

Maths Progression Ladder English Martyrs Catholic Primary

Updated to show White Rose 3.0 Scheme and vocabulary for Autumn 2022 (NB. No EY update)

Updated to show White Rose 3.0 Scheme and vocabulary for Spring 2023 (NB. No EY update)

Updated to show White Rose 3.0 Scheme and vocabulary for Summer 2023 (NB. No EY update)

Area of Learning		EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Number	Place Value	<ul style="list-style-type: none"> Match and sort Compare amounts to 5 Representing 0- 10 (including 0 as a concept) (1-5) (6-10) Comparing 0 - 10 (1-3) (6-10) Composition of 0 – 10 (1-3) (6-10) One more and one less Exploring pattern (also with shape) and relationships Building numbers beyond 10 	<ul style="list-style-type: none"> Sort, count, represent objects to 50 Count read and write forwards and backwards from any number 0-100 Count one more and one less Compare groups using equal, more, fewer, less Compare numbers to 100 Order groups of objects 	<ul style="list-style-type: none"> Numbers to 20 Count objects to 100 by making 10s Recognise tens and ones Use a place value chart Partition numbers to 100 Write numbers to 100 in words Flexibly partition numbers to 100 Write numbers to 100 in expanded form 	<ul style="list-style-type: none"> Represent numbers to 100 Partition numbers to 100 Number line to 100 Hundreds Represent numbers to 1,000 Partition numbers to 1,000 Flexible partitioning of numbers to 1000 Hundreds, tens and ones Find 1, 10 or 100 more or less 	<ul style="list-style-type: none"> Represent numbers to 1,000 Partition numbers to 1,000 Number line to 1,000 Thousands Represent numbers to 10,000 Partition numbers to 10,000 Flexible partitioning of numbers to 10,000 Find 1, 10, 100, 1,000 more or less Number line to 10,000 	<ul style="list-style-type: none"> Roman numerals to 1,000 Numbers to 10,000 Numbers to 100,000 Numbers to 1,000,000 Read and write numbers to 1,000,000 Powers of 10 Read and write numbers to 1,000,000 Powers of 10/100/1,000/10,000/100,000 more or less Partition numbers to 1,000,000 Number line to 1,000,000 	<ul style="list-style-type: none"> Numbers to 1,000,000 Numbers to 10,000,000 Read and write numbers to 10,000,000 Powers of 10 Number line to 10,000,000 Compare and order any integers Round any integers Negative numbers

		<ul style="list-style-type: none"> Exploring pattern beyond 10 <p>Vocab: match, sort, compare, count, order, more, less, fewer, pattern, numeral, partition, digit.</p>	<ul style="list-style-type: none"> Count objects from a larger group Order numbers to 100 Number lines Count in 2s and 5s, 10s Partitioning numbers to 100 <p>Vocab: Sort, count (backwards, forwards, groups), represent, recognise, fewer, more, same, greater than, less than, equal to, most, least, order, compare, object, different, arrange, total, many, pattern, numeral, number sentence, digit, tens, ones.</p> <ul style="list-style-type: none"> Count within 20 	<ul style="list-style-type: none"> 10s on the number line to 100 10s and 1s on the number line to 100 Estimate numbers on a number line Compare objects Compare numbers Order objects and numbers Count in 2s, 5s and 10s Count in 3s <p>Vocab: Count, recognise, partition, digit, numeral, place value chart, flexible partitioning, compare, order, number track, identify, represent, estimate, greater than, fewer than, tens, ones, part, whole, interval (on a number line).</p>	<ul style="list-style-type: none"> Number line to 1,000 Estimating on a number line to 1,000 Compare numbers to 1,000 Order numbers to 1,000 Count in 50s <p>Vocab: Representations, partition, flexible partitioning, identify, estimate, greatest/smallest digit, start point/end point/interval (on a number line), numerals, placeholder, function machine, difference, strategy, ascending, descending, pattern, millilitres (as part of place value question)</p>	<ul style="list-style-type: none"> Estimate on a number line to 10,000 Compare numbers to 10,000 Order numbers to 10,000 Roman numerals Round to the nearest 10 Round to the nearest 100 Round to the nearest 1,000 Round to the nearest 10, 100 or 1,000 <p>Vocab: Representations, partition, flexible partitioning, place holder, numeral, digit, interval, divisions (on a number line), increments, difference, scale, column, place value chart, Gattegno chart, estimate, approximate, greater than/less than, arrange, ascending/descend</p>	<ul style="list-style-type: none"> Compare and order numbers to 100,000 Compare and order numbers to 1,000,000 Round to the nearest 10, 100 or 1,000 Round within 100,000 Round within 1,000,000 <p>Vocab: million, roman numerals, patterns, similarities, differences, number system, representation, powers of 10, digit value, Gattegno chart, ascending/descending order</p> <p>Negative Numbers</p> <ul style="list-style-type: none"> Understand negative numbers Count through zero in 1s Count through zero in multiples 	<p>Vocab: (See also Year 5 vocab) powers, Multiplicative connections, ascending/descending, equality symbols, integer, accuracy,</p>
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- Understand 10
- Understand 11, 12 and 13
- Understand 14, 15 and 16
- Understand 17, 18 and 19
- Understand 20
- 1 more and 1 less
- The number line to 20
- Use a number line to 20
- Estimate on a number line to 20
- Compare numbers to 20
- Order numbers to 20

Vocab:
 equal to, more than, less than (fewer), most, least, greater than, smallest, numeral, multiple, representation, digit, estimate, half way

ing, Roman number system/ Roman numerals, rounding to the nearest..., accuracy.

- Compare and order negative numbers
- Find the difference

Vocab
 negative numbers, 'below zero', minus,

- Count from 20 to 50
- 20, 30, 40 and 50
- Count by making groups of tens
- Groups of tens and ones
- Partition into tens and ones
- The number line to 50
- Estimate on a number line to 50
- 1 more, 1 less

Vocab: as above, ensuring clarity with teen numbers and correct pronunciation, count forwards/backwards, count in multiples.

- Count from 50 to 100
- Tens to 100
- Partition into tens and ones
- The number line to 100
- 1 more, 1 less

		<ul style="list-style-type: none"> Compare numbers with the same number of tens Compare any two numbers Count from 50 to 100 <p>Vocab: as above, count forwards, backwards, efficient, representations, divisions, halfway, equal to, more than, less than (fewer), most, least.</p>					
Addition and subtraction	<ul style="list-style-type: none"> Making pairs Combining 2 amounts Bonds to 10 Adding more, taking away <p>Vocab: pair, add, number bond, more, less, fewer, tens frame, part-whole model.</p>	<ul style="list-style-type: none"> Part whole model Addition symbol Fact families-addition facts Number bonds-numbers within 10 Find and make number bonds with larger numbers Compare number 	<ul style="list-style-type: none"> Bonds to 10 Fact families – addition and subtraction bonds within 20 Related facts Bonds to 100 (tens) Add and subtract 1s Add by making 10 Add three 1-digit numbers 	<ul style="list-style-type: none"> Apply number bonds within 10 Add and subtract 1s Add and subtract 10s Add and subtract 100s Spot the pattern Add 1s across a 10 Add 10s across a 100 Subtract 1s across a 10 	<ul style="list-style-type: none"> Add and subtract 1s, 10s, 100s and 1,000s Add up to two 4-digit numbers - no exchange Add two 4-digit numbers - one exchange Add two 4-digit numbers—more than one exchange 	<ul style="list-style-type: none"> Mental strategies Add whole numbers with more than four digits Subtract whole numbers with more than four digits Round to check answers Inverse operations (addition and subtraction) 	<ul style="list-style-type: none"> Add and subtract integers Common factors Common multiples Rules of divisibility Primes to 100 Square and cube numbers Multiply up to a 4-digit number by

			<p>bonds and number sentences</p> <ul style="list-style-type: none"> • Addition-adding together • Addition-adding more • Finding a part • Add by counting on • Subtraction, taking away-how many left? • Subtraction symbol • Add or subtract one or two • Finding a part, breaking a part • Fact families, the 8 facts • Counting back • Subtraction finding the difference • Comparing statements $a + b > c + d$ • Subtraction crossing 10 • Related facts 	<ul style="list-style-type: none"> • Add to the next 10 • Add across a 10 • Subtract across 10 • Subtract from a 10 • Subtract a 1-digit number from a 2-digit number (across a 10) • 10 more, 10 less • Add and subtract 10s • Add two 2-digit numbers (not across a 10) • Add two 2-digit numbers (across a 10) • Subtract two 2-digit numbers (not across a 10) • Subtract two 2-digit numbers (across a 10) • Mixed addition and subtraction • Compare number sentences 	<ul style="list-style-type: none"> • Subtract 10s across a 100 • Make connections • Add two numbers (no exchange) S • Subtract two numbers (no exchange) • Add two numbers (across a 10) • Add two numbers (across a 100) • Subtract two numbers (across a 10) • Subtract two numbers (across a 100) • Add 2-digit and 3-digit numbers • Subtract a 2-digit number from a 3-digit number • Complements to 100 • Estimate answers • Inverse operations • Make decisions <p>Vocab:</p>	<ul style="list-style-type: none"> • Subtract two 4-digit numbers - no exchange • Subtract two 4-digit numbers - one exchange • Subtract two 4-digit numbers - more than one exchange • Efficient subtraction • Estimate answers • Checking strategies <p>Vocab: Addition/subtraction, efficient calculations, exchange, estimate, strategy, crossing a multiple, smallest value column, inverse.</p>	<ul style="list-style-type: none"> • Multi-step addition and subtraction problems • Compare calculations • Find missing numbers <p>Vocab: estimation, Addition/subtraction, efficient calculations, exchange, estimate, strategy, crossing a multiple, smallest value column, inverse.</p>	<p>a 2-digit number</p> <ul style="list-style-type: none"> • Solve problems with multiplication • Short division • Division using factors • Introduction to long division • Long division with remainders • Solve problems with division • Solve multi-step problems • Order of operations • Mental calculations and estimation • Reason from known facts
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			<p>Vocab (as above for place value Autumn) and also: part-whole model, addition/addition facts, fact family, number bonds, system, systematic, subtraction, take away,</p> <ul style="list-style-type: none"> • Add by counting on within 20 • Add ones using number bonds • Find and make number bonds to 20 • Doubles • Near doubles • Subtract ones using number bonds • Subtraction – counting back • Subtraction – finding the difference • Related facts • Missing number problems 	<ul style="list-style-type: none"> • Missing number Problems <p>Vocab: (as above for place value) and also: Fact families, commutative, number bond, addition, subtraction, related facts, more than, fewer/less than, efficient method, representation,</p>	<p>Add, subtract, pattern, exchange, complement (to 100), estimate, inverse, addition/subtraction, increase/decrease, multiple of 10/100, column, solution, written calculation/method, bar model.</p>			<p>Vocab: rules of divisibility, estimation, Addition/subtraction, efficient calculations, exchange, estimate, strategy, crossing a multiple, smallest value column, inverse, common multiples, divisible, factor pairs, common factors, prime numbers, prime factors and composite (non-prime) numbers, even/odd, squared, cubed (and the notation for these).</p>
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			(Vocab: As above for the Autumn term, and also: subtraction facts, number track, double, near double, first-then-now, representation)					
Multiplication and division	<ul style="list-style-type: none"> • Doubling • Sharing and grouping • Even and odd <p>Vocab: as above</p>	<ul style="list-style-type: none"> • Count in 2s • Count in 5s • Count in 10s • Recognise equal groups • Add equal groups • Make arrays • Make doubles • Make equal groups – grouping • Make equal groups – sharing <p>Vocab: count forwards, backwards, altogether, pairs, equal groups, total, numerals, multiples, representation, tens frames, tens column, ones column, arrays.</p>	<ul style="list-style-type: none"> • Recognise equal groups • Make equal groups • Add equal groups • Introduce the multiplication symbol • Multiplication sentences • Use arrays • Make equal groups – grouping • Make equal groups – sharing • The 2 times-table • Divide by 2 • Doubling and halving • Odd and even numbers • The 10 times-table • Divide by 10 	<ul style="list-style-type: none"> • Multiplication - equal groups • Use arrays • Multiples of 2 • Multiples of 5 and 10 • Sharing and grouping • Multiply by 3 • Divide by 3 • The 3 times-table • Multiply by 4 • Divide by 4 • The 4 times-table • Multiply by 8 • Divide by 8 • The 8 times-table • The 2, 4 and 8 times-tables <p>Vocab: emphasis on the word multiple, multiplication, division, equal</p>	<ul style="list-style-type: none"> • Multiply by 10 • Multiply by 100 • Divide by 10 • Multiples of 3 • Multiply and divide by 6 • 6 times-table and division facts • Multiply and divide by 9 • 9 times-table and division facts • The 3, 6 and 9 times-tables • Multiply and divide by 7 • 7 times-table and division facts • 11 times-table and division facts • 12 times-table and division facts 	<ul style="list-style-type: none"> • Multiples • Common multiples • Factors • Common factors • Prime numbers • Square numbers • Cube numbers • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiples of 10, 100 and 1,000 <p>Vocab: common multiples, divisible, factor pairs, common factors, prime numbers, prime factors and composite (non-prime) numbers, even/odd, squared, cubed (and the notation for these),</p>		

				<ul style="list-style-type: none"> • The 5 times-table • Divide by 5 • The 5 and 10 times-tables <p>Vocab: Repeated addition, equal/unequal groups, multiplication, division, arrays, times tables, altogether, doubling, halving, commutativity, multiplication (\times), division (\div) and equals (=) signs, efficient, exchange, odd, even.</p>	<p>groups, sharing, grouping, divide, same, different, equal, array, 'lots of', greater than/less than/fewer than/odd/even (revisited), efficient methods, commutative.</p> <ul style="list-style-type: none"> • Multiples of 10 • Related calculations • Reasoning about multiplication • Multiply a 2-digit number by a 1-digit number – no exchange • Multiply a 2-digit number by a 1-digit number – with exchange • Link multiplication and division • Divide a 2-digit number by a 1-digit number – no exchange • Divide a 2-digit number by a 1- 	<ul style="list-style-type: none"> • Multiply by 1 and 0 • Divide by 1 and itself • Multiply three numbers <p>Vocab, as Year 3 and also: connections (e.g. between 3, 6, and 9 times tables), multiples.</p> <ul style="list-style-type: none"> • Factor pairs • Use factor pairs • Multiply by 10 • Multiply by 100 • Divide by 10 • Divide by 100 • Related facts – multiplication and division • Informal written methods for multiplication • Multiply a 2-digit number by a 1-digit number • Multiply a 3-digit number by a 1-digit number • Divide a 2-digit number by a 1- 	<p>decimal.</p> <ul style="list-style-type: none"> • Multiply up to a 4-digit number by a 1-digit number • Multiply a 2-digit number by a 2-digit number (area model) • Multiply a 2-digit number by a 2-digit number • Multiply a 3-digit number by a 2-digit number • Multiply a 4-digit number by a 2-digit number • Solve problems with multiplication • Short division • Divide a 4-digit number by a 1-digit number • Divide with remainders • Efficient division • Solve problems with multiplication and division 	
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					<p>digit number – flexible partitioning</p> <ul style="list-style-type: none"> • Divide a 2-digit number by a 1-digit number – with remainders • Scaling • How many ways? <p>Vocab: (as Autumn term), also... Gattegno chart/place value chart, commutative, partitioning, scaling.</p>	<p>digit number (1)</p> <ul style="list-style-type: none"> • Divide a 2-digit number by a 1-digit number (2) • Divide a 3-digit number by a 1-digit number • Correspondence problems • Efficient multiplication <p>Vocab: (as Autumn term), also... Factor pairs, arrays, systematic, decimals, digits, exchange, efficient.</p>	<p>Vocab (as Autumn term above), and: earn, exchange, consecutive number, short division, remainder.</p>	
Fractions		<ul style="list-style-type: none"> • Recognise a half of an object or a shape • Find a half of an object or a shape • Recognise a half of a quantity • Find a half of a quantity • Recognise a quarter of an 	<ul style="list-style-type: none"> • Introduction to parts and whole • Equal and unequal parts • Recognise a half • Find a half • Recognise a quarter • Find a quarter • Recognise a third • Find a third 	<ul style="list-style-type: none"> • Understand the denominators of unit fractions • Compare and order unit fractions • Understand the numerators of non-unit fractions • Understand the whole 	<ul style="list-style-type: none"> • Understand the whole • Count beyond 1 • Partition a mixed number • Number lines with mixed numbers • Compare and order mixed numbers • Understand improper fractions 	<ul style="list-style-type: none"> • Find fractions equivalent to a unit fraction • Find fractions equivalent to a non-unit fraction • Recognise equivalent fractions • Convert improper fractions to mixed numbers 	<ul style="list-style-type: none"> • Equivalent fractions and simplifying • Equivalent fractions on a number line • Compare and order (denominator) • Compare and order 	

			<p>object or a shape</p> <ul style="list-style-type: none"> Find a quarter of an object or a shape Recognise a quarter of a quantity Find a quarter of a quantity <p>Vocab: Bigger, smaller, equal parts, half, halves, quarter, doubles, altogether, amount, whole, division (of a shape).</p>	<ul style="list-style-type: none"> Find the whole Unit fractions Non-unit fractions Recognise the equivalence of a half and two-quarters Recognise three-quarters Find three-quarters Count in fractions up to a whole <p>Vocab: Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ parts, part whole, bar model, fraction bar, equal/ unequal parts.</p>	<ul style="list-style-type: none"> Compare and order non-unit fractions Fractions and scales Fractions on a number line Count in fractions on a number line Equivalent fractions on a number line Equivalent fractions as bar models <p>(Vocab: fractions, diagram, equal, shaded, denominator, numerator, unit and non-unit fractions, diagonal (within the context of a shape being divided), the symbols for greater than and less than ($>$ and $<$), Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/ capacity (l/ml), divisions and number of intervals</p>	<ul style="list-style-type: none"> Convert mixed numbers to improper fractions Convert improper fractions to mixed numbers Equivalent fractions on a number line Equivalent fraction families Add two or more fractions Add fractions and mixed numbers Subtract two fractions Subtract from whole amounts Subtract from mixed numbers <p>(Vocab: fractions, diagram, equal, shaded, denominator, numerator, unit and non-unit fractions, mixed number, diagonal (within the context of a shape being divided), the</p>	<ul style="list-style-type: none"> Convert mixed numbers to improper fractions Compare fractions less than 1 Order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions with the same denominator Add fractions within 1 Add fractions with total greater than 1 Add to a mixed number Add two mixed numbers Subtract fractions Subtract from a mixed number Subtract from a mixed number - breaking the whole Subtract two mixed numbers 	<p>(numerator)</p> <ul style="list-style-type: none"> Add and subtract simple fractions Add and subtract any two fractions Add mixed numbers Subtract mixed numbers Multi-step problems Multiply fractions by integers Multiply fractions by fractions Divide a fraction by an integer Divide any fraction by an integer Mixed questions with fractions Fraction of an amount Fraction of an amount
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				<p>on a number line, equivalent.</p> <ul style="list-style-type: none"> • Add fractions • Subtract fractions • Partition the whole • Unit fractions of a set of objects • Non-unit fractions of a set of objects • Reasoning with fractions of an amount <p>Vocab: As above for Spring.</p>	<p>symbols for greater than and less than ($>$ and $<$), divisions and number of intervals on a number line, equivalent, improper fractions, integer.</p>	<p>Vocab: equivalent fractions, numerator, denominator, improper fractions, covert, tenths, hundredths, partition.</p>	<p>- find the whole</p> <p>Vocab: equivalent fractions, integer, mixed fraction, denominator, numerator, common factors, common multiples and prime numbers.</p> <p>FDPs</p> <ul style="list-style-type: none"> • Decimal and fraction equivalents • Fractions as division • Understand percentages • Fractions to percentages • Percentages – missing values • Equivalent fractions, decimals
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									and percentages
									<ul style="list-style-type: none">• Order fractions, decimals and percentages• Percentage of an amount – one step• Percentage of an amount – multi-step• Percentages – missing values
									(Vocab: common and more complex equivalents, equivalence, equal parts, common multiples, express fractions, denominator, numerator, simplify,

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- Tenths as fractions
 - Tenths as decimals
 - Tenths on a place value chart
 - Tenths on a number line
 - Divide a 1-digit number by 10
 - Divide a 2-digit number by 10
 - Hundredths as fractions
 - Hundredths as decimals
 - Hundredths on a place value chart
 - Divide a 1- or 2-digit number by 100
- (Vocab: fraction, tenth, pattern, division, decimal point, decimal equivalent/ equivalent fractions, hundredths, partition, divisions.
- Make a whole with tenths

- Decimals up to 2 decimal places
- Equivalent fractions and decimals (tenths)
- Equivalent fractions and decimals (hundredths)
- Equivalent fractions and decimals
- Thousandths as fractions
- Thousandths as decimals
- Thousandths on a place value chart
- Order and compare decimals (same number of decimal places)
- Order and compare any decimals with up to 3 decimal places
- Round to the nearest whole number
- Round to 1 decimal place
- Understand percentages

- Place value within 1
 - Place value – integers and decimals
 - Round decimals
 - Add and subtract decimals
 - Multiply by 10, 100 and 1,000
 - Divide by 10, 100 and 1,000
 - Multiply decimals by integers
 - Divide decimals by integers
 - Multiply and divide decimals in context
- (Vocab: integer, decimal, decimal point, round up, round down, exchange, 'context', one-tenth, one-hundredth,

			<ul style="list-style-type: none"> • Make a whole with hundredths • Partition decimals • Flexibly partition decimals • Compare decimals • Order decimals • Round to the nearest whole number • Halves and quarters as decimals <p>Vocab: tenths, hundredths, decimal places, equivalent fractions, partitioning.</p>	<ul style="list-style-type: none"> • Percentages as fractions • Percentages as decimals • Equivalent fractions, decimals and percentages <p>(Vocab: fraction, tenth, pattern, division, decimal point, decimal equivalent/ equivalent fractions, hundredths, partition, divisions, decimal place, numerator, denominator, partition fractions, partition 'flexibly', rounding up, rounding down, per cent, fraction/decimal equivalent.</p> <ul style="list-style-type: none"> • Use known facts to add and subtract decimals within 1 • Complements to 1 	<p>one-thousandth, perimeter, litres, kilograms).</p>
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| | | | | <ul style="list-style-type: none">• Add and subtract decimals across 1• Add decimals with the same number of decimal places• Subtract decimals with the same number of decimal places• Add decimals with different numbers of decimal places• Subtract decimals with different numbers of decimal places• Efficient strategies for adding and subtracting decimals• Decimal sequences• Multiply by 10, 100 and 1,000• Divide by 10, 100 and 1,000• Multiply and divide decimals – missing values | |
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				<p>Vocab: fraction, tenth, pattern, division, decimal point, decimal equivalent/ equivalent fractions, hundredths, thousandths, partition, divisions, decimal place, numerator, denominator, partition fractions, partition 'flexibly', rounding up, rounding down, percent, fraction/decimal equivalent.</p>	
	Algebra				<ul style="list-style-type: none"> • 1-step function machines • 2-step function machines • Form expressions • Substitution • Formulae • Form equations • Solve 1-step equations

				<ul style="list-style-type: none">• Solve 2-step equations• Find pairs of values• Solve problems with two unknowns <p>(Vocab: algebra, function, step, expression, equation, substitution, pair of values, unknowns, input, output, function, rule, formulae, enumerate, variables, inverse.)</p> <p>(also see above for FDP).</p>
	Ratio			<ul style="list-style-type: none">• Add or multiply?• Use ratio language• Introduction to the ratio symbol• Ratio and fractions

- Scale drawing
- Use scale factors
- Similar shapes
- Ratio problems
- Proportion problems
- Recipes

(**Vocab:** ratio, ratio symbol, scale drawing, scale factor, 'similar', additive/multiplicative relationships, double number line, horizontal/vertical relationship, integers, multiplication/division facts, sequence, quantity, enlargement, perimeter, corresponding side, orientation, proportion.)

Measurement

	<p>Time</p> <ul style="list-style-type: none"> • Non-standard units <i>Revisited Spr</i> <p>Vocab: long, time, clock, measure, short, morning, evening, night time, afternoon.</p> <ul style="list-style-type: none"> • Before and after • Days of the week • Months of the year • Hours, minutes and seconds • Tell the time to the hour • Tell the time to the half hour <p>Vocab: before, after, days of the week/ months of the year, hours, seconds, minutes, duration, minute hand, hour hand, pointing to, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening, event.</p>	<ul style="list-style-type: none"> • O'clock and half past • Quarter past and quarter to • Tell the time past the hour • Tell the time to the hour • Tell the time to 5 minutes • Minutes in an hour • Hours in a day <p>Vocab: hour hand, minute hand, half past, quarter past, quarter to, duration (refer back to Y1 vocab also).</p>	<ul style="list-style-type: none"> • Roman numerals to 12 • Tell the time to 5 minutes • Tell the time to the minute • Read time on a digital clock • Use am and pm • Years, months and days • Days and hours • Hours and minutes – use start and end times • Hours and minutes - use durations • 10 Minutes and seconds • Units of time • Solve problems with time <p>Vocab: As Year 2 vocab and also... roman numerals, analogue, 12/24 hour clock, 'past the hour' 'to the hour', approximately, seconds, duration.</p>	<ul style="list-style-type: none"> • Years, months, weeks and days • Hours, minutes and seconds • Convert between analogue and digital times • Convert to the 24-hour clock • Convert from the 24-hour clock <p>Vocab: As Year 3 vocab and also... additive reasoning/multiplicative reasoning, leap year.</p>		
	<p>Length</p> <ul style="list-style-type: none"> • Non-standard units 	<ul style="list-style-type: none"> • Compare lengths and heights 	<ul style="list-style-type: none"> • Measure in centimetres • Measure in metres 	<ul style="list-style-type: none"> • Measure in metres and centimetres 	(Length only)	

	and height	Vocab: long, short, tall, high, wide	<ul style="list-style-type: none"> Measure length using objects Measure length in centimetres <p>Vocab: Length, height, "longer than", "shorter than", "taller than", "is the same", "is equal to", unit of measure, ruler, centimetre,</p>	<ul style="list-style-type: none"> Compare lengths and heights Order lengths and heights Four operations with lengths and heights <p>Vocab: Length, height, "longer than", "shorter than", "taller than", "is the same", "is equal to", unit of measure, centimetre, metre, ruler, scale, thermometer, use of >, < and = as symbols.</p>	<ul style="list-style-type: none"> Measure in millimetres Measure in centimetres and millimetres Metres, centimetres and millimetres Equivalent lengths (metres and centimetres) Equivalent lengths (centimetres and millimetres) Compare lengths Add lengths Subtract lengths <p>Vocab: As Year 2</p>	<ul style="list-style-type: none"> Measure in kilometres and metres Equivalent lengths (kilometres and metres) <p>(Vocab: measure, measurement, kilometre, metre, equivalent, lengths, metre, centimetres, units, convert, conversion, regular/ irregular rectilinear shapes.</p>		
	Perimeter and area				<ul style="list-style-type: none"> What is perimeter? Measure perimeter Calculate perimeter <p>Vocab: As Year 2, also measure, compare, add and subtract: lengths (m/cm/mm);</p>	<ul style="list-style-type: none"> Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear shapes Find missing lengths in rectilinear shapes 	<ul style="list-style-type: none"> Perimeter of rectangles Perimeter of rectilinear shapes Perimeter of polygons Area of rectangles Area of compound shapes Estimate area 	<ul style="list-style-type: none"> Shapes – same area Area and perimeter Area of a triangle – counting squares Area of a right-angled triangle

				metre, centimetre, ruler,	<ul style="list-style-type: none"> Calculate perimeter of rectilinear shapes Perimeter of regular polygons Perimeter of polygons <p>(Vocab: conversion, regular/ irregular rectilinear shapes, perimeter, great/greatest, small/smallest, horizontal, vertical, value.)</p>	<p>(Vocab: perimeter, regular/ irregular/ non- rectilinear shapes, composite rectilinear shapes, polygon, great/greatest, small/smallest, horizontal, vertical, value, compound, dimension, equal).</p>	<ul style="list-style-type: none"> Area of any triangle Area of a parallelogram Volume – counting cubes Volume of a cuboid <p>(Vocab: area, perimeter, right-angled triangle, parallelogram, volume, formula, rectilinear shape, approximate, perpendicular height, base, compound shape.)</p>
Weight and volume		<ul style="list-style-type: none"> Heavier and lighter Measure mass Compare mass Full and empty Compare volume Measure capacity Compare capacity 	<ul style="list-style-type: none"> Compare mass Measure in grams Measure in kilograms Four operations with mass Compare volume and capacity Measure in millilitres 		<ul style="list-style-type: none"> Cubic centimetres Compare volume Estimate volume Estimate capacity <p>Vocab: volume, cuboid, capacity, face, cubic centimetres/ metres and notation, mass.</p>		

Mas
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and
Cap
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- Compare size, mass and capacity (heavier than, lighter than)
Revisited Spr
- Vocab: heavy, light, less, more, big, small, large

Vocab: heavier, lighter, larger, smaller (as they may get this confused with heavier/lighter), balance, mass, full, empty, volume, nearly full/empty, capacity, container.

- Measure in litres
 - Four operations with volume and capacity
 - Temperature
- Vocab:** heavier, lighter, balance scales/ circle scales, mass, full, empty, volume, nearly full/empty, capacity, container, kilogram/gram, temperature in °C, litres/ mass, millilitres, scale, thermometer, use of >, < and = as symbols.

- Use scales
 - Measure mass in grams
 - Measure mass in kilograms and grams
 - Equivalent masses (kilograms and grams)
 - Compare mass
 - Add and subtract mass
 - Measure capacity and volume in millilitres
 - Measure capacity and volume in litres and millilitres
 - Equivalent capacities and volumes (litres and millilitres)
 - Compare capacity and volume
 - Add and subtract capacity and volume
- Vocab:** heavier, lighter, balance scales/ circle scales, mass, full, empty, volume,

				nearly full/empty, capacity, container, kilogram/gram, temperature in °C, litres/ mass, millilitres, scale, thermometer, use of >, < and = as symbols, intervals on a scale, unit.		
Temperature				<ul style="list-style-type: none"> Temperature (in degrees C) (R) 		
Money		<ul style="list-style-type: none"> Unitising Recognise coins Recognise notes Count in coins <p>Vocab: denominations, coins, notes, value (greater than/ less than), 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2 coins, notes, total.</p>	<ul style="list-style-type: none"> Count money – pence Count money – pounds (notes and coins) Count money – pounds and pence Choose notes and coins Make the same amount Compare amounts of money Calculate with money Make a pound Find change 	<ul style="list-style-type: none"> Pounds and pence Convert pounds and pence Add money Subtract money Find change <p>Vocab: money, pence, coin, pounds, notes, amount, change, value, worth, more than/less than/equal to (in this context), denomination, total, cost, difference, change.</p>	<ul style="list-style-type: none"> Write money using decimals Convert between pounds and pence Compare amounts of money Estimate with money Calculate with money Solve problems with money <p>Vocab: money, pence, coin, pounds, notes, amount, change, value, worth, more</p>	

			<ul style="list-style-type: none"> Two-step problems <p>Vocab: money, pence, coin, pounds, notes, amount, change, value, worth, more than/less than/equal to (in this context), denomination, total, cost, difference.</p>		<p>than/less than/equal to (in this context), denomination, total, cost, difference, change.</p>		
Statistics			<ul style="list-style-type: none"> Make tally charts Tables Block diagrams Draw pictograms (1-1) Interpret pictograms (1-1) Draw pictograms (2, 5 and 10) Interpret pictograms (2, 5 and 10) <p>Vocab: Interpret, pictograms, tally charts, tally mark, block diagrams, tables, category, Vocab: Interpret, pictograms, tally charts, tally mark, block diagrams, tables, category,</p>	<ul style="list-style-type: none"> Interpret pictograms Draw pictograms Interpret bar charts Draw bar charts Collect and represent data Two-way tables <p>Vocab: Interpret, pictograms, tally charts, tally mark, block diagrams, tables, category, quantity, data, label, scaled/ bar chart, vertical and horizontal axis.</p>	<ul style="list-style-type: none"> Interpret charts Comparison, sum and difference Interpret line graphs Draw line graphs <p>Vocab: Interpret, pictograms, tally charts, tally mark, block diagrams, tables, category, quantity, data, label, scaled/ bar chart, vertical and horizontal axis.</p>	<ul style="list-style-type: none"> Draw line graphs Read and interpret line graphs Read and interpret tables Two-way tables Read and interpret timetables <p>(Vocab: line graph, axis, horizontal, vertical axis, intervals, sum and difference problems, average, table, statement, headings, value, missing values, row/ column,</p>	<ul style="list-style-type: none"> Line graphs Dual bar charts Read and interpret pie charts Pie charts with percentages Draw pie charts The mean <p>(Vocab: data, line graph, axis, horizontal/ vertical axis, difference between points, estimate, similarities/</p>

				quantity, data, label.			interpret, timetable.	differences, pie chart, sector, equal parts, interpret, protractor (<i>and how to use one</i>), angle, statistics, average, mean.
	Converting units						<ul style="list-style-type: none"> • Kilograms and kilometres • Millimetres and millilitres • Convert units of length • Convert between metric and imperial units • Convert units of time • Calculate with timetables <p>Vocab: kilometres/metres/centimetres/millimetres/grams/kilograms/litres, inches, pounds and pints, mass, revise units of time.</p>	<ul style="list-style-type: none"> • Metric measures • Convert metric measures • Calculate with metric measures • Miles and kilometres • Imperial measures <p>Vocab: Weight, mass, capacity, convert, standard, metric, imperial, units of measure e.g kilometres, miles, kilograms, metres, centimetres.</p>

Geometry

Properties of Shape

- Exploring pattern (also number)
- Circles and triangles
- 2D shapes with 4 sides
- 3D shapes

Vocab: pattern, unit of repeat, circle, triangle, 2D, 3D, cube, cone, cylinder, cuboid, sphere.

- Recognise and name 3-D shapes
- Sort 3-D shapes
- Recognise and name 2-D shapes
- Sort 2-D shapes
- Patterns with 2-D and 3-D shapes

Vocab: rectangles (including squares as a type of rectangle), circles and triangles, cubes, cuboids, cylinders, pyramids, cones, spheres, 'mathematical name for...', flat face, curved surface, shapes can 'roll'/'stack', repeating pattern, symmetrical pattern.

- Recognise 2-D and 3-D shapes
- Count sides on 2-D shapes
- Count vertices on 2-D shapes
- Draw 2-D shapes
- Lines of symmetry on shapes
- Use lines of symmetry to complete shapes
- Sort 2-D shapes
- Count faces on 3-D shapes
- Count edges on 3-D shapes
- Count vertices on 3-D shapes
- Sort 3-D shapes
- Make patterns with 2-D and 3-D shapes

Vocab: faces, sides, line of symmetry, symmetrical,

- Turns and angles
- Right angles
- Compare angles
- Measure and draw accurately
- Horizontal and vertical
- Parallel and perpendicular
- Recognise and describe 2-D shapes
- Draw polygons
- Recognise and describe 3-D shapes
- Make 3-D shapes

Vocab: As Year 2 vocab and also... horizontal / vertical lines, pairs of perpendicular and parallel lines.

- Understand angles as turns
- Identify angles
- Compare and order angles
- Triangles
- Quadrilaterals
- Polygons
- Lines of symmetry
- Complete a symmetric figure

Vocab: As Year 3 and also... angles as turns, measuring angles, polygons, lines of symmetry, symmetric figure, equilateral/ isosceles/scalene triangle, quadrilaterals.

- Understand and use degrees
- Classify angles
- Estimate angles
- Measure angles up to 180°
- Draw lines and angles accurately
- Calculate angles around a point
- Calculate angles on a straight line
- Lengths and angles in shapes
- Regular and irregular polygons
- 3-D shapes

Vocab: full/half/quarter/three-quarter turn, 360° in a full turn, 180° in half a turn, 90° in a quarter turn (or right angle) and 270° in a three-quarter turn, acute, obtuse and reflex angles, isometric paper.

- Measure and classify angles
- Calculate angles
- Vertically opposite angles
- Angles in a triangle Step 5
- Angles in a triangle – special cases
- Angles in a triangle – missing angles
- Angles in a quadrilateral
- Angles in polygons
- Circles
- Draw shapes accurately
- Nets of 3-D shapes

Vocab: full/half/quarter/three-quarter turn, 360° in a full turn, 180° in half a turn, 90° in a quarter

				vertical line, mirror line, 2D shapes circle octagon hexagon triangle pentagon, 3D shapes cuboid pyramid sphere cube cone, sides, curved surface, vertex, vertices (new concepts), prism, edge, non- standard shape, sorting diagram, repeating pattern.				turn (or right angle) and 270° in a three- quarter turn, acute, obtuse and reflex angles, diameter.
Position and Direction	<ul style="list-style-type: none"> Positional language Spatial reasoning-match, rotate, manipulate, compose and decompose, visualise and build, mapping. <p>Vocab: under, over, around, on top of, underneath, rotate, build, compose, left, right.</p>	<ul style="list-style-type: none"> Describe turns Describe position – left and right Describe position – forwards and backwards Describe position – above and below Ordinal numbers <p>Vocab: turn, left, right, forwards, backwards, above, below, 1st,</p>	<ul style="list-style-type: none"> Language of position Describe movement Describe turns Describe movement and turns Shape patterns with turns <p>Vocab: As Year 1 and also rotation, right angle, quarter turns, clockwise, anti-clockwise.</p>		<ul style="list-style-type: none"> Describe position using coordinates Plot coordinates Draw 2-D shapes on a grid Translate on a grid Describe translation on a grid <p>Vocab: co-ordinates, quadrant, plot/plotting, point, x axis, y axis,</p>	<ul style="list-style-type: none"> Read and plot coordinates Problem solving with coordinates Translation Translation with coordinates Lines of symmetry Reflection in horizontal and vertical lines <p>Vocab: co-ordinates, quadrant, plot/plotting, point, x axis, y axis,</p>	<ul style="list-style-type: none"> The first quadrant Read and plot points in four quadrants Solve problems with coordinates Translations Reflections <p>Vocab: co-ordinates, quadrant, plot/plotting, point, x axis, y axis, vertices, vertex,</p>	

			2 nd , 3 rd , direction, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, inside and outside.			vertices, vertex, translation.	vertices, vertex, translation, reflection.	translation, reflection, mirror line.
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