	AUTUMN TERM	SPRING TERM	SUMMER TERM
Pathway 3 Foundation/ higher GCSE (In addition to consolidating subject content from key stage 3)	**Year 11** **Foundation** Ratio and proportion. Multiplicative Reasoning. Algebra Linear and Quadratic equations and graphs. Indices and standard form. Fractions, decimals, percentages **Higher** Multiplicative Reasoning. More trigonometry. Further statistics. Similarity and congruence. Circle theorems. Equations and graphs	**Year 11** **Foundation** Probability. Angles Constructions, loci and bearings. Perimeter, area and volume. Congruence, similarity and vectors. More algebra **Higher** More algebra. Vectors and geometric proof. Proportion and graphs	Year 11 Revision & exams
	Year 10 **Foundation** Number Algebra Fractions and percentages. Graphs, tables and charts. **Higher** Number. Algebra. Fractions, ratio and percentages	**Year 10** **Foundation** Angles, Pythagoras and Trigonometry Equations, inequalities and sequences. **Higher** Interpreting and representing data. Angles and trigonometry. Graphs	**Year 10** **Foundation** Perimeter, area and volume. Averages and range. Transformation **Higher** Area and volume. Probability. Transformations and constructions. Equations and inequalities

Upper KS3	**Year 9** **Structure of the number system** Standard form 1.3.3 **Structure of the number system** Algebra: Expressions & formulae 1.4.4, 1.4.5	**Year 9** **Sequences & graphs** Non-linear relationships 4.1.3 **Geometry** Geometrical properties:similarity & Pythagoras' theorem 6.1.2,6.1.3 **Multiplicative reasoning** Trigonometry 3.2.1, 3.2.2	**Year 9** **Sequences & graphs** Graphical representations 4.2.3 Ratio, proportion and rates of change **Statistics & probability** Probability 5.3.1, 5.3.2, 5.3.3 Revision KS3
Lower KS3	**Structure of the number system** Place value, Estimation & rounding 1.1 1.1.1, 1.1.2, 1.1.3, 1.1.4 Properties of number: factors, multiples, squares and cubes. 1.2, 1.2.1,1.2.2,1.2.3 Arithmetic procedures with integers and decimals 2.1.1, 2.1.2, 2.1.5 Expressions and equations1.41,1.42,1.43 Solving linear equations 2.2.1,2.2.2, ,2.2.3,2.2.4	**Structure of the number system** Arithmetic procedures including fractions 1.3.1,1.3.2 2.1.3,2.1.4 Ratio **Multiplicative reasoning** Understanding multiplicative relationships: percentages and proportionality 3.1.13.1.2,3.13,3.1.4,3.1.5,3.1.6 **Statistics & probability** Statistical representations, measures and analysis 5.1.1,5.1.2, 5.2.1,5.2.2 **Sequences & graphs** Sequences 4.1.1,4.1.2	**Sequences & graphs** Graphical representations of linear relationships 4.2.1,4.2.2 **Geometry** Perimeter, area and volume 6.2.1,6.2.2,6.2.3 Geometrical properties: polygons 6.1.1 Constructions 6.4.1,6.4.2 Transformations 6.3.1,6.3.2,6.3.3,6.3.4

Upper KS2	**NUMBER & PLACE VALUE** 5NPV–1 6NPV–1 5NPV–2 6NPV–2 5NPV–3 6NPV–3 5NPV–4 6NPV–4 5NPV–5 **NUMBER FACTS** 5NF–1 5NF–2	**ADDITION & SUBTRACTION** 6AS/MD–1 6AS/MD–2 6AS/MD–3 6AS/MD–4 **MULTIPLICATION/DIVISION** 5MD–1 5MD–2 5MD–3 5MD–4	**FRACTIONS** 5F–1 6F–1 5F–2 6F–2 5F–3 6F–3 Percentages **GEOMETRY** 5G–1 6G–1 5G–2
	Discrete sessions on time & measures (including money) across the year-see resource reference below: ● **convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)** ● **understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints** ● **measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres** ● **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** ● **estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]** ● **solve problems involving converting between units of time use all four operations to solve problems involving**		

	measure [for example, length, mass, volume, money] using decimal notation, including scaling. ● solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate ● use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ● convert between miles and kilometres ● recognise that shapes with the same areas can have different perimeters and vice versa ● recognise when it is possible to use formulae for area and volume of shapes ● calculate the area of parallelograms and triangles ● calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3].

| **Lower KS2** | **NUMBER & PLACE VALUE**
3NPV–1
4NPV–1
3NPV–2
4NPV–2
3NPV–3
4NPV–3
3NPV–4
4NPV–4

NUMBER FACTS
3NF–1
4NF–1
3NF–2
4NF–2
3NF–3
4NF–3 | **ADDITION & SUBTRACTION**
3AS–1
3AS–2
3AS–3

MULTIPLICATION/DIVISION
3MD–1
4MD–1
4MD–2
4MD–3 | **FRACTIONS**
3F–1
4F–1
3F–2
4F–2
3F–3
4F–3

GEOMETRY
3G–1
4G–1
3G–2
4G–2
4G–3 |

	Discrete sessions on time & measures (including money) across the year- see resource reference below:
	measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) **measure the perimeter of simple 2-D shapes** **add and subtract amounts of money to give change, using both £ and p in practical contexts** **tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks** **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, a.m./p.m., morning, afternoon, noon and midnight** **know the number of seconds in a minute and the number of days in each month, year and leap year** **compare durations of events [for example to calculate the time taken by particular events or tasks].** **Convert between different units of measure [for example, kilometre to metre; hour to minute]** **measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres** **find the area of rectilinear shapes by counting squares estimate, compare and calculate different measures, including money in pounds and pence**

| KS1 | **NUMBER & PLACE VALUE**
1NPV–1
1NPV–2
2NPV–1
2NPV–2

NUMBER FACTS
1NF–1
1NF–2
2NF–1 | **ADDITION & SUBTRACTION**
1AS–1
2AS–1
1AS–2
2AS–2
2AS–3
2AS–4
MULTIPLICATION/DIVISION
2MD–1
2MD–2 | **FRACTIONS**
1.Name the fractions 'one-half', 'one quarter' and 'one third' in relation to a fraction of a length, shape or set of objects
2. Read & write the fraction notation ½ ⅓ and ¼ and relate this to a fraction of a length, shape or set of objects
3. Find half of numbers
4.Find ⅓, ¼ of a number
5. Find 2/4 and ¾ of an object, shape,set of objects, length or quantity, recognise the equivalence of 2/4 and 1/2

GEOMETRY
1G–1
2G–1
1G–2 |

	Discrete sessions on time & measures (including money) across the year- see resource reference below: ● **choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels** ● **compare and order lengths, mass, volume/capacity and record the results using >, < and =** ● **recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money** ● **solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change** ● **compare and sequence intervals of time** ● **tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times** ● **know the number of minutes in an hour and the number of hours in a day**
EYFS	**Cardinality & counting** Counting: saying number words in sequence (stable order) Counting: tagging each object with one number word (1:1 correspondence) Counting: knowing the last number counted gives the total so far (cardinal principle) Subitising: recognising small quantities without needing to count them all Numeral meanings Conservation: knowing that the number does not change if things are rearranged (as long as none have been added or taken away- order irrelevance) **Comparison** More than / less than Identifying groups with the same number of things

Composition
Part–whole: identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total)
Inverse operations
A number can be partitioned into different pairs of numbers
A number can be partitioned into more than two numbers
Number bonds: knowing which pairs make a given number

Pattern
Continuing an AB pattern
Copying an AB pattern
Make their own AB pattern
Spotting an error in an AB pattern
Identifying the unit of repeat
Continuing an ABC pattern
Continuing a pattern which ends mid-unit

Shape & space
Developing spatial awareness: experiencing different viewpoints
Developing spatial vocabulary
Shape awareness: developing shape awareness through construction
Representing spatial relationships
Identifying similarities between shapes
Showing awareness of properties of shape
Describing properties of shape
Developing an awareness of relationships between shapes

Measures
Comparing amounts of continuous quantities
Showing awareness of comparison in estimating and predicting
Comparing indirectly
Recognising the relationship between the

	Comparing numbers and reasoning Knowing the 'one more than/one less than' relationship between counting numbers	Make their own ABB, ABBC patterns Spotting an error in an ABB pattern Symbolising the unit structure Generalising structures to another context or mode Making a pattern which repeats around a circle Making a pattern around a border with a fixed number of spaces Pattern-spotting around us	size and number of units Beginning to use units to compare things Beginning to use time to sequence events Beginning to experience specific time durations

Position and direction, Statistics are not covered through RtP.
These should be taught discretely through subjects such as position and direction through PE, map work in Geography or coding/programming in ICT

[EYFS materials](#)
KS1 materials [*DfE guidance*](#) *KS1* **Time/ money & measures** *sessions- use reference material from* [*curriculum prioritisation*](#) *Y1 & 2*
KS2 materials [*DfE guidance*](#) *Lower KS2* **Time/ money & measures session**- *use reference material from* [*curriculum prioritisation*](#) *Y3 & 4* *Upper KS2* **Time/ money & measures session**- *use reference material from* [*curriculum prioritisation*](#) *Y5 & 6*

KS3 Materials:

[Assessment checkpoints](#) *for Lower KS3*
[KS3 Mastery Professional Development Materials](#)