Mathematical Vocabulary

EYFS



**Mathematics vocabulary list EYFS**

Maths is its own language. Sometimes that language looks like written word and sometimes it looks like symbols, but it is a language; 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.

At Chester Blue Coat, 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.

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| **Vocabulary** | **Definition** | | **Example** | |
| **Number and Place Value** | | | | |
| Before | In front of or prior to. | | *‘The number 3 comes* ***before*** *5 on the number track’.* | |
| Between | A preposition that indicates location of an object with reference to two other objects, to the left of the first and the right of the second. | | *‘4 is* ***between*** *3 and 5 on our number track’.* | |
| Compare | Look for similarities and/or  differences between at least two  objects or sets. | | *‘Let me* ***compare*** *these two sets – there are more red cars than blue cars.’* | |
| Count | Assigning one number name to each of a set of objects to determine how many there are. | | *‘I* ***counted*** *the children in the group – there are four so we will need four pencils.’* | |
| Digit | A digit is a single symbol used to make numerals. | |  | |
| Estimate | To find a value that is close enough to the right answer, usually with some thought or calculation involved. | | *‘Can you* ***estimate*** *how many counters are below?’* | |
| Fewer | A lesser amount – used when  counting discrete objects, i.e.  countable objects such as, pens, teddies, counters, etc. | | *‘The girl has* ***fewer*** *blocks than the boy’.* | |
| First | Before anything else. | | *Fred is the* ***first*** *person in line’.* | |
| First, second, third… | *‘****First, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth’****.* | | | |
| Greater | When a quantity or number is bigger or larger than the second or rest quantities or numbers. | | *‘10 is* ***greater*** *than 8’.* | |
| How many? | What number. | | *‘****How many*** *counters are there on the 5 frame?’* | |
| Is the same as… | Is equal to | | *‘4 is* ***the same as*** *3 + 1. It is also* ***the same as*** *2 + 2’* | |
| Largest, greatest | The most in a set. | | *‘The* ***greatest*** *number in the following set, 6, 3, 9 is 9’.* | |
| Last | Comes after all others in time or  order. | | *‘Rory is the* ***last*** *person in the line’.* | |
| Less | A smaller amount or not as much. | | *‘I have 9p and you have 3p. You have* ***less*** *money than me’.* | |
| Next | Comes immediately after the  present one in order. | | *‘The* ***next*** *shape in my pattern is a square’.* | |
| Number | A count or measurement. | |  | |
| One, two, three…to twenty | ***‘One, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty.’*** | | | |
| Ones  Tens | *‘Numbers, such as 12, have two digits. Each digit is a different place value. The left digit is the* ***tens****' place. It tells you that there is one* ***ten****. The last or right digit is the* ***ones****' place which is 2 in this example’.* | | | |
| Order | Describes the placement of items according to given criteria or in a pattern. As a verb, to place items according to given criteria or in a pattern. | | *‘I have* ***ordered*** *the chickens from biggest to smallest.’* | |
| Pair | A set of two things used together. | | *‘Socks come in a* ***pair*** *– one for each foot’.* | |
| Pattern | A systematic arrangement of numbers, shapes or other elements according to a rule. | | *‘The* ***pattern*** *is red, blue, red, blue, red blue’.* | |
| Subitise | Instantly recognising the number of objects in a small group, without counting. | | *‘There are 9 dots here. I worked this out without counting. I* ***subitised****’.* | |
| Zero | The number before one. It is neither positive nor negative. | | *‘****Zero*** *comes before one on the number track’.* | |
|  |  | | | |
| **Addition and subtraction** | | | | |
| Add | Carry out the process of addition. | | *‘I can* ***add*** *two numbers together to find a total.*  *1 + 2 = 3’’* | |
| Addition | The operation to combine at least two numbers or quantities to form a further number or quantity, the sum or total. Addition is the inverse operation to subtraction. | | *‘eight plus three is equal to eleven.*  *This is an* ***addition*** *question.’* | |
| Altogether | In total. | | *‘That will be £2* ***altogether*** *please.’* | |
| Commutative | Either of two laws relating to number operations of addition and multiplication, stated symbolically: a + b = b + a and ab = ba. | | *‘6 + 3 equals the same as 3 + 6. This is the* ***commutative law****.’* | |
| Double | To multiply by two or add a value to itself. | | *‘Four is double two.’* | |
| Less | A smaller amount or not as much. | | *‘I have two footballs. You have 10 footballs. I have* ***less****’.* | |
| More | A greater amount. | | *‘I have twenty apples and you have five. I have* ***more****.’* | |
| Sum | The result of one or more additions. | | *‘The* ***sum*** *of five and three is eight.’* | |
| Take away | Used in the reduction structure of subtraction. To remove a number of items from a set. | | *‘He ate three of the sweets so we need to* ***take away*** *three counters.’* | |
| Total | The sum found by adding. | | *‘There are a* ***total*** *of five people at this table.’* | |
| **Multiplication and division** | | | | |
| Doubling | To multiply by two or add a value to itself. | | *‘Ten is* ***double*** *five.’* | |
| Halving | One of two equal parts of a shape, quantity or object. | |  | |
| Number patterns | A systematic arrangement of numbers, shapes or other elements according to a rule. | | *‘The* ***number pattern*** *is 2, 4, 6, 8, 10.’* | |
| Sharing | To distribute fairly between a given number of recipients. This is one model for division. | | *‘I will* ***share*** *the crayons equally between the people at the table.’* | |
| **Fractions** | | | | |
| Half | Either of two equal or corresponding parts into which something is or can be divided. | |  | |
| Parts of a whole | A ratio or a fraction that represents a relationship between a part and its whole. | | *‘A cake has been split into two* ***parts****. One part has been eaten.’* | |
| **Measurement** | | | | |
| Compare | Look for similarities and/or differences between at least two objects or sets. | | *‘I can* ***compare*** *these two sets – this set has more.’* | |
| Guess | An estimate or conclusion | | *‘My* ***guess*** *is about 11’* | |
| Measure | To find the size of something in a given unit. | | *‘How might we* ***measure*** *how much sand there is in the sand tray?‘* | |
| Size | An element’s overall dimensions or magnitude. | | *‘The* ***size*** *of my shoe is smaller than my teacher’s.’* | |
| **Length** | | | | |
| Depth | The distance between the nearest end and the farthest end of an object. | | *‘Can you measure the* ***depth*** *of this box?’* | |
| Height | The vertical distance from the top of the base of the object. | | *‘The* ***height*** *of this object is 12 cubes.’* | |
| Length | A linear measurement. | | *‘The* ***length*** *of my snake is shorter than yours.’* | |
| Long | An adjective to describe length. | | *‘I have a* ***long’*** *piece of string.* | |
| Short | An adjective used to describe length. | | *‘This bed is too* ***short.’*** | |
| Tall | Measuring a specific distance from top to bottom. | | *‘The children are not as* ***tall*** *as the teacher.’* | |
| Width | The measurement of the distance of a side of an object. | | *‘The* ***width*** *of this table is…’* | |
| **Weight** | | | | |
| Balances | A measuring tool used to weigh objects. It has two dishes hanging on a bar. Both dishes will be level when the contents weigh the same. Also, as a verb, indicates equivalence and equality. | | ‘The objects in the balance are unequal in weight because the dish on the right side is lower down that the dish on the left side. The two objects balance which means they have the same mass.’ | |
| Heavy | Having a weight that is greater than that of another object. | | *‘That box is* ***heavy.’*** | |
| Light | Having a weight that is less than that of another object. | | *‘The banana in the monkey’s hand is* ***light.’*** | |
| Scales | An instrument for weighing. | | *‘Can you use the* ***scales*** *to weigh the cubes?’* | |
| Weigh | Find out how heavy something is. | | *‘I have* ***weighed*** *the Lego model.’* | |
| Weight | The force exerted on an object by gravity. | | *‘The* ***weight*** *of this book is heavier that the pencil.’* | |
| **Capacity and volume** | | | | |
| Container | An object for holding or transporting something. | | *‘What* ***container*** *will hold the most water?’* | |
| Empty | Containing nothing. Most commonly used in the context of measures. | | *‘There is no more water left in the jug- it is* ***empty.’*** | |
| Full | Contains/ holds as much or as many as possible; has no empty space. | | *‘The juice carton is not* ***full*** *because I drank some.’* | |
| **Time** | | | | |
| Afternoon | The time from noon or lunchtime to evening. | | ‘We are going to the forest this **afternoon.’** | |
| Days of the week, Monday, Tuesday… | **‘Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.’** | | | |
| Early | Near the beginning of a particular time or period. | | ‘You have arrived **early**  today.’ | |
| Evening | The period of time at the end of the day, usually from about 6 pm to bedtime. | | ‘You go to bed in the **evening.’** | |
| First | Comes before all others in time or order. | | ‘The **first** thing we are going to do today is to wash our hands.’ | |
| Hour | A period of time equivalent to 60 minutes. | | ‘We are having lunch in 1 **hour.’** | |
| Last | Comes after all others in time or order. | | ‘The **last** thing we are going to do today is read a story.’ | |
| Late | Doing something or taking place after the expected, proper, or usual time. | | ‘The teacher arrived **late**.’ | |
| Morning | The period between midnight and noon. | | ‘Good **morning** everyone.’ | |
| Night | The period from sunset to sunrise in each twenty-four hours. | | ‘You can normally see the moon in the **night.’** | |
| O’clock | ‘The time is now 1 **o’clock**.’ | | | |
| Soon | In or after a short time. | | ‘We are doing PE **soon.’** | |
| Time | Related to duration. Measured in seconds, minutes, hours, days, weeks, months, years etc. | | ‘After lunch it will be **time** for PE.’ | |
| Today | The present day | | *‘The theatre are coming* ***today.’*** | |
| Tomorrow | The next day. | | *‘Tomorrow****, the weather will be snowy.’*** | |
| Week | A period of seven days. | | *‘Next* ***week****, we will be learning about farm animals.’* | |
| Yesterday | The previous day. | | *‘Do you remember what we did* ***yesterday****?* | |
| **Money** | | | | |
| Buy | Obtain in exchange for payment. | | *‘How much is that item to* ***buy.’*** | |
| Coin | A flat disc or piece of metal with an official stamp, used as money. | | *‘I have 5* ***coins*** *her. I wonder how much I can buy from the shop…?’* | |
| Money | Any object that is generally accepted as payment for goods and services. | | *‘That is a lot of* ***money.’*** | |
| Pay | Give (someone) money that is due for work done, goods received. | | *‘How much have I got to* ***pay*** *you for that?’* | |
| Penny/Pence | A small sum of money. | | *That will be 3* ***pence*** *please.’* | |
| Pound | Equal to 100 pence. | | *‘The cake will be one pound* ***please.’*** | |
| Price | The amount an item costs. | | *‘What is the* ***price*** *of that please.’* | |
| Sell | Give or hand over (something) in exchange for money. | | *‘I am going to* ***sell*** *you this today.’* | |
| Spend | Give (money) to pay for goods, services. | | *‘How much money do you have to* ***spend?’*** | |
| **Properties of Shape** | | | | |
| Bigger, larger | Of considerable size | |  | |
| Curved | A non-plane surface of a 3-D shape. Both cones and cylinders have curved surfaces. | |  | |
| Flat | A level surface. | | ‘The table has a flat rectangular surface.’ | |
| Hollow | Having a hole or small space inside. | |  | |
| Pattern | A systematic arrangement of numbers, shapes or other elements according to a rule. | |  | |
| Repeating Pattern | A design for decorating a surface composed of a number of elements (motifs) arranged in a regular or formal manner. | | ‘Circle, rectangle, circle, rectangle…this is a repeating pattern of shapes’. | |
| Round | A circular piece of something. | |  | |
| Shape | A geometric figure such as a square, triangle, or rectangle. | |  | |
| Size | An element’s overall dimensions or magnitude. | | The size of my shoe is smaller than my teacher’s.’ | |
| Smaller | Of a size that is less than normal or usual. | |  | |
| Solid | Having three dimensions. | |  | |
| Sort | Arrange systematically in groups. | | ‘How could we sort these shapes?’ | |
| Straight | A line or movement uniform in direction, without bends or curves. | | The edges of the table are straight.’ | |
| Symmetrical | A balanced and a proportionate similarity which is found in two halves of an object, that is, onehalf is the mirror image of the other half. | | How can we see if this square is symmetrical? Let’s fold it’. | |
| **2d shapes** | | | | |
| Corner | A point where two or more lines meet. The correct mathematical termis vertex (vertices). | |  | |
| Circle | The name of a 2-D shape. A circle has a curved side. | |  | |
| Rectangle | A quadrilateral with four right angles. | |  | |
| Side | A straight line that forms part of the boundary of a shape. | |  | |
| Square | A quadrilateral with four equal length sides and four right angles. | |  | |
| Triangle | A polygon with three sides. | |  | |
| **3d shapes** | | | | |
| **Cone** | A 3-D shape with one circular plane face, which tapers to an apex. | |  | |
| Cube | A 3-D shape with six identical square faces. | |  | |
| Cuboid | A 3-D shape with six rectangular faces. | |  | |
| Cylinder | A 3-D shape with two circular faces joined by a curved surface. | |  | |
| 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). | |  | |
| Face | One of the plane surfaces of a solid shape. | |  | |
| 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 | |  | |
| Sphere | 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. | |  | |
| Vertex, vertices | The point at which two or more lines intersect. | |  | |
| **Position and direction.** | | | | |
| Above |  | | | |
| Across |  | | | |
| Along |  | | | |
| Apart |  | | | |
| Around |  | | | |
| Away from |  | | | |
| Back |  | | | |
| Backwards |  | | | |
| Behind |  | | | |
| Below |  | | | |
| Bend |  | | | |
| Beside |  | | | |
| Between |  | | | |
| Bottom |  | | | |
| Close |  | | | |
| Corner |  | | | |
| Direction | ‘Which direction do you think the postman needs to take next?’ | | | |
| Down |  | | | |
| Far | ‘Birmingham is quite far away from our school.’ | | | |
| Forwards |  | | | |
| From |  | | | |
| Front |  | | | |
| Half-turn | A 180 degree rotation, i.e. ½ of a 360 degree or ‘full’ turn. | | | |
| In |  | | | |
| Inside |  | | | |
| Left |  | | | |
| Middle |  | | | |
| Movement | Let’s stretch our arms really high in the air. Let’s make big movements’. | | | |
| Near |  | | | |
| Next to |  | | | |
| On |  | | | |
| Opposite |  | | | |
| Outside |  | | | |
| Over |  | | | |
| Position | Location, expressed either descriptively using positional prepositions, or specified by coordinates.  *‘The book is on the table. The clock is hanging above the board. This is their position’.* | | | |
| Right |  | | | |
| Roll |  | | | |
| Sideways |  | | | |
| Slide |  | | | |
| Stretch |  | | | |
| Through |  | | | |
| Top |  | | | |
| Towards |  | | | |
| Turn |  | | | |
| Under |  | | | |
| Up |  | | | |
| Whole turn | *360 degree turn* | | | |
| **Statistics** | | | | |
| Count | | Assigning one number name to each of a set of objects to determine how many there are. | | *‘I counted the children in the group – there are four so we will need four pencils.’* |
| Group | | To make equal size groups. | | *I will group the crayons equally so that each person gets two.’* |
| Set | | A defined equal size group. | | *I have placed all the purple counters in this set because they are all the same colour’.* |
| Sort | | To organise a set of elements into specified categories. | | *‘I will sort these objects based on their size.’* |