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Maths Vocabulary Progression.

Place Value						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	
Count Subitise Sequence Order (ordinal number) Compare Equal Fewer More Less Zero	Approximate Decreasing Digit Estimate Even Increasing odd Partition Place value Quantity Unit Greater than Less than Equal to	Column Commutative Consecutive Ascending order Descending order	Numeral Roman numerals Round	Associative law Integer Negative number Positive number	Negative integer Positive Integer Power (of ten)	

Addition and Subtraction						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Add Addition Difference Double Plus Altogether Subtract Subtraction Sum Total Take away Minus Number bond Part Whole	Addend Facts Known fact	Calculate Commutative Efficient Inverse Near double Operation Relationship Column addition Colum subtraction Exchange Subtrahend Minuend Difference	Formal Written method Place holder			Brackets Equivalent expression Order of operations

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Multiplication and Division						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Double Half Unequal Equal Share Group	Divide Array Repeated addition Repeated subtraction	Division Multiple Multiplication Multiply	Factor Product Derived Facts Correspondence Scaling Multiplicand multiplier	Factor pairs Distributive law Dividend Divisor Quotient Short division Short multiplication Remainder	Common Factor Common multiple Prime number Prime factor Square number Cube number Divisible Divisibility Long multiplication Long division Remainder	Factorise

Fractions/Decimals/Percentages						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	Whole Half Quarter Fraction	Denominator Third Equivalent Unit Fraction Non-Unit Fraction Numerator Vinculum	Tenth	Equivalent Convert Proper Fraction Improper fraction Decimal Fraction Mixed numbers Simplify	Percent percentage	Common fraction Degree of accuracy Proportion

Ratio and Proportion						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
						Relative Size Missing value Scale factor Proportion ratio

Algebra						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
						Formula Linear number sequence Algebra Variable Unknown

Measurement (Height and Length)						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Distance Measure Compare Long(er)(est) Short(er)(est) Long Length Height Tall(er)(est)	Non-standard unit Metre (m) Standard Unit	Centimetre (cm) Scale Estimate Order	Kilometre (km) Millimetre (mm)	Convert	Cubic centimetre Cubic metre	Conversion Mile Foot/Feet Imperial Unit Inch Metric unit Square millimetre Square kilometre Cubic Millimetre Cubic Kilometre

Measurement (Weight, Capacity and Temperature)						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Balance Weight Capacity Heavy(er) Light(er) Full Empty Half full/empty Mass	Volume Kilogram (kg) Litres (l) Scales	Gram (g) Millilitre (ml) Temperature Celsius				Gallon Ounce Pint Pound Stone

Measurement (Time)						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Clock Time Quick(er) Slow(er) Earlier Later Before After First Last Next Today Yesterday Tomorrow Morning Afternoon Evening Day Week	Analogue clock Chronological Hour Minute order Days of the week Months of the year Month Year O'clock Half past	Intervals of time Quarter past Quarter to Duration	Roman numerals a.m. p.m. noon midnight Leap year Digital 12 hour clock 24 hour clock			

Measurement (Money)						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Cost	Money Coins Notes Pound sterling (£) Pence (p)	Value Change				

Geometry – Properties of Shape						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
2D Shape Rectangle Square Circle Corner Edge Triangle 3D shape Cuboid Cube Face Curved Surface Cylinder Straight Flat Side Vertex (vertices)	Cone Oblong Property Pyramid Sphere	Angle Heptagon Hexagon Octagon Pentagon Quadrilateral Right angle Symmetry Apex	Prism Orientation Acute Angle Obtuse Angle Horizontal Irregular Vertical line Perpendicular Parallel Perimeter Regular Squared-based pyramid Triangle-based pyramid	Area Diagonal Isosceles Equilateral Kite Parallelogram Point Protractor Rectilinear Rhombus Scalene Trapezium Square centimetre	Reflex angle Degree Diagonal Angle on a line Angle at a point Congruent Decagon Dodecagon Nonagon Polygon Polyhedron Scale Square metre Tetrahedron Scaling Compound shapes Irregular shapes	Arc Radius Diameter Circumference Compass Centre Net Vertically opposite angles

Geometry – Position & Direction						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Above Below Over Under Between Direction On top of Next to Behind In front Beneath Pattern	Anti-clockwise Clockwise Position Movement Whole turn Quarter turn Half turn Left Position Right turn	Straight line Rotation Sequence		Coordinate Grid Interval Plot Axis	Reflection Translation Transformation	Intersect Origin Quadrant

Statistics						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	Block graph Chart Data Table	Frequency Pictograms Tally	Bar graph Axis	Time graph Discrete data Line graph Interpret	Timetable	Pie chart Mean Average

Acute angle	An angle that is smaller than a right angle.
Addend	A number to be added to another.
Addition	Finding the total, or sum, by combining two or more numbers.
Algebra	Algebra uses letters (like x or y) or other symbols in place of unknown values, and then identifies them with them using specific operations
Analogue Clock	A clock with faces and hands
Angle	The **amount of turn**, measured in degrees.
Angle at a point	Angles that meet at a point that sum to 360°.
Angle on a straight line	Angles formed on a straight line that sum to180°.
Anticlockwise	Movement in the oppositive direction to the motion of the hands of a clock.
Apex	The point (vertex) furthest from the base of an object.
Area	The space a surface takes up inside its perimeter. Area is always measured in square units.
Array	An arrangement of counters or numbers, in columns and rows, used to represent multiplication and division.
Ascending order	Arranged from smallest to largest. Increasing.
Average	A calculated "central" value of a set of numbers.

Axis	A fixed, reference line along which or from which distances or angles are taken.
Bar graph	A representation of data in which the frequencies are represented by the height or length of bars.
Brackets	Symbols used to separate parts of a multi-step calculation.
Capacity	The amount of liquid a container can hold.
Centimetre	A metric unit of length.
Centre	In a circle, the centre refers to one point that is equidistant to all points around the circumference of the circle.
Chronological	In time order.
Circle	The name of a 2D shape. A circle has a curved side.
Circumference	The perimeter/boundary of a circle.
Clockwise	Movement in the direction of the hands of a clock.
Column addition	A formal method of setting out an addition in ordered columns with each column representing a place value and ordered from right to left in increasing powers of 10.
Column Subtraction	A formal method of setting out a subtraction in ordered columns with each column representing a place value and ordered from right to left in increasing powers of 10.
Common Factor	A factor of two (or more) given numbers.
Common Multiple	A multiple of two (or more) given numbers.

Commutative	A property of addition and multiplication. It does not matter in which order the addends or factors are added or multiplied; the result will be the same.
Compare	Look for similarities and/or differences between at least two objects or sets.
Compound shape	A shape formed by combining two or more shapes.
Cone	A 3D shape which one circular plane face, which tapers to an apex.
Congruent	Used to describe two shapes or figures which are exactly the same size.
Convert	To change from one unit of measurement to another.
Coordinate	The position of a point usually described using pairs of numbers. Sometimes called cartesian coordinates.
Corner	A point where two or more lines meet. The correct mathematical term is a vertex (vertices).
Count	Assigning one number name to each of a set of objects to determine how many there are.
Cube	a 3D shape with six identical, square faces.
Cube number	The product of three equal factors.
Cubic centimetre	A unit used to measure volume. The space taken up by a cube with edges of length 1cm or which measures 1cm x 1cm x 1cm.
Cubic Metre	A unit used to measure volume. The space taken up by a cube with edges of length 1 metre.
Cuboid	A 3D shape with six rectangular faces.

Curved surface	A non-plane surface of a 3-D shape. Both cones and cylinders have curved surfaces.
Cylinder	A 3D shape with circular bases and a curved surface joining them.
2D Shape	Having only two dimensions, such as width and height but no thickness. Squares, Circles, Triangles, etc are two-dimensional objects. They are often described as flat.
3D shape	Having three dimensions (such as height, width and depth). They are often described as solid.
Data	Quantitative information which has been counted or measured.
Decimal	Relating to the base ten. Most commonly used synonymously with decimal fractions where the number of tenths, hundredth, thousandths, etc. are represented as digits following a decimal point.
Decimal Fraction	A fraction expressed in decimal form.
Descending order	Arranged from largest to smallest. Decreasing.
Degree	The unit of measure for angles.
Denominator	The number written below the line in a fraction. In a measure context, it indicates the number of equal parts into which the whole is divided. In a division context, it is the divisor.
Diagonal	A line segment that joins one vertex to another.
Diameter	A line from one point of the circumference of a circle to another on the oppositive side, which must pass through the centre of the circle.
Difference	The numerical difference between two numbers or sets of objects and is found by comparing the quantity of one set of objects with another. It is one way of thinking about subtraction.
Digit	One of the ten numerals from 0 to 9, from wich we compose numbers.

Digital Clock	A clock that displays the time as hours and minutes passed, usually since midnight.
Direction	The orientation of a line in space. e.g. north, south, east, west; up, down, right, left are directions.
Distributive	The process whereby adding some numbers and then multiplying the sum gives the same answer as multiplying the numbers separately and then adding the products.
Divide	To share or group into equal parts.
Dividend	The amount that you want to divide.
Divisibility	The property of being divisible by a given number. E
Divisible (by)	A whole number is divisible by another if there is no remainder after division and the result is a whole number.
Division	The process of partitioning a whole into equal parts.
Divisor	The number you divide by.
Dodecagon	A polygon with twelve sides and twelve angles.
Double	To multiply by two or add a value to itself
Edge	A line segment joining two vertices of a plane figure (2-D shape) and the intersection of two plane faces (in a 3-D shape).
Equal	Indicates equivalence between two values and can be expressed with the symbol '='. The symbol is read as 'is equal to' which means the same as. Expressions on either side of the symbol have the same value.
Equivalent fraction	Fractions with the same value as another.

Estimate	An appropriately accurate guess, depending on the context and numbers involved.
Even	A number with a 0, 2, 4, 6 or 8 in the ones and therefore exactly divisible by two.
Exchange	Change a number or expression for another of equal value. T
Expression	One or a group of numbers, symbols or operators. An expression does not use equality or inequality signs. Using an equality or inequality sign will give an equation
Face	One of the plane surfaces of a solid shape.
Factor	A number, that when multiplied with one or more other factors, makes a given number.
Facts	Related to the four operations (+, -, ×, ÷). Pupils should be supported in achieving fluency, i.e. very fast recall, in these facts. These then become known facts.
Foot	An imperial unit of measure of length.
Formula	An algebraic expression of a rule.
(The four) operations	A mathematical process. The four mathematical operations are addition, subtraction, multiplication and division.
Fraction	1. A part of a whole number, quantity or shape. 2. Expressing a division relationship between two integers.
Gallon	An imperial unit of measure of volume/capacity.
Gram	A metric unit of mass
Graph	A diagram showing a relationship between variables.

Grid	A series of evenly divided and equally spaced shapes, usually squares.
Heptagon	A polygon with seven sides and seven angles.
Hexagon	A polygon with six sides and six edges.
Horizontal	Horizontal refers to planes and line segments that are parallel to the horizon.
Hour	A unit of time.
Imperial unit	A unit of measure once officially used in the UK but is now used less often, except in the context of length. Includes miles, pounds and pints.
Improper fraction	A fraction where the numerator is bigger than the denominator. These fractions are therefore greater than one whole.
Inch	An imperial unit of measure.
Integer	A whole number that can be positive or negative.
Interpret	Draw out the key mathematical features of a graph.
Inverse	Opposite operations that 'undo' each other.
Kilogram	A standard unit of mass, equal to 1000 grams.
Kilometre	A metric unit measure of length that is equal to one thousand metres.
Kite	A 2-D shape with two pairs of equal length adjacent sides. The diagonals intersect at right angles.

Length	Distance from end to end or from one point to another. A linear measurement.
Line graph	A graph that uses lines to connect the points on a data chart. Used to present continuous data, such as change over time.
Line of Symmetry	The line that divides the object into its identical halves is called the line of symmetry.
Litre	A standard unit of volume, equal to 1000 millilitres.
Long division	The formal written algorithm that can be used to divide by a number with two or more digits.
Long multiplication	The formal written algorithm that can be used to multiply a number by a number with two or more digits.
Mass	A measure relating to the amount of matter within a given object.
Mean	A measure of central tendency. The mean average of a set of data is the sum of the quantities divided by the number of quantities.
Measure	1. The size in terms of an agreed unit. See also compound measure. 2. Measure is also used as a verb, to find the size.
Metre	To find the size of something in a given unit.
Metric unit	A standard unit of measure used in the UK and Europe. Includes centimetres, litres and kilograms.
Mile	An imperial unit of measure of length.
Millilitre	A metric unit of capacity/volume.
Millimetre	A metric unit measure of length that is equal to one thousandth of one metre.

Minus	A name for the symbol '-', which denotes the operation of subtraction.
Minute	Unit of time. 1 minute = 60 seconds 60 minutes = 1 hour
Missing number problem	A problem of the type 7 = □ − 9 o
Mixed number	Numbers consisting of an integer and fractional part.
Multiple	The result of multiplying a number by an integer, for example, 12 is a multiple of 3 and 4 because 3 × 4 = 12.
Multiplicand	A number to be multiplied by another
multiplication	One of the four mathematical operations. Multiplication can be understood as repeated addition or scaling (introduced in Year 3).
multiply	To increase a quantity by a given scale factor.
Negative integer	A whole number with a value less than zero. Zero is neither positive nor negative.
Negative number	A number that is less than zero. (It is helpful to refer to these numbers as 'negative numbers' rather than 'minus' to avoid confusion with the operation 'minus'.)
Net	A group of 2-D shapes which, when folded and connected, forms a 3-D polyhedron.
Number bond	A pair of numbers with a given total.
Numeral	A numeral is a symbol (or group of symbols) used to represent a number.
Numerator	The number written above the vinculum in a fraction. In a measure context, it indicates the specified number of parts out of the whole. In a division context, it is the dividend.

Octagon	A polygon with eight sides and eight angles.
Odd	An integer which is not divisible by two without a remainder.
operation	A mathematical process. The four mathematical operations are addition, subtraction, multiplication and division.
Origin	The point at which axes in a coordinates grid cross; the point (0,0).
Ounce	An imperial unit of measure of mass.
Parallel	Line segments that can be described as parallel must be on the same plane and will never meet, regardless of how far either or both line segments are extended.
Parallelogram	A 2-D shape that has two pairs of parallel sides and equal opposite angles.
Partition	To split a number into two or more parts.
Pattern	A systematic arrangement of numbers, shapes or other elements according to a rule.
Pentagon	A polygon with five sides and five angles.
Percentage	1 The number of parts per hundred which is written using the % symbol.
Perimeter	The perimeter of a 2-D shape is the total distance around its exterior.
Pictogram	A representation of data using pictures or symbols.
Pie chart	A representation of a set of data where each segment represents one group in proportion to the whole.

Pint	An imperial unit of measure.
Place value	A system for writing numbers, in which the value of a digit is defined by its position within the number.
Plot	To mark out a point on a graph or grid.
Plus	The word representing the operation of addition. It is also the name for the symbol '+'.
Polygon	A 2-D shape with three or more straight sides.
Positive number	A number that is greater than zero. Zero is neither positive or negative.
Position	Location, expressed either descriptively using positional prepositions, or specified by coordinates.
Pound (mass)	An imperial unit of measure of mass.
Pound (sterling)	The official currency of the United Kingdom.
Power (of ten)	The power (or exponent) of a number says how many times to use the number in a multiplication. It is written as a small number to the right and above the base number.
Prime factor	A factor that is a prime number.
Prime number	A whole number with only two factors, one and the number itself.
Prism	A prism is a 3-D solid with two identical, parallel bases and otherwise rectangular faces.
Product	The result you get when you multiply two numbers.

Proper fraction	A fraction with a value less than one.
Property	Characteristics or qualities that something has such as a shape.
Proportion	A comparison between two or more parts of a whole or group. Proportion expresses a part-whole relationship. This may be represented as a fraction, a percentage or a decimal.
Pyramid	A 3-D shape with a polygonal base and otherwise triangular faces, which form edges with the base, and which meet at an apex.
Quadrant	One of four regions into which a coordinates grid is divided.
Quadrilateral	A 2D shape with four sides and four angles. which add up to 360 degrees.
Quantity	An amount, in some cases given a numerical value.
Quarter turn	One of four equal parts of a whole, quantity or object.
Quotient	The result when the dividend is divided by the divisor.
Radius	A line from one point of the circumference of a circle to the centre of the circle.
Ratio	A comparison between two or more parts of a whole or group. Ratio expresses a part-part relationship. This is usually represented in the form a:b.
Rectangle	A quadrilateral with four right angles.
Rectilinear	A rectilinear shape has straight line edges which are perpendicular (all meet at right angles).
Reflection	A mirror image that is equidistant from a mirror line.

Remainder	The amount remaining after division when a whole number answer is needed.
Repeated addition	A structure of multiplication where equal parts are added to make a whole.
Repeated subtraction	A structure of division, where equal parts are subtracted and the number of equal parts summed to calculate a quotient.
Representation	A way to represent the structure of a mathematical concept (concrete, pictorial or abstract).
Rhombus	An equilateral parallelogram with four equal length sides.
Right Angle	An angle of 90 degrees.
Roman Numerals	Roman numerals are a system of symbols used to represent numbers that were developed and used by the Romans. They do not use a place value system.
Rotation	The act of rotating about an axis/centre.
Rounding	Approximate a number, normally to the nearest multiple of ten, to make it easier with which to calculate.
Row	A horizontal arrangement.
Scale	To enlarge or reduce a number, quantity or measurement by a given amount (called a scale factor).
Scale factor	The ratio of corresponding edge lengths.
Second	1. A unit of time. 2. An ordinal number.
Sequence	A series of numbers or other elements which follow a rule.

Share	To distribute fairly between a given number of recipients. This is one model for division.
Short division	A formal written layout where the quotient is calculated showing only one written step.
Short multiplication	A formal written layout where the multiplier is usually 9 or less.
Side	A straight line that forms part of the boundary of a shape.
Sort	To organise a set of elements into specified categories.
Sphere	A 3-D shape with a continuous surface, which is at all points equidistant from its centre. It has an infinite number of flat faces and straight edges.
Square	A quadrilateral with four equal length sides and four right angles.
Square Number	The product of two equal factors.
Square centimetre	A unit of measure for area equal to a square with the dimensions 1 cm by 1cm.
Square metre	A unit of measure for area. The surface covered by a square with sides of length one metre.
Standard unit	A uniform measure, agreed upon as standard.
Subtract	Carry out the process of subtraction.
Subtraction	The inverse operation to addition.
Subtrahend	A number to be subtracted from another.

Sum	The result of one or more additions.
Surface	An outer boundary of a 3-D object.
Symmetry	When two or more parts are identical after a flip, slide or turn.
Take away	Used in the reduction structure of subtraction. To remove a number of items from a set.
Tally	A form of counting. Each tally is a vertical mark. After the fourth vertical mark, a fifth horizontal/diagonal mark is drawn to create a group of five.
Temperature	H The measure of heat.
Time	Related to duration. Measured in seconds, minutes, hours, days, weeks, months, years etc.
Total	The sum found by adding.
Transformation	A collective term for the ways that shapes can be changed, resulting in congruent or similar shapes, i.e. translation, reflection, rotation or enlargement.
Translation	When a shape moves so that it is in a different position but retains the same size, area, angles and side length and so is congruent.
Trapezium	A quadrilateral with exactly one pair of parallel sides.
Triangle	A polygon with three sides.
Turn	Rotation (see half and quarter turn).
Unit	1. An element considered as a single entity. Ten single cubes can be grouped together to make a unit of ten. 2. A unit of measure, which can be standard or nonstandard.

Unit fraction	A fraction with a numerator of one.
Vertex/Vertices	The point at which two or more lines intersect.
Vertical	In an up-down direction or position. Upright.
Volume	A quantity or amount of any substance and the 3-D space it fills.
Weight	The force exerted on an object by gravity. Weight therefore changes with a change in gravitational force. Used interchangeably with mass until KS2.
Yard	Symbol: yd. An imperial measure of length. In relation to other imperial units of length, 1 yard = 3 feet
Zero	The number before one. It is neither positive nor negative