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 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.

At Kingsley, 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?’* |

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| 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’.* |

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| 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’.* |

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| ***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.’* |

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| 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.’* |

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| ***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 farthest end of an object. | *‘Can you measure the* ***depth*** *of this*  *box?’* |
| Height | The vertical distance from the top to 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.’ |

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| Long | An adjective used 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****.’* |

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| 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 than 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.’* |

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| ***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, 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  p.m. 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 has arrived* ***later*** *than*  *expected.’* |
| Morning | The period of time 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 now is 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 P.E.’* |
| 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****?’* |

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| ***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*** *here. 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 not going to* ***sell*** *you this today’.* |
| Spend | Give (money) to pay for goods, services | *‘How much money do you have to*  ***spend****?’* |

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| ***Properties of shape*** | | |
| Bigger, Larger | Of considerable size. | *‘Which of these fish is the* ***biggest****?’* |
| Curved | A non-plane surface of a 3-D shape.  Both cones and cylinders have curved surfaces. | *‘This line is* ***curved****.’* |
| Flat | A level surface. | *‘The table has a* ***flat*** *rectangular*  *surface.’* |
| Hollow | Having a hole or empty space inside. | *‘This box is* ***hollow****’.* |
| Pattern | A systematic arrangement of numbers, shapes or other elements according to a rule. | *‘The* ***pattern*** *below is square, triangle,*  *square, triangle.’* |
| 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. | *‘This circle is* ***round****’.* |
| Shape | A geometric figure such as a square, triangle, or rectangle. | *‘Which of these* ***shapes*** *has four*  *sides?’* |
| 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. | *‘Which of these fish is the* ***smallest****?’* |

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| Solid | Having three dimensions. | *‘This cube is a* ***solid*** *shape’.* |
| 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, one- half is the mirror image of the other half. | *‘How can we see if this square is*  ***symmetrical****? Let’s fold it’.* |
| ***2d shape*** | | |
| Corner | A point where two or more lines meet. The correct mathematical term is vertex (vertices). | *‘The table has four* ***corners*** *(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. | *‘This shape has four straight* ***sides****.’* |
| Square | A quadrilateral with four equal length sides and four right angles. |  |
| Triangle | A polygon with three sides. |  |

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| ***3d shape*** | | |
| 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). | *‘A triangle has three* ***edges*** *and a cube has 12* ***edges****’.* |
| Face | One of the plane surfaces of a solid shape. | *‘A cube has six* ***faces****.’* |
| 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 | 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. | *‘A bowling ball is a* ***sphere****’.* |
| Vertex, vertices | The point at which two or more lines intersect. | *‘This shape has five* ***vertices****’.* |

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| ***Position and direction*** | |
| Above | *‘The ball is* ***above*** *the box’.* |
| Across | *‘Walk* ***across*** *the road’.* |
| Along | *‘The hare ran* ***alongside*** *the tortoise’.* |
| Apart | *‘Move* ***apart*** *from each other’* |
| Around | *‘The plane flew* ***around*** *the world’.* |
| Away from | *‘If you see a snake, run* ***away from*** *it’.* |

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| Back | *‘Please come in through the* ***back*** *of the house’.* |
| Backwards | *‘Move* ***backwards*** *until you reach the wall’.* |
| Behind | *‘The cat was* ***behind*** *the box’.* |
| Below | *‘****Below*** *the tree, sat a little boy’.* |
| Bend | *‘****Bend*** *over and touch your toes’.* |
| Beside | *‘The cat sat* ***beside*** *the chair’.* |

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| Between | *‘The red ball is* ***between*** *the two cardboard boxes’.* |
| Bottom | *‘The little girl waved from the* ***bottom*** *of the classroom’.* |
| Close | *‘The children ran to the playground* ***close*** *together’.* |
| Corner | *‘Around the* ***corner*** *is the library’* |
| Direction | *‘Which* ***direction*** *do you think the postman needs to take next?’* |
| Down | *‘The girl slid* ***down*** *the slide’.* |
| Far | *‘Birmingham is quite* ***far*** *away from our school.’* |
| Forwards | *‘The girl walked* ***forward*** *through the corridor’.* |

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| From | *‘The man moved the boxes* ***from*** *the van to the school.’* | |
| Front | *‘The teacher was at the* ***front*** *of the class’.* | |
| Half turn | A 180 degree rotation, i.e. ½ of a  360 degree or ‘full’ turn. |  |
| In | *‘The dog hid* ***in*** *the box’.* | |
| Inside | *‘The two boys slept* ***inside*** *their tents’.* | |
| Left | *‘The green car is to the* ***left*** *of the right car’.* | |

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| Middle | *‘The archer hit the* ***middle*** *of the target’.* |
| Movement | *‘Let’s stretch our arms really high in the air. Let’s make big* ***movements****’.* |
| Near | *‘The bear was near the tree’.* |
| Next to | *‘The cat sat* ***next to*** *the ball of string’.* |
| On | *‘The elephant balanced carefully* ***on*** *the ball’.* |
| Opposite | *‘The man was on the* ***opposite*** *side of the wall’.* |

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| Outside | *‘The children played skipping* ***outside****’.* | |
| Over | *‘The horse jumped* ***over*** *the fence’.* | |
| 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 | *‘The purple fish is to the* ***right*** *of the green fish’.* | |
| Roll | *‘****Roll*** *the ball along the floor’.* | |
| Sideways | *‘Tilt your body* ***sideways****. Can you still balance?’* | |

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| Slide | *‘In the dance, we need to* ***slide*** *to the right’.* |
| Stretch | *‘Before any exercise, we must* ***stretch*** *our muscles’.* |
| Through | *‘Chuck the ball* ***through*** *the hoop and into the net’.* |
| Top | *‘The explorer climbed to the* ***top*** *of the mountain’* |
| Towards | *‘The boy ran* ***towards*** *his mum at the end of the day’* |

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| Turn | *‘The two girls were dancing and* ***turned*** *on the spot’.* | |
| Under | *‘The boy hid* ***under*** *his blanket and read his book’.* | |
| Up | *‘You can climb* ***up*** *the tree as long as an adult helps you’.* | |
| Whole turn | 360 degrees 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 group of objects, numbers or other elements. | *‘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.’* |