Mathematical Vocabulary

Year 3



Mathematics vocabulary list Year 3

Maths is its own language. Sometimes that language looks like written word and sometimes it looks like symbols, but it is a language and it must be learned for math fluency and competency. If your child does not have a good understanding of key mathematical vocabulary, it can hinder them in making good progress in maths and in other areas of the curriculum.

We explicitly teach maths vocabulary, giving it a context and allowing children to apply it in a variety of problems.

Listed below are the key mathematical terms your child will learn this year. This is the minimum we expect children to learn; however, we know children are curious and will undoubtedly want to learn more and we encourage this.

| <u>Vocabulary</u> | <u>Definition</u> | <u>Example</u> |
|------------------------|--|--|
| Number and Place Value | | |
| Approximate | Anything that is similar, but not exactly equal, to something else. | 'The approximate answer to 199 + 100 is 300 because 199 is very close to 200.' |
| Formal written method | A way of carrying out a calculation which is done on paper rather than entirely mentally. | 874 – 523 becomes 8 7 4 – 5 2 3 3 5 1 Answer: 351 |
| Numbers 101- 1,000 | 'One hundred and one, one hundr nine, one thousand.' | ed and two nine hundred and ninety- |
| Place holder | A place holder is a zero used in any place value column (that contains a value of zero) to clarify the relative positions of the digits in other places. | 'I need to use a place holder in the ones column to make it clear that my number is 320 and not 32. ' |
| Relationship | A mathematical relation is, a relationship between sets of numbers or sets of element. | 'What is the relationship between multiplication and division?' |
| Round | Approximate a number, normally to the nearest multiple of ten, to make it easier with which to calculate. | 'I would round the number 17 to 20 because it is three away from 20 but seven away from 10. ' |

| | Addition and subtract | ion |
|-----------------------------------|--|---|
| Columnar addition/subtraction | The formal written algorithms for addition and subtraction that are exemplified in Mathematics Appendix 1 of the 2014 national curriculum. | Addition and subtraction 789 + 642 becomes 874 - 523 becomes 7 |
| | Multiplication and divi | sion |
| Factor | A number, that when multiplied with one or more other factors, makes a given number. | 'The number six has four factors : 1, 2, 3 and 6. ' |
| Product | The result you get when you multiply two numbers. | '24 is the product of 3 and 8.' |
| | Fractions | |
| Sixths, sevenths, eighths, tenths | The fraction equal to one divided by six. The fraction equal to one divided by seven etc. | 'One sixth plus four sixths is equal to five sixths '. |
| | Length | |
| Distance from/to | How far away something is. | 'What is the distance from house A to house B on the map?' |
| Kilometre | A metric unit measure of length that is equal to one thousand metres. | 'The distance from the school to Arun's house was exactly one kilometre.' |
| Millimetre | A metric unit measure of length that is equal to one thousandth of one metre. | 'The length of Philippa's ruler is 300 millimetres. ' |
| Perimeter | The perimeter of a 2-D shape is the total distance around its exterior. | PERIMETER The distance around the edge of a shape |

| Weight | | |
|---------------------|---|--|
| | | |
| Capacity and volume | | |
| | Temperature | |
| Centigrade | The Celsius scale of temperature. | 'The temperature outside is 22 degrees centigrade' |
| Time | | |
| 12-hour clock time | The 12-hour clock notation uses am and pm to indicate morning and afternoon. | 'The time is 12.45pm on a 12-hour clock'. $ \begin{array}{cccccccccccccccccccccccccccccccccc$ |
| 24-hour clock time | A way of telling the time in which the day runs from midnight to midnight and is divided into 24 hours, numbered from 0 to 24. | 'The time is 1245 on a 24-hour clock'. |
| AM | The abbreviation a.m. stands for the Latin ante meridiem, meaning before. | 'The time is 9.00 am '. |
| Calendar | A chart or series of pages showing the days, weeks, and months of a particular year, or giving particular seasonal information. | FEBRUARY Sun Mon Tue Wed Thu Fri Sat 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 |
| Century | A period of 100 years. | 'WW1 ended just over a century ago'. |
| Earliest | Happening or done before the usual or expected time. | 'What is the earliest that you can arrive at school?' |
| Latest | Of most recent date. | 'The latest you can finish your lunch is 12.30pm' |

| PM | The abbreviation p.m. stand for the Latin post meridiem, meaning after midday. | 'The time is 9.00 pm '. |
|----------------|--|---|
| 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. | 'The number twelve on this clock is represented by the Roman numerals XII, which is 10 + 1 + 1.' |
| | 2d shape | |
| Irregular | In geometry, irregular is a term used to describe shapes that are not regular (see below). | The sides and the angles of this pentagon are not all equal so the pentagon is irregular . |
| 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. | |
| Perpendicular | A pair of line segments (or surfaces) can be described as perpendicular if they intersect at (or form) a right angle. | |
| Regular | Regular 2-D shapes (regular polygons) have angles that are all equal and side lengths that are all equal. Regular 3-D shapes (the Platonic Solids) are those that have congruent (exactly the same) faces of a single regular polygon. | 'A square is a regular 2-D shape because all four angles are right angles and all four sides are the same length. A cube is a regular 3-D shape with six identical square faces.' |

| 3d shape | | |
|---|---|---|
| Hemisphere | A hemisphere is a 3D geometric figure that is half of a sphere. | |
| Prism | A prism is a 3-D solid with two identical, parallel bases and otherwise rectangular faces. | Triangular Prism Cuboid Cube Cylinder Trapezoidal Prism Pentagonal Prism |
| Squarebased/triangular based pyramid | A pyramid is a 3-D shape with a 2D shape (which gives the pyramid its name) as a base and triangular faces that taper to a point called a vertex or apex. | apex |
| | Position and direc | tion |
| Acute angle | An angle that is smaller than a right angle. | ACUTE ANGLE |
| Compass point | The directions on the magnetic compass. The 4 main points are North, South, East and West. | W E |

| Diagonal | A diagonal is a straight line joining two nonadjacent vertices of a shape, that is, two corners of a shape that are not next to each other. | |
|-----------------------------|--|---|
| Horizontal | A line that runs right and left across the page. | Horizontal Line |
| North, south, east, west | Cardinal directions. | 'The boy moves four squares north and three squares west .' |
| Obtuse angle | An angle that is greater than a right angle but less than 180 degrees. | 130° |
| Vertical | A line that runs top to bottom down the page. | Vertical Line |
| | Statistics | |
| Axis (plural axes) | A real or imaginary reference line. The y-axis (vertical) and x-axis (horizontal) on charts and graphs are used to show the measuring scale or labels for the variables. | 'The y- axis on this bar graph shows you how many pupils preferred each colour.' |
| Bar graph | A representation of data in which the frequencies are represented by the height or length of the bars. | 'This bar graph shows us the preferred colours of the pupils in our Year 3 class. ' |
| Carroll diagram | A way of sorting objects, numbers and shapes by their traits. | Shapes with curved lines Pink Shapes Blue Shapes Shapes with straight lines Blue Shapes |

| Frequency | The number of times an event or a value occurs | 'Football was chosen by most of the children in the class- it was the most frequent sport played at lunchtime'. |
|--------------|--|--|
| Horizontal | Horizontal refers to planes and line segments that are parallel to the horizon. | 'The x-axis on a graph should be horizontal.' |
| Venn diagram | An illustration that uses circles to show the relationships among things or finite groups of things. | 10 5 25 31 8 Numbers in the 5x table 5 10 25 31 |