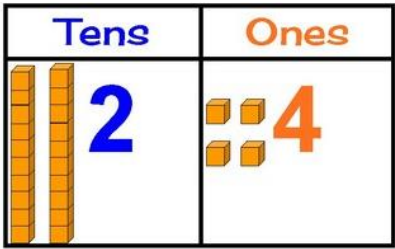
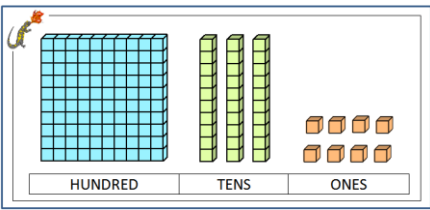


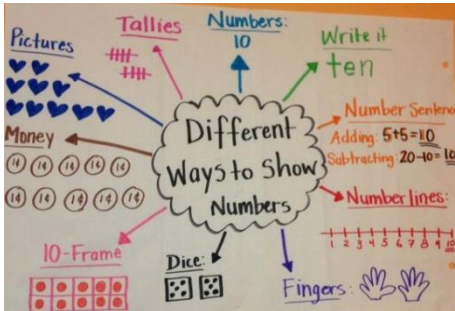
## Mathematics vocabulary list Year 2

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.

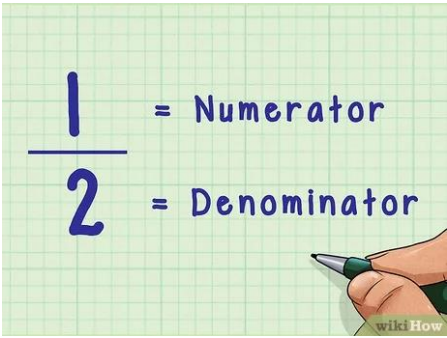
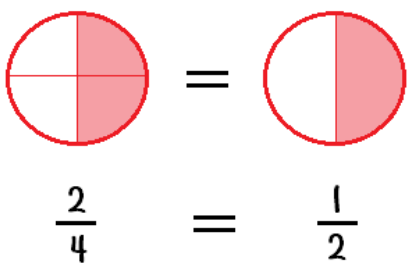
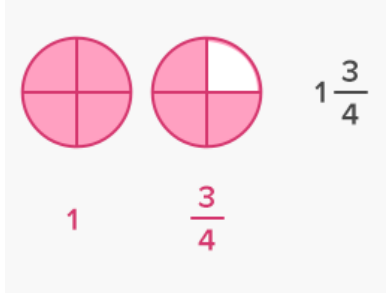
At Grace Mary, we explicitly teach maths vocabulary, giving it a context and allowing children to apply it in a variety of problems.

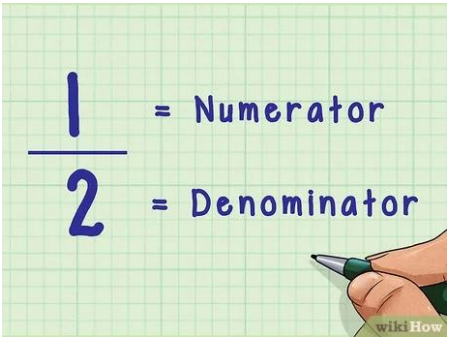


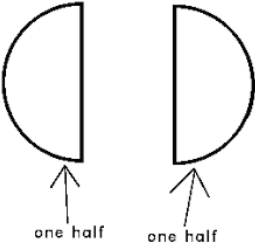
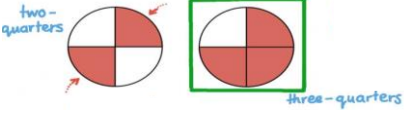
Listed below are the key mathematical terms your child will learn this year. This is the minimum we expect children to learn; however, we know children are curious and will undoubtedly want to learn more and we encourage this.


<u>Vocabulary</u>	<u>Definition</u>	<u>Example</u>
<b><i>Number and Place Value</i></b>		
Calculate	To compute or work out mathematically.	'Can you <b>calculate</b> the answer to $13 + 4$ ?'
Column	A vertical arrangement of numbers or objects.	<p>'24 has two tens – I will place them into the tens <b>column</b>'.</p> 
Continue	To carry something on.	<p>'Can you <b>continue</b> this pattern?</p> <p>15, 20, 25, 30, 35...'</p>
Efficient	Well-organised. Choosing an efficient computation strategy requires consideration of the numbers involved and will normally utilise 'known facts'.	<p>'I will use my number bonds knowledge to calculate <math>22 + 7</math> <b>efficiently</b>. I know that <math>2 + 7</math> is equal to 9, so the answer is 29. That's more efficient than counting on seven.'</p>
> Greater than	The > symbol means "greater than". It shows that one number or value is larger than another number.	<p>'Ten is <b>greater than</b> three'</p> <p><math>10 &gt; 3</math></p>
Hundreds	The number equivalent to the product of ten and ten; ten more than ninety; a three-digit number.	
< Less than	The symbol < means that one number is smaller than the other number.	<p>'There is <b>less than</b> 10.'</p> <p><math>3 &lt; 10</math></p>







One-, two- or three-digit number	One-digit numbers are the numbers 0-9; two-digit numbers are the numbers 10 to 99; three-digit numbers are the numbers 100 to 999	'Can you give me a <b>two-digit</b> number greater than 46?'
Operation	A mathematical process. The four mathematical operations are addition, subtraction, multiplication and division.	' $4 + 2 = 6$ . The <b>operation</b> is addition.'
Place value	A system for writing numbers, in which the value of a digit is defined by its position within the number.	'In the number 52 written in base ten, The digit five has a <b>value</b> of 50 and the digit two has a <b>value</b> of 2.'
Predict	A prediction is a reasonable guess as to what will happen.	'I <b>predict</b> the next number in the sequence will be 45.  30, 35, 40...'
Representation	A very general relationship that expresses similarities (or equivalences) between mathematical objects or structures.	
Rule	Rule is the procedure that a count must follow.	'The <b>rule</b> in the sequence below is add 2.  31, 33, 35, 37, 39'.
Sequence	A list of numbers or objects in a special order.	'The <b>sequence</b> below starts at 3 and increases by 4 every time.  3, 7, 11, 15'.
Twenty-first, twenty-second ...	'Twenty-first, twenty-second...ninety ninth, one-hundredth'.	
Twenty-one, twentytwo...	'Twenty-one, twenty-two, twenty three...ninety-nine, one-hundred'.	
Addition and subtraction		
Facts	A fact family can be defined as a group of math facts or equations created using the same set of numbers.	' $34 + 13 = 47$ $13 + 34 = 47$ $47 - 34 = 13$ $47 - 13 = 34$ '
Inverse operations	Opposite operations that 'undo' each other.	'Addition and subtraction are <b>inverse operations</b> .'

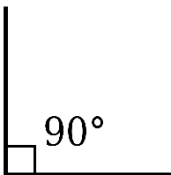

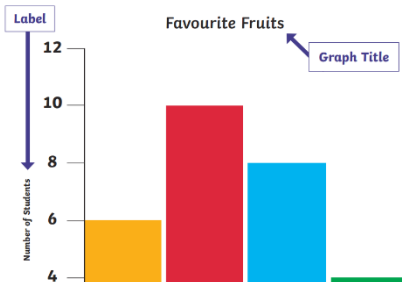
Near double	When two numbers involved in an addition are close in value, such as $23 + 22$ . The numbers can be treated as exact doubles, followed by compensating.	<i>'To calculate <math>23 + 22</math>, I can use the <b>near double</b> strategy. I can double 22 and then add one more.'</i>
Regroup	To rearrange groups in place value to carry out an operation.	
Renaming	Writing a number in an equivalent form, usually in terms of its place-value parts.	
<b>Multiplication and division</b>		
Division fact	Division number sentences related to times tables knowledge.	<i>'<math>20 \div 5 = 4</math> is a <b>division fact</b>'.</i>
Equal groups of	A group is an equal group if it has the same number of items as all of the other groups.	
Left over	When dividing in maths, the groups can be the same size. Sometimes there may be a leftover.	

Multiplication fact	The answer to a multiplication calculation. For example in $3 \times 3 = 9$ , the multiplication fact is 9.	' $10 \times 7 = 70$ is a <b>multiplication fact</b> '.
Multiplication table	A list that shows the results of multiplying certain numbers by each other.	<p><b><u>TIMES TABLE</u></b></p> $\begin{array}{l} 2 \times 0 = 0 \\ 2 \times 1 = 2 \\ 2 \times 2 = 4 \\ 2 \times 3 = 6 \\ 2 \times 4 = 8 \\ 2 \times 5 = 10 \\ 2 \times 6 = 12 \\ 2 \times 7 = 14 \\ 2 \times 8 = 16 \\ 2 \times 9 = 18 \\ 2 \times 10 = 20 \\ 2 \times 11 = 22 \\ 2 \times 12 = 24 \end{array}$
Times	An arithmetic operation that is the inverse of division.	'Four <b>times</b> three equals twelve'.
<b>Fractions</b>		
Denominator	The number written below the vinculum 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.	
Equivalence	The condition of being equal or equivalent in value, worth.	
Mixed number	A number consisting of an integer and a proper fraction.	

Non-unit fraction	A fraction with a numerator greater than one.	'Two thirds is a <b>non-unit fraction</b> .'
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.	
One of three equal parts	When a shape is divided into three equal parts, each part is called a third.	 <p>One-third means one of three equal parts.</p>
One third, two thirds	When a shape is divided into three equal parts, each part is called a third. Two of these parts are called two thirds.	 $\frac{2}{3}$ two-thirds
Two halves	Two equal parts of one whole thing.	 <p>two halves</p>
Two quarters, three quarters	When a shape is divided into four equal parts, each part is called a quarter. Two of these parts are called two quarters. Three of these parts is called three quarters.	
Unit fraction	A fraction with a numerator of one.	' $\frac{1}{4}$ is a <b>unit fraction</b> .'

Vinculum	A horizontal line that separates the numerator and the denominator in a fraction.	$\frac{1}{4}$ ← vinculum
<b>Length</b>		
Centimetre	<p>A measure of length. It is about the width of a fingernail.</p> <p>There are 100 centimetres in a metre.</p> <p>The abbreviation is cm.</p>	'The length of the line is <b>20cm</b> '.
Furthest	At or by the greatest distance.	'The child in the red jumper is <b>furthest</b> away from the tree.'
Tape Measure	A length of tape or thin flexible metal, marked at graded intervals for measuring.	'Which item would be the best to measure this object- a ruler, metre stick or <b>tape measure</b> ?'
<b>Weight</b>		
Gram	A metric unit of mass equal to one thousandth of a kilogram.	'This apple weighs approximately 100 <b>grams</b> '.
<b>Capacity and volume</b>		
Millilitre	One thousandth of a litre.	'This small beaker holds about 60 <b>millilitres</b> of water'.
<b>Temperature</b>		
Degree	A set change in temperature measured against a given scale	'The temperature at present is 16 <b>degrees Celsius</b> '.
Temperature	Measure of hotness or coldness.	'The <b>temperature</b> at present is 16 degrees Celsius'.
<b>Time</b>		
5, 10, 15 ... minutes past		

Digital clock	A clock that displays the time in numerical digits rather than by hands on a dial.	
Fortnight	A period of two weeks.	'There are 14 days in a <b>fortnight</b> '.
Seconds	A unit of time.	'There are 60 <b>seconds</b> in a minute'
<b>2d shape</b>		
Hexagon	A polygon with six sides and six angles.	
Line symmetry	A shape is symmetrical when it fits exactly onto itself when folded in half.	<b>This triangle has one line of symmetry.</b> 
Octagon	A polygon with eight sides and eight angles.	
Pentagon	A polygon with five sides and five angles.	
<b>3d shape</b>		
Surface	The outside part or uppermost layer of a 3d shape.	

Position and direction												
Right angle	An angle of 90°, as in a corner of a square											
Straight line	A line that does not curve.											
Statistics												
Frequency	The number of times something occurs within a data set.	<p>'4 pupils have brown hair. The <b>frequency</b> of brown hair is 4.'</p> <table><tr><td>Brown</td><td>Blue</td><td>Blonde</td></tr><tr><td>IIII</td><td>III</td><td>I</td></tr></table>	Brown	Blue	Blonde	IIII	III	I				
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Label	The horizontal label across the bottom and the vertical label along the side tells us what kinds of facts are listed in a graph.											
Least common	The smallest amount or number.	'No one caught the bus to school. It was the <b>least common</b> mode of transport'.										
Least popular	The smallest amount or number.	'No one chose green as their favourite colour. It was the <b>least popular</b> option'.										
Most common	The biggest amount or number.	'20 children walked to school. It was the <b>most common</b> mode of transport'.										
Most popular	The biggest amount or number.	'15 children chose red as their favourite colour. It was the <b>most popular</b> option.'										
Pictogram	A representation of data using pictures or symbols.	<p><b>Countries people visited</b></p> <table><tr><td>France</td><td>● ● ●</td></tr><tr><td>Germany</td><td>● ● ● ●</td></tr><tr><td>America</td><td>● ●</td></tr><tr><td>China</td><td>●</td></tr><tr><td>Australia</td><td>●</td></tr></table> <p>Each ● stands for 10 people</p>	France	● ● ●	Germany	● ● ● ●	America	● ●	China	●	Australia	●
France	● ● ●											
Germany	● ● ● ●											
America	● ●											
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Represent	To present something in a certain way.	'We are going to <b>represent</b> the data you collected in a pictogram'.										



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.	<p><i>'The tally chart shows that blue was the most popular colour.'</i></p> <table><tr><td><i>Yellow</i></td><td><i>    </i></td><td><i>4</i></td></tr><tr><td><i>Red</i></td><td><i>    </i></td><td><i>5</i></td></tr><tr><td><i>Blue</i></td><td><i>     /</i></td><td><i>6</i></td></tr><tr><td><i>Green</i></td><td><i> </i></td><td><i>1</i></td></tr><tr><td><i>Pink</i></td><td><i>    </i></td><td><i>4</i></td></tr></table>	<i>Yellow</i>	<i>    </i>	<i>4</i>	<i>Red</i>	<i>    </i>	<i>5</i>	<i>Blue</i>	<i>     /</i>	<i>6</i>	<i>Green</i>	<i> </i>	<i>1</i>	<i>Pink</i>	<i>    </i>	<i>4</i>
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Title	The title of a graph tells you what the graph is about.	<p style="text-align: center;"><u>Zoo Data</u></p> <table><tr><th>Animal</th><th>Visitors</th></tr><tr><td>Penguin</td><td>8</td></tr><tr><td>Lion</td><td>10</td></tr><tr><td>Snake</td><td>15</td></tr><tr><td>Giraffe</td><td>4</td></tr><tr><td>Monkey</td><td>7</td></tr></table>	Animal	Visitors	Penguin	8	Lion	10	Snake	15	Giraffe	4	Monkey	7			
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