATS</u></b></li> <li>- Revise all topics covered in preparation for assessments</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><u>Problem solving and investigations</u></b></li> <li>- Investigate problems and challenges involving the topics taught this year</li> <li>- Use maths skills within a wider project: theme parks</li> </ul>



	<ul style="list-style-type: none"> <li>- Solve multi-step problems involving addition and subtraction</li> <li>▪ <b><u>Multiplication and division</u></b> <ul style="list-style-type: none"> <li>- Identify and use properties of number, focusing on primes</li> <li>- Multiply larger integers and decimal numbers using a range of strategies</li> <li>- Divide integers by 1-digit and 2-digit numbers representing remainders appropriately</li> <li>- Illustrate and explain formal multiplication and division strategies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Express missing numbers algebraically</li> <li>- Solve equations with unknown values</li> <li>▪ <b><u>Fractions</u></b> <ul style="list-style-type: none"> <li>- Deepen understanding of equivalence</li> <li>- Order, simplify and compare fractions, including those greater than one</li> <li>- Recall equivalence between common fractions and decimals</li> <li>- Find decimal quotients using short division</li> <li>- Add and subtract fractions</li> <li>- Represent multiplication involving fractions</li> <li>- Multiply two proper fractions</li> <li>- Divide a fraction by an integer</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>given dimensions and angles</li> <li>- Describe, draw, translate and reflect shapes on a co-ordinate plane</li> <li>- Recognise and construct 3-D shapes</li> <li>- Name and illustrate parts of a circle</li> <li>▪ <b><u>Decimals and measure</u></b> <ul style="list-style-type: none"> <li>- Use, read, write and convert between standard units of measures: length, mass, time, money and volume, as well as imperial units</li> <li>- Calculate the area of parallelograms and triangles</li> <li>- Calculate, estimate and compare the volume of cuboids</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Construct and interpret line graphs and pie charts</li> <li>- Compare pie charts</li> <li>▪ <b><u>Proportion problems</u></b> <ul style="list-style-type: none"> <li>- Use fractions to express proportion</li> <li>- Identify ratio as a relationship between quantities and as a scale factor</li> <li>- Explore unequal sharing involving ratio</li> </ul> </li> </ul>		
<p>Vocabulary</p>	<p>Integer, numeral, digit, place value, ten thousand, hundred thousand, million, ten million, place holder, greater than, less than, ascending, descending, estimate, rounding, multiple, approximately, strategy, efficient, regrouping, whole, part, sum, difference, equation, tenths, hundredths, thousandths, decimal, decimal point, prime, square, cube, prime multiple, factor, common multiple, common factor,</p>	<p>Operation, priority, order, inverse, brackets, order of operations, sequence term, term-to-term rule, nth term, linear, ascending, descending, express, algebra, generalise, variable, algebraic expression, unknown, fraction, numerator, denominator, part-whole, value, equal, equivalent, factor, multiple, simplest form, common factors, common denominators, mixed number, improper fraction, fraction-decimal</p>	<p>Angle, obtuse, acute, right angle, reflex, full turn, half turn, quarter turn, rotation, degree, parallel, perpendicular, adjacent, opposite, diagonal, polygon, internal angle, regular, irregular, coordinate, point, quadrant, position, axis, axes, translate, translation, reflect, reflection, congruent, shape net, circle, radius, diameter, circumference, sequence, term, increasing, decreasing, rule, unit of measure, length, mass, capacity, volume,</p>	<p>Part, whole, percent, percentage, equivalent, tenth, hundredth, fraction, decimal, mean, average, sum, total, share, equal, graph, line, axis, axes, plot, point, cumulative, data, discrete, continuous, interval, pie chart, segment, data, value, set, interpret, compare, proportion, out of, ratio, scale factor, increase, decrease, quantity</p>		

	multiplication, product, division, dividend, divisor, quotient, remainder	equivalence, unit fraction, non-unit fraction, scaling, scale factor, fraction of the whole, simplify	scale, estimate, approximate, metric, imperial, area, perimeter			
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