

MATHS END POINTS

TRINITY & ST MICHAEL'S

NPV	Number & Place Value
NF	Number Fluency
AS	Addition & Subtraction
MD	Multiplication & Division
Fr	Fractions
G	Geometry
MM	Measurement
ST	Statistics
R & P	Ratio & Proportion

YEAR 1 – END POINTS

Y1 – NPV 1	Y1 – NPV 2	Y1 – NF 1	Y1 – NF 2
Count within 100, forwards and backwards, starting with any number	Reason about the location numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$.	Develop fluency in addition and subtraction facts within 10	Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.
<ul style="list-style-type: none"> Count objects to 10 Count forwards to 10 Count backwards from 10 Count forwards and backwards from any number within 10. Count one less for numbers within 10 Finding one more and one less within 10. Count forwards and backwards and write numbers to 20 One more one less Counting forwards and backwards within 50 One more, one less within 50 Counting to 100 Counting forwards and backwards within 100 One more, one less within 100. 	<ul style="list-style-type: none"> Compare up to 10 objects Introduce $<$, $>$ and $=$ for numbers within 10 Compare numbers within 10 Order up to 10 objects Order numbers up to 10 Ordinal numbers Organise the number line from 0 to 10 Compare numbers within 20 Order groups of objects within 20 Order numbers within 20 Introduce $<$, $>$ and $=$ for numbers within 20 Compare number sentence 	<ul style="list-style-type: none"> Fact families to 10 - addition facts Find number bonds for numbers within 10 Systematic methods for number bonds within 10 Number bonds to 10 Compare number bonds Finding a part Subtraction - taking away - crossing out Subtraction - taking away - using the symbol Fact families - the 8 facts Subtraction - counting back Subtraction - finding the difference 	<ul style="list-style-type: none"> Counting up using concrete objects Counting up using images Counting up using a number squares Count in 2s to 50 Count in 5s to 50 Count in 10s to 100 Counting Coins

YEAR 1 – END POINTS

Y1 – AS 1

Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.

- Introducing parts and wholes (single object)
- Part-whole model (with images)
- Part-whole model
- Find number bonds for numbers within 10
- Systematic methods for number bonds within 10
- Number bonds to 10
- Compare number bonds
- Finding a part
- Recognise odd and even numbers
- Recognise partners with odd and even numbers.

Y1 – AS 2

Read, write and interpret equations containing addition (+), subtraction (−) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.

- Addition symbol
- Fact families - addition facts
- Addition - adding together
- Addition - adding more
- Subtraction - taking away - crossing out
- Subtraction - taking away - using the symbol
- Subtraction - find a part
- Fact families - the 8 facts
- Subtraction - counting back
- Subtraction - finding the difference
- Add by counting on within 20
- Add by making 10
- Subtraction - not crossing 10
- Subtraction - not crossing 10 (counting back)
- Subtraction - crossing 10
- Subtraction - crossing 10

YEAR 1 – END POINTS

Y1 – G 1	Y1 – G 2	Y1 – Fr 1
<p>Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.</p>	<p>Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.</p>	<p>Recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity. Recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity.</p>
<ul style="list-style-type: none">• Recognise and name 3-D shapes• Sort 3-D shapes• Recognise and name 2-D shapes• Sort 2-D shapes	<ul style="list-style-type: none">• Recognise and name 3-D shapes• Sort 3-D shapes• Recognise and name 2-D shapes• Sort 2-D shapes	

YEAR 1 – END POINTS

Y1 – MM 1	Y1 – MM 2	Y1 – MM 3	Y1 – MM 4
<p>Compare, measure and begin to record lengths and heights using both standard and non-standard units.</p>	<p>Measure and begin to record mass/weight and capacity.</p>	<p>Describe position, direction and movement, including whole, half, quarter and three- quarter turns.</p>	<p>To tell the time to the nearest half an hour</p>
<ul style="list-style-type: none"> • Compare lengths and heights • Estimate lengths using objects, cm • Measure lengths using objects • Measure lengths using cm 	<ul style="list-style-type: none"> • Use vocab such as heavier and lighter to describe and compare objects • Use vocab such as full and empty • Compare mass, capacity and volume • Measure mass and capacity using a non standard unit. 	<ul style="list-style-type: none"> • Describe position using left and right • Describe position using forward and backwards • Describe position using above and below • Describe turns using whole, half, quarter and three-quarters 	<ul style="list-style-type: none"> • Describe an event using before or after • Sequence events using next, first, today, yesterday, tomorrow, morning, afternoon and evening. • Months of the year • Days of the week • Hours, minutes and seconds • Tell the time to the nearest hour • Tell the time to the nearest half an hour

YEAR 1 – GREATER DEPTH

NPV

Partition numbers to 20
into multiple parts

G

Verbally compare 2D
& 3D shapes justifying
their answer with the
knowledge of
properties

NF

Develop fluency in
addition and subtraction
facts within 20

AS

Understand the
importance of the
equals symbol and
begin experiment with
moving this symbol.

YEAR 2 – END POINTS

Y2 – NPV 1	Y2 – NPV 2	Y2 – NF 1	Y2 – NF 2
<p>Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.</p>	<p>Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.</p>	<p>Secure fluency in addition and subtraction facts within 20, through continued practice.</p>	<p>Become increasingly fluent with recalling 2, 5, and 10 multiplication and division facts.</p>
<ul style="list-style-type: none"> • Count objects to 100 • Read and write numbers to 100 in numerals and words • Represent numbers to 100 • Tens and ones using a part-whole • Tens and ones using addition • Use a place value chart 	<ul style="list-style-type: none"> • Compare objects • Compare numbers • Order objects and numbers Compare money • Finding 10 more and 10 less • Using $<$, $>$ and $=$ for numbers within 100 	<ul style="list-style-type: none"> • Fact families - addition and subtraction bonds to 20 • Check calculations • Compare number sentences • Number bonds to 10 • Number bonds to 20 • Mentally add and subtract within 10 • Mentally add and subtract within 20 • Pupils will also be developing their fluency with these facts throughout the remaining steps in the Addition and Subtraction block 	

YEAR 2 – END POINTS

Y2 – AS 1	Y2 – AS 2	Y2 – AS 3	Y2 – AS4	Y2 – AS 5
Add and subtract across 10 within 100	Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?".	Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two- digit number.	Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers.	Solve missing number problems within 100 by counting forwards or backwards from the first number given.
<ul style="list-style-type: none"> • Add by making 10 • Subtraction - crossing 10 • Find and make number bonds • Add three 1-digit numbers 	<ul style="list-style-type: none"> • Find the difference • The structure of 'difference' is also highlighted within many of the other subtraction steps 	<ul style="list-style-type: none"> • Related facts • Add and subtract 1s • 10 more 10 less • Add and subtract 10s • Add a 2-digit and 1-digit number - crossing ten • Subtract a 1-digit number from a 2-digit number - crossing ten 	<ul style="list-style-type: none"> • Add two 2-digit numbers - not crossing ten - add ones and add tens • Add two 2-digit numbers - crossing ten - add ones and add tens • Subtract a 2-digit number from a 2- digit number - not crossing ten • Subtract a 2-digit number from a 2- digit number - crossing ten - subtract ones and subtract tens • Bonds to 100 (tens and ones) <p>Money</p> <ul style="list-style-type: none"> • Find the total • Find the difference • Find change • Two-step problems <p>Length and Height</p>	<ul style="list-style-type: none"> Counting on in 10s Counting on in 1s Counting backwards in 10s Counting backwards in 1s

YEAR 2 – END POINTS

Y2 – MD 1	Y2 – MD 2	Y2 – Fr 1	Y2 Fr 2
<p>Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.</p>	<p>Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).</p>	<p>To identify $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{4}$, of a number or shape, and know that all parts must be equal parts.</p>	<p>Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ and other simple fractions</p>
<ul style="list-style-type: none"> • Multiplication sentences using the x symbol • Multiplication sentences from pictures • Use arrays • 2 times-table • 5 times-table • 10 times-table <p>Statistics</p> <ul style="list-style-type: none"> • Draw pictograms (2, 5 and 10) • Interpret pictograms (2, 5 and 10) • Block diagrams <p>Mass, Capacity and Temperature</p> <ul style="list-style-type: none"> • Measure mass in grams • Measure mass in kilograms • Millilitres • Temperature 	<ul style="list-style-type: none"> • Make equal groups – sharing • Make equal groups - grouping • Divide by 2 • Divide by 5 • Divide by 10 	<ul style="list-style-type: none"> • Fraction of a shape • Fraction of an amount • Fraction of a number 	

YEAR 2 – END POINTS

Y2 – MM 1	Y2 – MM 2	Y2 – MM 3
<p>Compare, measure, record and calculate length weight, mass, capacity and temperature.</p>	<p>Use mathematical vocabulary to describe position, direction and movement including movement in a straight line.</p>	<p>Tell and write the time quarter past/to the hour on analogue and draw the hands on a clock face to show these analogue times.</p>
<ul style="list-style-type: none">• Compare lengths and heights• Measure in centimetres & metres• Order lengths and heights• Four operations with lengths and heights• Compare mass• Measure in grams and kilograms• Order weight & mass• Four operations with mass• Compare volume and capacity• Measure in millilitres and litres• Four operations with volume and capacity• Temperature	<ul style="list-style-type: none">• Recap language of position• Describe movement and turns whole, half, quarter and three-quarters and linking them to right angles• Shape patterns with turns	<ul style="list-style-type: none">• Know units of time: minutes, hours, days, weeks, months, years• Know the relationship between seconds and minutes and minutes and hours, including the number of minutes in an hour and the number of hours in a day.• Comparing time• O'clock and half past• Quarter to and Quarter Past• Adding and subtracting time• The difference between time

YEAR 2 – END POINTS

Y2 – G1	Y2 – G2	Y2 – G 3
<p>Identify, compare, sort and describe the properties of 2D Shapes, including lines of symmetry</p>	<p>Identify, compare, sort and describe common 3D shapes and everyday objects.</p>	<p>Describe and act position and direction using mathematical vocabulary such as: quarter turn, half turn, three quarter turn, clockwise, anti clockwise</p>
<ul style="list-style-type: none">• Corners• Sides• Lines of Symmetry• 2D Shapes on the surface of 3D shapes• Compare 2D shapes and everyday objects• Sort 2D shapes and everyday objects.	<ul style="list-style-type: none">• Vertices• Edges• Lengths• Build 3D shapes	

YEAR 2 – GREATER DEPTH

MM -

Read the time on a clock to the nearest 5 minutes

NPV

Read scales* where not all numbers on the scale are given and estimate points in between.

G -

Describe similarities and differences of 2-D and 3-D shapes, using their properties.

AS

Use reasoning about numbers and relationships to solve more complex problems and explain their thinking.

YEAR 3 – END POINTS

Y3 – NPV 1	Y3 – NPV 2	Y3 – NPV 3	Y3 – NPV 4
<p>Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10</p>	<p>Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning.</p>	<p>Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10</p>	<p>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</p>
<ul style="list-style-type: none"> • Hundreds • Convert pounds and pence 	<p>Numbers to 1,000 Write numbers to 1,000 100s, 10s and 1s (1) 100s, 10s and 1s (2)</p>	<ul style="list-style-type: none"> • Number line to 1,000 • Compare objects • Compare numbers • Ordering numbers <p>Length and Perimeter</p> <ul style="list-style-type: none"> • Compare lengths 	<ul style="list-style-type: none"> • Count in 50s <p>Mass and Capacity</p> <ul style="list-style-type: none"> • Measure mass • Measure capacity • Compare capacity

YEAR 3 – END POINTS

Y3 – NF 1	Y3 – NF 2	Y3 – NF 3
<p>Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</p>	<p>Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.</p>	<p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p>
<ul style="list-style-type: none">• Add 3-digit and 1-digit numbers - crossing 10• Subtract a 1-digit number from a 3-digit number - crossing 10• Add 3-digit and 2-digit numbers - crossing 100• Subtract a 2-digit number from a 3-digit number - crossing 100	<ul style="list-style-type: none">• 2 times-table• Divide by 2• 5 times-table• Divide by 5• 10 times-table• Divide by 10• 4 times-table• Divide by 4• The 8 times-table• Divide by 8	<p>Length and Perimeter</p> <ul style="list-style-type: none">• Equivalent lengths (m and cm)• Equivalent lengths (mm and cm)

YEAR 3 – END POINTS

Y3 – MD 1	Y3 – AS 1	Y3 – AS 2
<p>Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.</p>	<p>Add and subtract up to three-digit numbers using columnar methods.</p>	<p>Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</p>
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Add and subtract 100s • Spot the pattern - making it explicit • Mixed addition and subtraction problems • Add and subtract 2-digit & 3-digit numbers- not crossing 10 or 100 • Add 2-digit and 3-digit numbers - crossing 10 or 100 • Subtract a 2-digit number from a 3-digit number - crossing 10 or 100 • Add two 3-digit numbers - not crossing 10 or 100 • Add two 3-digit numbers - crossing 10 or 100 • Subtract a 3-digit number from a 3-digit number - no exchange • Subtract a 3-digit number from a 3-digit number - exchange 	<ul style="list-style-type: none"> • Check answers <p>Money</p> <ul style="list-style-type: none"> • Add money • Subtract money • Give change

YEAR 3 – END POINTS

Y3 – Fr 1	Y3 – Fr 2	Y3 – Fr 3	Y3 – Fr 4
Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.	Find unit fractions of quantities using known division facts (multiplication tables fluency).	Reason about the location of any fraction within 1 in the linear number system.	Add and subtract fractions with the same denominator, within 1
		<ul style="list-style-type: none">• Count in tenths• Fractions on a number line• Compare fractions• Order fractions	<ul style="list-style-type: none">• Add fractions• Subtract fractions

YEAR 3 – END POINTS

Y3 – G 1

Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations

- Turns and angles
- Right angles in shapes
- Recognise and describe 2-D shapes

Y3 – G 2

Draw polygons by joining marked points, and identify parallel and perpendicular sides.

- Parallel and perpendicular
- Recognise and describe 2-D shapes

YEAR 3 – END POINTS

Y3 – MM 1	Y3 – MM 2	Y3 – MM 3
<p>Tell and write the time to the nearest 5 minutes from an analogue or digital clock, including using Roman numerals from I to XII.</p>	<p>Measure and compare lengths; (m/cm/mm) and capacity (ml/L).</p>	<p>Measure the perimeter of simple 2D shapes.</p>
<ul style="list-style-type: none">• Tell and write the time from an analogue clock• Tell and write the time from an analogue clock with Roman Numerals I to XII• Tell the 12 hour and 24-hour time• Estimate and read time with increasing accuracy to the nearest minute• Record and compare time in terms of seconds, minutes and hours• Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight• Know the number of seconds in a minute• Know the number of days in each month• Know the number of days in a year and leap year• Compare durations of events (time taken by particular events or tasks)	<ul style="list-style-type: none">• Measure, compare, add and subtract lengths (m/cm/mm), mass (kg/g) and volume/capacity (l/ml)	

YEAR 3 – GREATER DEPTH

MD –
Begin to find
remainders when
dividing.

NPV
Recognise the place
value of each digit in
four-digit numbers

FR –
Add and subtract
improper and mixed
fractions with the same
denominator

MD-
Recall multiplication
facts, and corresponding
division facts, in the 6 &
7 multiplication tables.

AS
To use the inverse to
calculate missing
number problems.

YEAR 4 – END POINTS

Y4 – NPV 1	Y4 – NPV 2	Y4 – NPV 3	Y4 – NPV 4	Y4 – NPV 5	Y4 – NPV 6
<p>Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.</p>	<p>Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning.</p>	<p>Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each</p>	<p>Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.</p>	<p>Round decimals with two decimal places to the nearest whole number and to one decimal place.</p>	<p>Read, write, order and compare number with up to three decimal places.</p>
<ul style="list-style-type: none"> • Multiply by 10 • Multiply by 100 • Divide by 10 • Divide by 100 	<ul style="list-style-type: none"> • 1000s, 100s, 10s and 1s • Partitioning 	<ul style="list-style-type: none"> • Round to the nearest 100 • The number line to 10,000 • 1,000 more or less • Compare 4-digit numbers • Order numbers • Round to the nearest 1,000 			

YEAR 4 – END POINTS

Y4 – NF 1	Y4 – NF 2	Y4 – NF 3
<p>Recall multiplication and division facts up to 12×12 and recognise products in multiplication tables as multiples of the corresponding number.</p>	<p>Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.</p>	<p>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)</p>
<ul style="list-style-type: none">• Multiply by 10• Divide by 10• Multiply and divide by 6• 6 times-table and division facts• The 3 times-table• Multiply and divide by 9• 9 times-table and division facts• Multiply and divide by 7• 7 times-table and division facts• 11 and 12 times-table• Multiply 3 numbers• Factor pairs		

YEAR 4 – END POINTS

Y4 – AS 1	Y4 – AS 2	Y4 – AS 3
<p>Add and subtract numbers with up to 4 digit using a formal written methods of columnar addition and subtraction where appropriate.</p>	<p>Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.</p>	<p>Estimate and use inverse operations to check answers to a calculation.</p>
<ul style="list-style-type: none">• Place Value – Thousands, hundreds, Tens & Ones• 2 digits add/subtract 2 digits• 3 digits add / subtract 2/3 digits• 4 digits add / subtract 2/3/4 digits• Crossing tens, hundreds and thousands barrier		

YEAR 4 – END POINTS

Y4 – MD 1	Y4 – MD 2	Y4 – MD 3	Y4 – MD 4
<p>Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.</p>	<p>Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.</p>	<p>Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.</p>	<p>Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method. Divide numbers up to 4 digits by a one-digit number using a formal written method.</p>
<ul style="list-style-type: none">• Multiply by 10• Multiply by 100• Divide by 10• Divide by 100	<ul style="list-style-type: none">• Multiply by 10• Divide by 10• Multiply and divide by 6• 6 times-table and division facts• The 3 times-table• Multiply and divide by 9• 9 times-table and division facts• Multiply and divide by 7• 7 times-table and division facts• 11 and 12 times-table• Multiply 3 numbers• Factor pairs		

YEAR 4 – END POINTS

Y4 – Fr 1	Y4 – Fr 2	Y4 – Fr 3	Y4 – Fr 4	Y4 – Fr 5
Reason about the location of mixed numbers in the linear number system.	Convert mixed numbers to improper fractions and vice versa.	Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.	Recognise and show, families of common equivalent fractions.	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities including non-unit fractions where the answer is a whole number.
<ul style="list-style-type: none">•Count in fractions•Fractions greater than 1	<ul style="list-style-type: none">•Count in fractions•Fractions greater than 1	<ul style="list-style-type: none">•Add 2 or more fractions•Subtract 2 fractions•Subtract from whole amounts		

YEAR 4 – END POINTS

Y4 – G 1	Y4 – G 2	Y4 – G 3
<p>Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.</p>	<p>Identify regular polygons, including equilateral triangles and squares, as those in which the side- lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.</p>	<p>Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.</p>
<ul style="list-style-type: none">• Describe position• Draw on a grid• Move on a grid• Describe movement on a grid	<ul style="list-style-type: none">• Measure perimeter• Perimeter on a grid• Perimeter of a rectangle• Perimeter of rectilinear shapes	<ul style="list-style-type: none">• Lines of symmetry• Complete a symmetric figure

YEAR 4 – END POINTS

Y4 – MM 1	Y4 – MM 2	Y4 – MM 3	Y4 MM4	Y4 MM5
<p>Convert between different units of measure.</p> <ul style="list-style-type: none"> • Km – M – Cm – Mm • Days – Hours – Minutes – Seconds • L – Ml 	<p>Estimate, compare and calculate different measures (km, m, cm, mm, ml, l), including pounds and pence.</p> <ul style="list-style-type: none"> • 	<p>Read, write and draw an analogue time to the nearest minute.</p> <ul style="list-style-type: none"> • Time Facts • Read, write and draw to the nearest 5 minutes • Past and to times. 	<p>Read, write and convert between analogue and digital 12 – and 24 hour clocks.</p>	<p>Calculate duration within increasing difficulty</p>
Y4 – MM 6	Y4 – MM 7			
<p>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p>	<p>Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p>			

YEAR 4 – END POINTS

Y4 – G1	Y4 – G2	Y4 – G3	Y4 – G4	Y4 – G5
<p>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</p>	<p>Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.</p>	<p>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</p>	<p>Plot specified points and draw sides to complete a given polygon.</p>	<p>Describe movements between positions as translations of a given unit (left, right & up, down)</p>
	<ul style="list-style-type: none">• Lines of symmetry• Complete a symmetric figure			

YEAR 4 – GREATER DEPTH

MD –
Begin to find factors
and multiples of
positive whole numbers

NPV -
Recognise the place
value of each digit in
numbers with up to 2
decimal places

MD-
Multiplying and dividing
decimals (up to 2
decimal places) by 10,
100

NPV -
Reason about the
location of any number
with up to 2 decimals
places in the linear
number system

YEAR 5 – END POINTS

Y5 – NPV 1	Y5 – NPV 2	Y5 – NPV 3	Y5 – NPV 4	Y5 – NPV 5	Y5 – NPV 6
<p>Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01</p>	<p>Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning.</p>	<p>Reason about the location of any number with up to 2 decimal places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.</p>	<p>Read and write decimal numbers as fractions</p>	<p>Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.</p>	<p>Convert between units of measure, including using common decimals and fractions.</p>
<ul style="list-style-type: none"> • Understand thousandths • Thousandths as decimals 	<ul style="list-style-type: none"> • Decimals up to 2 d.p. • Numbers up to 1, 000, 000 • Read Roman Numerals to 1000 and recognise years written in Roman Numerals 	<ul style="list-style-type: none"> • Rounding decimals • Order and compare decimals • Round any number to 1, 000, 000 to the nearest 10, 100, 1000, 10, 000 and 100, 000. 			<ul style="list-style-type: none"> • Decimals as fractions • Kilograms and kilometres • Millimetres and millilitres • Metric units • Imperial units • Converting units of time • Timetables

YEAR 5 – END POINTS

Y5 – NF 1	Y5 – NF 2	Y5 NF 3
Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.	Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).	Count forwards and backwards with positive and negative whole numbers including through zero.
<ul style="list-style-type: none">• Multiples• Factors• Common factors• Prime numbers• Square numbers		

YEAR 5 – END POINTS

Y5 – AS 1	Y5 – AS 2	Y5 – AS 3
<p>Add and subtract numbers with up to 4 digit using a formal written methods of columnar addition and subtraction where appropriate.</p>	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p>
<ul style="list-style-type: none">• Place Value – Thousands, hundreds, Tens & Ones• 2 digits add/subtract 2 digits• 3 digits add / subtract 2/3 digits• 4 digits add / subtract 2/3/4 digits• Crossing tens, hundreds and thousands barrier		

YEAR 5 – END POINTS

Y5 – MD 1	Y5 – MD 2	Y5 – MD 3	Y5 – MD 4	Y5 – MD 5	Y5 – MD 6
<p>Multiply and divide numbers by 10, 100 and 1000; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size.</p>	<p>Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.</p>	<p>Multiply any whole number with up to 4 digits by any one-digit or two-digit numbers using a formal written method.</p>	<p>Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.</p>	<p>Recognise and use square numbers and cube numbers.</p>	<p>Solve Problems involving multiplication and division and a combination of these including understanding the meaning of the equals sign</p>
<ul style="list-style-type: none"> • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiples of 10, 100 and 1,00 • Multiplying decimals by 10, 100 and 1,000 • Dividing decimals by 10, 100 and 1,000 	<ul style="list-style-type: none"> • Multiples • Factors • Common factors • Prime numbers • Square numbers 	<ul style="list-style-type: none"> • Multiply 4-digits by 1-digits • Multiply 4-digits by 2-digits 	<ul style="list-style-type: none"> • Divide 4-digits by 1-digit • Divide with remainders 		

YEAR 5 – END POINTS

Y5 – Fr 1	Y5 – Fr 2	Y5 – Fr 3	Y5 – Fr 4	Y5 – Fr 5
Recognise mixed numbers and improper fractions and convert from one form to the other.	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundreds.	Compare and order fractions whose denominators are all multiples of the same number.	Add and subtract fractions with the same denominator and denominators that are multiples of the same number.	Multiply proper fractions and mixed number factions by a whole number.

YEAR 5 – END POINTS

Y5 – G1	Y5 – G2	Y5 – G 1	Y5 – G 2	Y5 – G4	Y5 – G5
<p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p>	<p>Compare and classify geometric shapes based on their properties and sizes.</p>	<p>Compare, estimate and measure acute, obtuse and reflex angles, angles in degrees ($^{\circ}$) and draw angles of a given size.</p>	<p>Compare areas and perimeter and calculate the area and perimeter of rectangles (including squares) using standard units.</p>	<p>Identify: Angles at a point and a whole turn (360 degrees) Angles at a point on a straight line</p>	<p>Identify, describe and represent the position of a shape following a reflection or translation, using appropriate language, and know that the shape has not changed.</p>
<ul style="list-style-type: none"> • Properties of 2D shapes • Types of triangles • Knowledge of shapes to identify the length of missing sides. 		<ul style="list-style-type: none"> • Measuring angles in degrees • Measuring with a protractor • Drawing lines and angles accurately 	<ul style="list-style-type: none"> • Area / perimeter of rectangles • Area / Perimeter of compound shapes • Area / Perimeter of irregular shapes 		

YEAR 5 – END POINTS

Y5 – MM1	Y5 – MM 2	Y5 – MM 3	Y5 – MM4	Y5 – MM5
Convert between different units of metric measure	Understand and use appropriate equivalences between metric and common imperial units.	Use all four operations to solve problems involving measure and use decimal notation, including scaling.	Solve problems involving converting between units of time.	Read, analyse and calculate duration on a timetable with multiple 24 / 12-hour digital times.
<ul style="list-style-type: none">• Kilometre – Metre• Metre – Centimetre• Centimetre – Millimetre• Grams – Kilograms• Litre – Millilitres	<ul style="list-style-type: none">• Pounds• Pints• Inches	<ul style="list-style-type: none">• Length• Mass• Volume• Money		<ul style="list-style-type: none">• Read timetables• Analyse and comprehend timetables• Calculate duration between times

YEAR 5 – GREATER DEPTH

MD –
Begin to find factors
and multiples of
positive whole numbers

NPV -
Recognise the place
value of each digit in
numbers up to 10
million

MD-
Multiplying and dividing
decimals (up to 2
decimal places) by 10,
100

NPV -
Reason about the
location of any number
with up to 2 decimals
places in the linear
number system

YEAR 6 – END POINTS

Y6 – NPV 1	Y6 – NPV 2	Y6 – NPV 3	Y6 NPV - 4	Y6 – NPV 5	Y6 – NPV 6
<p>Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000).</p>	<p>Read, write, identify, order and compare numbers up to 10, 000, 000 and determine the value of each digit.</p>	<p>Identify the value of each digit in numbers given to three decimal places.</p>	<p>Read, write, identify, order and compare the value of each digit in numbers given to three decimal places.</p>	<p>Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.</p>	<p>Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.</p>
<ul style="list-style-type: none"> • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Convert metric measures 	<ul style="list-style-type: none"> • Numbers to 10 million 			<ul style="list-style-type: none"> • Compare and order any number • Round any number • Negative numbers 	

YEAR 6 – END POINTS

Y6 – NF 1	Y6 – NF 2	Y6 – AS 1	Y6 – AS 2
Round any whole number to a required degree of accuracy	Use negative numbers in context, and calculate intervals across zero	Use their knowledge of the order of operations to carry out calculations involving the four operations.	Solve addition and subtraction multi-step problems in contexts, deciding which operations to use and why.

YEAR 6 – END POINTS

Y6 – MD 1	Y6 – MD 2	Y6 – MD 3	Y6 – MD 4	Y6 – AS/MD 5
Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.	Multiply any whole number with up to 4 digits by any one-digit or two-digit numbers using a formal written method.	Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.	Multiply and divide numbers by 10, 100 and 100 giving answers up to three decimal places.	Solve arithmetic and reason problems involving addition, subtraction multiplication and division.
<ul style="list-style-type: none">• Multiples• Factors• Common factors• Prime numbers• Square numbers	<ul style="list-style-type: none">• Multiply 4-digits by 1-digits• Multiply 4-digits by 2-digits• Answers up to 2 decimal places	<ul style="list-style-type: none">• Divide 4-digits by 1-digit• Divide with remainders• Answers up to 2 decimal places		

YEAR 6 – END POINTS

Y6 – Fr 1	Y6 – Fr 2	Y6 – Fr 3	Y6 – Fr 4	Y6 – Fr 5	Y6 – Fr 6	Y6 – Fr 7
<p>Recognise when fractions can be simplified, and use common factors to simplify fractions.</p>	<p>Compare and order fractions, including fraction > 1</p>	<p>Multiply simple pairs of proper fractions, writing the answer in its simplest form.</p>	<p>Divide Proper fractions by whole numbers.</p>	<p>Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.</p>	<p>Associate a fraction with division and calculate decimal fraction equivalents.</p>	<p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p>
<ul style="list-style-type: none"> • Equivalent fractions • Simplify fractions • Four rules with fractions 		<ul style="list-style-type: none"> • Fractions on a number line • Compare and order (denominator) • Add fractions • Subtract fractions • Mixed addition and subtraction • Four rules with fractions 		<ul style="list-style-type: none"> • Fractions on a number line • Compare and order (denominator) • Compare and order (numerator) 		

YEAR 6 – END POINTS

Y6 – R&P 1	Y6 – R&P 2	Y6 – R&P 3	Y6 – Algebra 1
Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.	Solve problems involving the calculation of percentages and the use of percentages for comparison.	Solve problems involving similar shapes where the scale factor is known or can be found.	Use simple formulae
<ul style="list-style-type: none">• Equivalent fractions• Simplify fractions• Four rules with fractions		<ul style="list-style-type: none">• Fractions on a number line• Compare and order (denominator)• Add fractions• Subtract fractions• Mixed addition and subtraction• Four rules with fractions	

YEAR 6 – END POINTS

Y6 – G 1	Y6 – G 2	Y6 – G 3	Y6 – G 4	Y6 – G 5	Y6 – G 6
<p>Draw 2D shapes using given dimensions and angles.</p>	<p>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</p>	<p>Recognise , describe and build simple 3D shapes, including making nets</p>	<p>Find unknown angles in any triangles, quadrilaterals, and regular polygons</p>	<p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles</p>	<p>Describe positions on a full coordinate grid (all four quadrants). Draw and translate simple shapes on the coordinate plane and reflex them in the axes.</p>
<ul style="list-style-type: none"> • Measurement • Angles (obtuse & acute) 	<ul style="list-style-type: none"> • Radius • Diameter • Circumference 		<ul style="list-style-type: none"> • Years, months, weeks, days, hours, seconds 	<p>Measuring angles using a protractor Angles around a point – 360 degrees Angles on a straight line – 180 degrees</p>	

YEAR 6 – END POINTS

Y6 – Algebra 1	Y6 – Algebra 2	Y6 – Algebra 3	Y6 – Algebra 4	Y6 – Algebra 5
Use simple formulae	Generate and describe linear number sequences	Express missing number problems algebraically	Find pairs of numbers that satisfy an equation with two unknowns.	Enumerate possibilities of combinations of two variables.

YEAR 6 – GREATER DEPTH

