	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Fractions	Children should be able to recognise when shape has been halved and that it has 2 equal parts. Children should be able to half a group <10 (by knowing they can share the resources equally).	Children should be able to recognise when shapes have been split into quarters. Children should be able to split a group into quarters and explain that they would share the group into four groups. The children should recognise containers that are a quarter or a half full. Children should be able to recognise ½ and ¼ written as fractions.	Children should be able to recognise a third, two-thirds and three-quarters written as fractions. Children should be able to explain how to split a shape or a group into thirds. Children should be able to count in halves to 10. Children should be able to recognise the numerator and denominator.	Children should be able to read and write unit and non-unit fractions. Children should be able to count forwards and backwards in tenths up to 5. Children should recognise fractions that are equivalent to one half.	Children should be able to recognise and convert between improper fractions and mixed numbers. Children should recognise that one tenth is the same as 0.1. Children should recognise that a half is the same as 0.5. Children should recognise that a quarter is the same as 0.25.	Children should be able to explain how to add and subtract fractions. Children should know how to find the lowest common multiple and how they can use this to add and subtract fractions. Children should know the equivalent decimal to one third and three quarters.	Children should be able to multiply and divide fractions by fractions and whole numbers. Children should be able to find fractions of amounts. Children should be able to demonstrate how they would simplify a fraction. Children should be able to define percentage. Children should know how to calculate the percentage of an amount. Children should know percentage, fraction and decimal equivalents (0.25, 0.5, 0.75, 1) Children should be able to define ratio and proportion.
Number	Children should be able to recognise numbers one to ten.	Children should know their number bonds to ten. Children should be able to name and recognise the addition, subtract and equal to symbols. Children should know that the = sign, means the same as or equal to. Children should recognise the ones and tens columns and explain what each digit represents. Children should recognise odd and even numbers.	Children should know their number bonds to 20. Children should be able to identify the multiplication and division signs. Children should be able to describe division as grouping or sharing. Children should be able to related repeated addition to multiplication. Children should be able to recognise the hundreds column and explain what each digit in a three-digit number represents. Children should be able to count in 2s, 5s and 10s (forwards and backwards).	Children should know the more than and less than signs. Children should be able to count in 3s, 4s, 9s and 11s (forwards and backwards). Children should be able to recognise the thousands column and explain what each digit in a four-digit number represents. Children should know the Roman numerals I, V and X. Children should be able to explain how they would round a number to the nearest 10.	Children should be able to define and give examples of factors and multiples. Children should be able to recognise the tenths column and the decimal point. Children should know the Roman numerals L, C, D and M. Children should be able to explain how they would round a number to the nearest 100. Children should know all their times tables to 12 x 12.	Children should know how to calculate the lowest common multiple and highest common factor of two numbers. Children should be able to define and name prime numbers (to 20). Children should be able to calculate and define square numbers and know how to represent these using 2. Children should be able to calculate and define cube numbers and know how to represent these using 3. Children should know how to round to the nearest 1 and 0.1.	Children should be able to recognise the millions, hundred thousands and thousandths columns. They should also understand when to use a comma. Children should be able to round a number to different place values. Children should be able to read roman numerals (including dates).

						Children should be able to recognise the ten thousand and hundredths columns. They should also understand when to use a comma.	
Shape	Children should be able to identify squares, circles and triangles and describe them.	Children should be able to recognise rectangle, sphere, cube and cylinder. Children should be able to identify faces, edges and vertices. Children should know that it is one vertex and more than one vertices. Children should be able to differentiate between curved and straight edges and faces.	Children should know that quadrilaterals are four-sided, 2D shapes. Children should be able to recognise these 3D shapes: cuboid and cone. Children should be able to recognise these 2D shapes: pentagon, hexagon, semi-circle and oval. Children should be able to recognise lines of symmetry in 2D shapes.	Children should be able to recognise and escribe the features of a triangular prism, tetrahedron, square-based pyramid, heptagon and octagon. Children should be able to explain and demonstrate clockwise and anti-clockwise. Children should know that a polygon is any 2D shape with straight sides. Children should be able to recognise and demonstrate vertical and horizontal.	Children should be able to describe and recognise equilateral, isosceles, scalene and right-angled triangles. Children should be able to describe and recognise acute, obtuse and right angles and know that they are measure in degrees. Children should be able to explain how to calculate the perimeter of a shape. Children should be able to describe and recognise parallel and perpendicular lines.	Children should be able to describe and recognise parallelograms, rhombuses, kites and trapezia. Children should recognise and be able to use a protractor. Children should recognise and be able to define reflex angles. Children should recognise various prisms and be able to define a prism. Children should be able to recognise and define regular and irregular polygons. Children should know that angles around a point add up to 180°. Children should be able to calculate and define the area of rectangles.	Children should know that the angles in a triangle add up to 180°. Children should know that angles in a quadrilateral add up to 360°. Children should know that opposite angles are equal. Children should be able to recognise and name an octahedron and a dodecahedron. Children should know how to calculate the area of a triangle and parallelogram.
Money	Children should be able to recognise the following coins: 1p, 2p, 5p and 10p.	Children should be able to recognise 20p, 50p and £1 coins. Children should recognise £5, £10 and £20 notes.	Children should be able to recognise £2 coin and £50 note. Children should be able to talk about how debit cards are linked to a person's bank account and how they can be used to spend money.	Children should be able to calculate change from five pounds and discuss a range of methods including counting up on a numberline, subtraction and rounding. Children should be able to create amount under £5 with different combinations of coins.	Children should be able to calculate half a price, including what to do when the price has an odd number of pence. Children should be able to estimate the cost of a few items to the nearest pound.	Children should be able to demonstrate the skills needed to calculate problems involving units of measure, fractions and money. Children should know that different countries use different currencies. Children should be able to talk about budgeting, related to their experiences.	Children should be able to calculate percentages of prices. Children should be able to solve problems involving coins, instalments and sales offers. Children should be able to define debit and credit.
Time	Children should be able to say the days of the week in order.	Children should be able to name times of the day – dawn, morning, midday,	Children should be able to recognise half past times on an analogue clock.	Children should be able to read quarter to and quarter past on an analogue clock.	Children should know how to tell the time to the	Children should be able to convert between seconds, minutes and hours.	Children should be able to interpret information from time tables.

	Children should be able to identify the morning and the afternoon and recognise some activities that they do in the morning and the afternoon. Children should be able to recognise clocks in their environment. Children should know the seasons of the year.	afternoon, dusk, evening, night and midnight. Children should be able to identify the minute-hand and hour hand. Children should be able to recognise o'clock times on an analogue clock. Children should know the months of the year and name when some significant events happen in the year - Christmas, Easter and Harvest.	Children should know that there are twelve months in a year and seven days in a week. Children should be able to name activities that take a second, a minute and an hour, and know which are longer or shorter.	Children should be able to read o'clock and half past on a digital clock. Children should know that there is 60 minutes in an hour, 24 hours in 1 day and 7 days in a week. Children should know that a fortnight is 2 weeks. Children should know when midnight and noon are.	nearest 5 minutes on an analogue clock. Children should know how to read quarter past and quarter to on a digital clock. Children should know that there are 60 seconds in a minute. Children should know how many days there are in each month. Children should know how many days and weeks are in a year.	Children should be able to convert between days, weeks, months and years. Children should be able to calculate how many minutes until the next hour. Children should be able calculate tome problems that bridge o'clock. Children should recognise am and pm on a 12-hourdigital clock. Children should be able to read a 24-hour digital clock.	Children should be able to solve problems involving timings.
Measure	Children should be able to recognise taller/longer and shorter items when comparing them. Children should be able to recognise which things are heavier and which are lighter. Children should be able to recognise when a container is full or empty.	Children should be able to recognise when a container is half full. Children should be able to recognise a variety of weighing scales including digital scales. Children should be able to recognise when scales are balanced and this means the items on either side weigh the same. Children should be able to identify height/length and width of an object.	Children should be able to recognise a ruler and tape measure and know that they are used to measure length. Children should be able to demonstrate the length of a centimetre and a metre, and name some objects that you would measure using them. Children should know that cm and m represent centimetres and metres. Children should name some objects that you would measure using grams or kilograms. Children should know that g and kg represent grams and kilograms.	Children should be able to recognise containers that would be measured in litres and millilitres. Children should be able to recognise that temperature is measured in degrees. Children should be able to recognise when millimetres and kilometres should be used to measure distance. Children should be able to recognise the abbreviations of millilitres, litres, degrees Celsius, millimetres and kilometres	Children should know how many millilitres in a litre, grams in a kilogram, metres in a kilometre, centimetres in a metre and millimetres in a centimetre. Children should be able convert unit measures – eg. 3L = 3000ml. Children should be able to recognise the height, width/length and depth of a 3D shape.	Children should be able to convert measures including lengths, capacities and mass. Children should be able to solve problems which involved converting measures. Children should know that a tonne is 1000kg. Children should know that a centilitre is 10ml.	Children should be aware of imperial measurements and their metric equivalent. Children should be able to convert between fractions and whole units of measure.
Position and direction	Children should be able to describe the position of an object in relation to another.	Children should be able to use between to escribe the position of an item. Children should be able to demonstrate a quarter, half, three-quarter and full turn.	Children should know the direction left and right. Children should know the compass points and their order.	Children should be able to describe the coordinates of a location in the first quadrant. Children should be able to recognise axis and describe	Children should be able to plot coordinates in the first quadrant. Children should be able to recognise and name the x-axis and y-axis, as well as	Children should be able to describe and demonstrate translating a shape in the first quadrant. Children should be able to reflect a shape in a mirror line.	Children should know that there are four quadrants. Children should be able to locate coordinates within all quadrants.

			Children should be able to demonstrate clockwise and anticlockwise.	them as horizontal or vertical.	say which is vertical and which is horizontal.	Children should be able to locate the origin.	Children should be able to locate missing coordinates of known 2D shapes.
Statistics	Children should be able to count objects in categories and say which has most and least.	Children should be able to interpret data from a simple table. Children should be able to explain how to use a tally chart.	Children should know what a pictogram is and the key features of one, including the key. Children should be able to interpret simple data from a pictogram. Children should know what a block diagram is and the key features of one. Children should be able to interpret simple data from a block diagram.	Children should be able to interpret data from a bar chart, including data that falls between intervals. Children should be able to discuss that bar chart can have various scales that need to be appropriate to the data been displayed. Children should be able to recognise ways to collect data such as a survey, questionnaire, tally chart or table.	Children should know the difference between continuous and discrete data and explain how it can be presented. Children should be able to interpret data from a line graph. Children should be able to recognise the x-axis and y-axis on line and bar graphs.	Children should be able to interpret data from a pie chart using their knowledge of angles and fractions. Children should be able to discuss correlations shown on a line graph and draw conclusions about possible relationships. Children should be able to make predictions following on from a set of data presented on a line graph. Children should be able to consider minimum and maximum values of an axis for a given set of data.	Children should be able to describe a journey based on a time vs distance graph, including stops. Children should be able to calculate the mean, mode, median and range for a selection of data. Children should be able to define frequency.

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Fractions	Whole Half Part	Fraction Quarter Share Group Container	Numerator Denominator Share Equal	Equivalent Decimal Tenths Unit fraction Non-unit fraction	Convert Mixed number Improper fractions Decimal point Hundredths	Lowest common multiple Thousandths	Simplify Ratio Fractions of amounts Proportion
Number	Number One Two Three Four Five Six Seven Eight Nine Ten	Addition Subtraction Equal to Same as Ones Tens Place value Number sentence Number	Array Digit Multiply Divide Share Group	Greater than Less than Remainder Roman numerals Rounding	Factor Multiple Decimal point Tenths	Lowest common multiple Highest common factor Prime number Square numbers Cube numbers	Millions Hundred thousands Thousandths
Shape	Square Circle Triangle Shape Straight Round	Rectangle Sphere Cube Cylinder Vertex Vertices Edges Faces Curved	2D 3D Line of symmetry Apex Cuboid Cone Pentagon Hexagon Semi-circle Oval	Polygon Triangular prism Tetrahedron Square based pyramid Heptagon Octagon Anti-clockwise Clockwise polygon Horizontal Vertical	Equilateral Perimeter Isosceles Parallel Scalene Perpendicular Right-angled triangle Acute Obtuse Right angle	Parallelogram Trapezium Kite Rhombus Protractor Reflex angle Prism Regular polygon Irregular polygon Area	Opposite angles Octahedron Dodecahedron
Money	Coin	Pence	Owe	Combinations	Sale	Transaction	Invoice

	Money Price	Pound Amount Cost Change	Total Difference Pay Bank account	Convert Value	Receipt Estimate Reduction	Budget Currency	Debit Credit Instalment
Time	Before After Morning Afternoon Monday Tuesday Wednesday Thursday Friday Saturday Season Sunday Clock Summer Autumn Winter Spring	Months – January, February, March, April, May, June, July, August, September, October, November and December Minutes Hours Minute hand Hour hand O'clock Dawn, morning, midday, afternoon, dusk, evening, night and midnight First, next and finally	Duration Second Time Year Longer Shorter	Fortnight Midnight Noon Quarter-past Quarter-to Digital Analogue	Annual Monthly Biannual Calendar	am pm	Time tables Departure Arrival
Measure	Container Jug Full Empty Heavier Lighter Taller Longer Shorter	Height Length Weight Balance Half full Weighing scales	Centimetres (cm) Metres (m) Grams (g) Kilograms (kg) Heaviest Lightest	Capacity Celsius Volume Degrees Increment Millilitre Millimetre Litre Kilometre Temperature	Convert Width Depth	Tonne Centilitre Capacity Mass	Imperial Metric Inch Foot Yard Mile Ounce Pound Stone Pint Gallon
Position and direction	Front Behind Under On Above Next to Forwards Backwards	Between Quarter turn Half turn Three-quarter turn Full turn	Left Right North South East West Direction Compass Clockwise Anticlockwise	Brackets Coordinates Location Horizontal Vertical Axis	x-axis y-axis quadrant first quadrant	Translation Reflection Mirror line Origin	Four quadrants
Statistics	Count Most Least	Tally chart Tally Table	Pictogram Block diagram Key Data	Bar chart Scale Interval Survey Questionnaire	Continuous data Discrete data Line graph x-axis y-axis	Pie chart Correlation Conclusion Relationship Minimum value Maximum value Prediction	Time vs distance graph Mode Median Mean Range Frequency