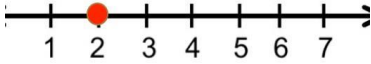




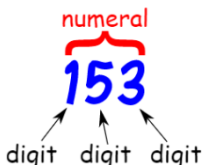

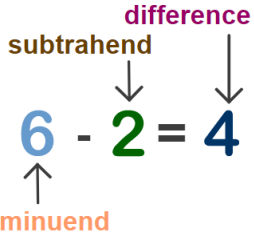
## Mathematics vocabulary list Year 1

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


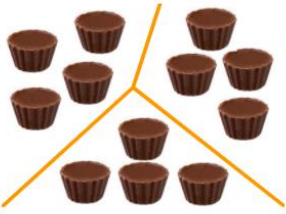
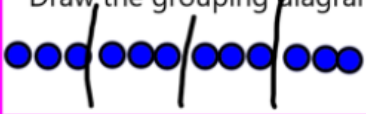
Listed below are the key mathematical terms your child will learn this year. This is the minimum we expect children to learn; however, we know children are curious and will undoubtedly want to learn more and we encourage this.

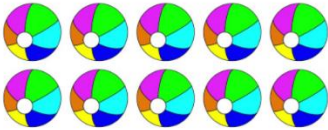
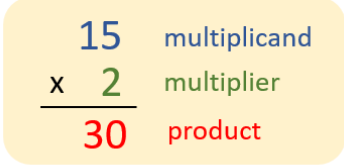
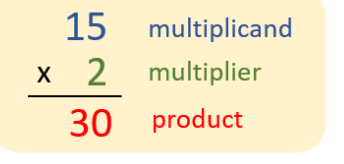
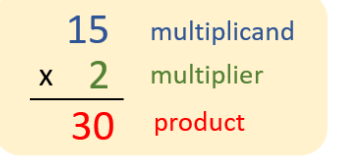

<u>Vocabulary</u>	<u>Definition</u>	<u>Example</u>
<b>Number and Place Value</b>		
Above	Something that is over another number.	'5 is <b>above</b> 3 when we count'.
Backwards	Back towards the starting point.	'7, 6, 5, 4, 3... this is counting <b>backwards</b> '.
Below	Something that is lower than something else.	'3 is <b>below</b> 5 when we are counting'.
Equal to	Being the same in quantity	'2 + 1 is <b>equal to</b> 3 6 is <b>equal to</b> 6'
Equivalent to	Equal in value, amount	'6 + 6 is <b>equivalent</b> to 2 x 6'
Forwards	To advance something	'2, 4, 6, 8, 10... We are counting <b>forwards</b> in jumps of 2'.
Half-way between	1 at or to half the distance; at or to the middle.	' <b>Half-way</b> between 1 and 3 is 2'.
		
Known fact	A number fact which has been committed to memory (or very fast recall) and can be applied fluently to various calculation strategies.	'When I use the 'Make ten' strategy to add, I use <b>known facts</b> to partition the number I'm adding.'
Least	Smallest in amount	'C has the <b>least</b> amount of stars in'.
		
Many	A number representing some quantity.	'How <b>many</b> have you got in total?'

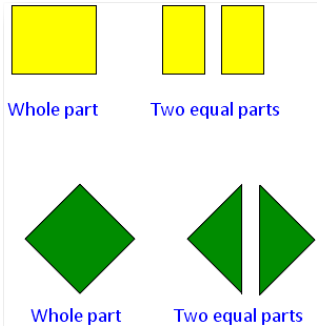

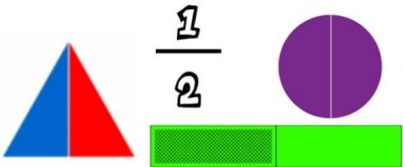
Most	Largest in amount.	<p>'D has the <b>most</b> amount of stars in'.</p> 
Multiple of	A number that may be divided by another a certain number of times without a remainder.	<p>'10 is a <b>multiple</b> of 2. 2, 4, 6, 8, 10'</p>
Numeral	A symbol or name that stands for a number.	
Numbers 20-100	<b>'Twenty-one, twenty-two ... one hundred'</b>	
Rule	A consistent pattern which allows generalisation. Awareness of a rule allows a pupil to continue a sequence or generate a related sequence.	<p>'3, 5, 7, 9, 11... The <b>rule</b> is that each number is two greater than the previous number. Therefore, the next number in this sequence will be 13.'</p>
<b>Addition and subtraction</b>		
Addend	The numbers or terms added together to form the sum.	
Difference	The numerical difference between two numbers or sets of objects. It is found by comparing the quantity of one set of objects with another.	
Equals	Be the same as in number or amount.	<p>'5 + 5 = 10' '10 = 5 + 5'</p>
Half	Either of two equal or corresponding parts into which something is or can be divided.	<p>'4 + 4 = 8. So <b>half</b> of 8 is 4 because 8 - 4 = 4'.</p>



Minuend	A quantity or number from which another is to be subtracted.													
Missing number	A part of an equation that is missing.	<p>'Find the <i>missing number</i> below.'</p> $2 + \square + 7 = 14$												
Near	Close to	'9 is <i>close to</i> 10'.												
Number bonds/pairs	A pair of numbers with a given total.	<p>'<i>Number bonds to 10</i>'.</p> <table border="0"> <tr> <td><math>0 + 10 = 10</math></td> <td><math>10 + 0 = 10</math></td> </tr> <tr> <td><math>1 + 9 = 10</math></td> <td><math>9 + 1 = 10</math></td> </tr> <tr> <td><math>2 + 8 = 10</math></td> <td><math>8 + 2 = 10</math></td> </tr> <tr> <td><math>3 + 7 = 10</math></td> <td><math>7 + 3 = 10</math></td> </tr> <tr> <td><math>4 + 6 = 10</math></td> <td><math>6 + 4 = 10</math></td> </tr> <tr> <td><math>5 + 5 = 10</math></td> <td><math>5 + 5 = 10</math></td> </tr> </table>	$0 + 10 = 10$	$10 + 0 = 10$	$1 + 9 = 10$	$9 + 1 = 10$	$2 + 8 = 10$	$8 + 2 = 10$	$3 + 7 = 10$	$7 + 3 = 10$	$4 + 6 = 10$	$6 + 4 = 10$	$5 + 5 = 10$	$5 + 5 = 10$
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$5 + 5 = 10$	$5 + 5 = 10$													
Repeated addition	A structure of multiplication where equal parts are added to make a whole.	'I can show $4 \times 5$ as <i>repeated addition</i> : $4 + 4 + 4 + 4 + 4$ .'												
Repeated subtraction	A structure of division, where equal parts are subtracted and the number of equal parts summed to calculate a quotient.	'I can use <i>repeated subtraction</i> to calculate 20 divided by four: $20 - 4 - 4 - 4 - 4$ .'												
Subtract	Carry out the process of subtraction.	'Nine <i>subtract</i> three is equal to six.'												
Subtraction	The inverse operation to addition.	'We are taking some away so it is a <i>subtraction</i> question.'												
Subtrahend	A quantity or number to be subtracted from another.													


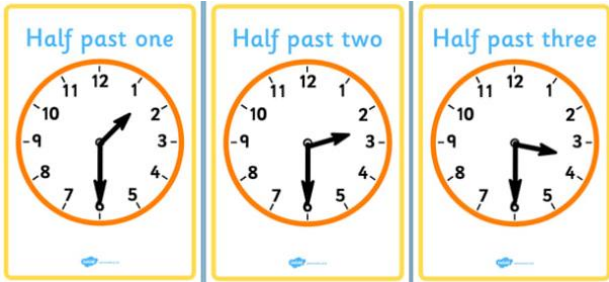
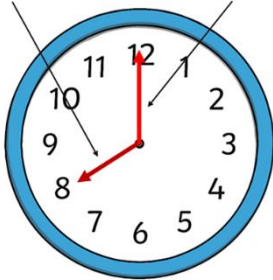
**Multiplication and division**

<p>Array</p>	<p>An arrangement of counters or numbers, in columns and rows, used to represent multiplication and division.</p>	<p>'This <b>array</b> shows <math>3 \times 4</math>, <math>4 \times 3</math>, <math>12 \div 4</math> and <math>12 \div 3</math>'.</p> 															
<p>Divide</p>	<p>To share or group into equal parts.</p>	<p>'I can <b>divide</b> 12 by three using <i>grouping or sharing</i>'.</p>															
<p>Dividend</p>	<p>A number to be divided by another number.</p>	<div style="text-align: center;"> <table border="0" style="margin: auto;"> <tr> <td style="border: 1px solid black; padding: 2px;">Dividend</td> <td style="padding: 0 20px;"></td> <td style="border: 1px solid black; padding: 2px;">Divisor</td> <td style="padding: 0 20px;"></td> <td style="border: 1px solid black; padding: 2px;">Quotient</td> </tr> <tr> <td style="text-align: center;">↓</td> <td></td> <td style="text-align: center;">↓</td> <td></td> <td style="text-align: center;">↓</td> </tr> <tr> <td colspan="5" style="text-align: center; border: 1px solid black; padding: 10px;"> <math>6 \div 3 = 2</math> </td> </tr> </table> </div>	Dividend		Divisor		Quotient	↓		↓		↓	$6 \div 3 = 2$				
Dividend		Divisor		Quotient													
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<p>Division</p>	<p>Distributing a group of things into equal parts.</p>	<p>'Answer the <b>division</b> questions below:</p> <p><i>There are 12 chocolates, and 3 friends want to share them, how do they divide the chocolates?'</i></p> 															
<p>Divisor</p>	<p>A divisor is a number that divides another number either completely or with a remainder.</p>	<div style="text-align: center;"> <table border="0" style="margin: auto;"> <tr> <td style="border: 1px solid black; padding: 2px;">Dividend</td> <td style="padding: 0 20px;"></td> <td style="border: 1px solid black; padding: 2px;">Divisor</td> <td style="padding: 0 20px;"></td> <td style="border: 1px solid black; padding: 2px;">Quotient</td> </tr> <tr> <td style="text-align: center;">↓</td> <td></td> <td style="text-align: center;">↓</td> <td></td> <td style="text-align: center;">↓</td> </tr> <tr> <td colspan="5" style="text-align: center; border: 1px solid black; padding: 10px;"> <math>6 \div 3 = 2</math> </td> </tr> </table> </div>	Dividend		Divisor		Quotient	↓		↓		↓	$6 \div 3 = 2$				
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<p>Grouping</p>	<p>Dividing things into equal groups or sets. This is one model for division.</p>	<div style="text-align: center;"> <p>Draw the grouping diagram</p>  <p>Complete the number sentence</p> <math style="color: red;">12 \div 4 = 3</math> </div>															


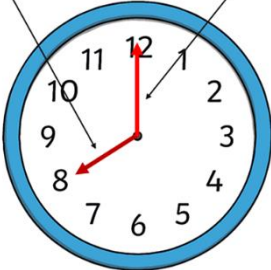

Multiplication	Gives the result of combining groups of equal sizes.	$2 \times 5 = 10$  $2+2+2+2+2$
Multiple	The product result of one number multiplied by another number.	'20 is a multiple of 10 and 2. $2 \times 10 = 20$ '.
Multiplicand	A quantity which is to be multiplied by another (the multiplier).	<b>Parts of Multiplication</b> 
Multiplier	A quantity that multiplies the multiplicand.	<b>Parts of Multiplication</b> 
Multiply	Add equal groups.	' <b>Multiply</b> 5 by 2'.
Product	The result of one or more multiplications	<b>Parts of Multiplication</b> 
Quotient	A result obtained by dividing one quantity by another.	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">Dividend ↓</div> <div style="text-align: center;">Divisor ↓</div> <div style="text-align: center;">Quotient ↓</div> </div> <div style="text-align: center; border: 1px solid gray; padding: 10px; margin-top: 10px;"> <math>6 \div 3 = 2</math> </div>
Sharing	To distribute fairly between a given number of recipients. This is one model for division.	<div style="border: 2px solid magenta; padding: 10px;"> <p>Draw the sharing diagram</p>  <p>Complete the number sentence</p> <math>12 \div 4 = 3</math> </div>





<b>Fractions</b>		
Equal grouping	Groups that have the same number of equivalent items.	<i>'Each bucket has the same number of <b>equal groups</b>'</i>
Equal part	Having the same portion, division, piece, or segment of a whole.	 <p>Whole part      Two equal parts</p> <p>Whole part      Two equal parts</p>
Equal sharing	Dividing the whole or a group of objects is into equal parts.	<i>'The pizzas below have been <b>shared equally</b>'.</i>
Fraction	<p>How many parts of a whole:</p> <ul style="list-style-type: none"> <li>• the top number (the numerator) says how many parts we have.</li> <li>• the bottom number (the denominator) says how many equal parts the whole is divided into.</li> </ul>	<p><i>'I have shared my sweets into two equal parts. Everyone will get a <b>fraction</b> of the whole quantity of sweets. One group is a half of the whole.'</i></p> 
One of two equal parts	When something is divided into two equal sections, half is one of the two parts.	<p style="text-align: center;"><b>one of two equal parts</b></p> 
Quarter	One of four equal parts of a whole, quantity or object.	<i>'I have shared the eight conkers into four equal groups – I have two conkers, which is one <b>quarter</b> of the whole.'</i>

<b>Length</b>		
Metre	A standard unit of measure, equal to 100 centimetres.	'I estimate that the table is about a <b>metre</b> tall.'
Metre stick	A measuring stick one meter long that is marked off in centimeters and usually millimeters.	'About how many <b>metres</b> is the table in length? I am going to use my <b>metre stick</b> to measure it'
Ruler	A tool or device used to measure length and draw straight lines.	'The length of this line is 10cm. I measured with a <b>ruler</b> '.
<b>Weight</b>		
Kilogram	A standard unit of mass, equal to 1000 grams.	'The book has a mass of two <b>kilograms</b> '.
<b>Capacity and volume</b>		
Capacity	The maximum amount that something can contain.	'The <b>capacity</b> of the jug is 1 litre'. 
Less than	One value or amount is lesser than the other.	'The amount of water in this container is <b>less than</b> the amount of water in this container.'
Litre	A standard unit of volume, equal to 1000 millilitres.	'The capacity of the jug is about half a <b>litre</b> '.
More than	One value or amount is greater than the other.	'The amount of water in this container is <b>more than</b> the amount of water in this container.'
Volume	A quantity or amount of any substance and the 3-D space it fills.	'The bottle contains a <b>volume</b> of one litre but its capacity is two litres. The bottle is half full.' 

<i>Time</i>		
Always	At all times.	'Christmas is <b>always</b> on December 25 <sup>th</sup> '.
Analogue clock	A clock with a face and hands.	
Date	The day of the month or year as specified by a number.	'Monday 1 <sup>st</sup> September 2021 01.09.21'
Earlier	Before the usual or expected time.	'We have finished our lesson a bit <b>earlier</b> today'.
Half past		
Hour hand	<h3>Hours and Minutes</h3> <p>This is the <b>hour</b> hand.                      This is the <b>minute</b> hand.</p> <p>It is the shortest hand on the clock.      It is longer than the hour hand.</p> 	
Later	A time or situation that is after the one that you have been talking about or after the present one.	'It is not lunchtime yet. It is <b>later</b> '.


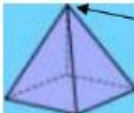


Midnight		
Minute hand	<p style="text-align: center;"><b>Hours and Minutes</b></p> <p>This is the <b>hour</b> hand.                      This is the <b>minute</b> hand.</p> <p>It is the shortest hand on the clock.      It is longer than the hour hand.</p> 	
Minute	A unit of time.	'We will have lunch in five <b>minutes</b> .'
Months of the year	<b>'January, February, March, April, May, June, July, August, September, October, November, December'</b> .	
Never	<i>'I wish it was Christmas in the summer in this country. That will <b>never</b> happen'.</i>	
Often	<i>'In Britain, it <b>often</b> rains in the winter'.</i>	
Once	On one occasion or for one time only.	<i>'I completed that challenge <b>once</b>. I need to complete it twice'.</i>
Quarter past		


Quarter to	<p>Quarter to 5</p> 	
Seasons	<i>'Spring, summer, autumn, winter'.</i>	
Sometimes	<i>'Sometimes, it might snow in the winter'.</i>	
Twice	Two times; on two occasions	<i>'I completed that challenge once. I need to complete it <b>twice</b>'.</i>
Usually	<i>'Usually we have our lunch at 12pm'.</i>	
Weekend	<i>'Saturday and Sunday is the <b>weekend</b>'.</i>	
Year	The period of 365 days (or 366 days in leap years) starting from the first of January,	<i>'Next <b>year</b>, you will be moving into year 2.'</i>
<b><u>Money</u></b>		
Change	Receiving money back after purchasing.	<i>'If I buy this teddy, how much <b>change</b> would I get?'</i> 
Cheap	Low in price, especially in relation to similar items or services.	<i>'These sweets are very <b>cheap</b> in the shop. In the other shop, they cost more'.</i>
Costs less	Cheaper in one place than in another.	<i>'The doll <b>costs less</b> than the teddy bear'.</i> 
Costs more	More expensive in one place than in another.	<i>'The teddy bear <b>costs more</b> than the doll'.</i> 

Costs the same as	Equal in price.	'The plant in shop A <b>costs the same</b> as the same plant in shop B.'
Dear	Very expensive.	'It would cost a lot of money to go on holiday abroad. It would be very <b>dear</b> '.
Total	Comprising the whole number or amount.	'The <b>total</b> cost is £5.'




### **2d shape**

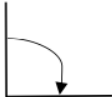
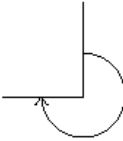
Oblong	A quadrilateral with two pairs of parallel sides of equal length.	
Point	A sharp point of a shape.	A sharp part of a shape is a point.  point The pyramid is pointed.

### **3d shape**

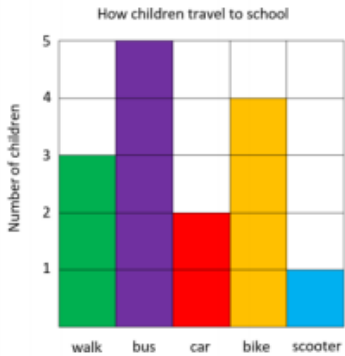
Volume	A quantity or amount of any substance and the 3-D space it fills.	'The bottle contains a <b>volume</b> of one litre but its capacity is two litres. The bottle is half full.'
		

### **Position and direction**

Anti-clockwise	Movement in the opposite direction to the motion of the hands of a clock.	
Center	A center is a point that is the same distance from all the extremities of a figure.	
Clockwise	Movement in the direction of the hands of a clock.	

Quarter turn	A 90-degree rotation, i.e. $\frac{1}{4}$ of a 360 degree 'full' turn.	
Three-quarter turn	A 270-degree rotation i.e. $\frac{3}{4}$ of a 360 degree 'full' turn.	

**Statistics**

Block graph	The pre-cursor to the bar graph, this representation of data has an x- and y-axis and one block represents one item. Each block is adjoined to the adjacent block.	<p style="text-align: center;">How children travel to school</p> 								
Chart	A table or a graph.	<i>'I will mark one day for the sun on our weather <b>chart</b>.'</i>								
Data	Quantitative information which has been counted or measured.	<i>'This block graph shows us <b>data</b> for the colour of the cars in the car park.'</i>								
Table	A structure organised into columns and rows, in which data can be recorded.	<p><i>'The information for Thursday is not yet complete on the <b>table</b> because it is only Wednesday.'</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Mon</th> <th>Tues</th> <th>Weds</th> <th>Thurs</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>7</td> <td>4</td> <td></td> </tr> </tbody> </table>	Mon	Tues	Weds	Thurs	5	7	4	
Mon	Tues	Weds	Thurs							
5	7	4								