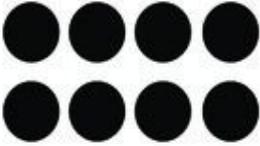
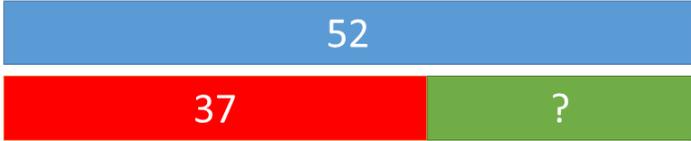
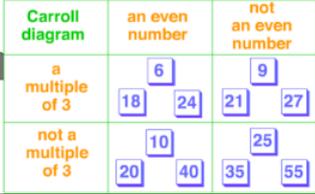
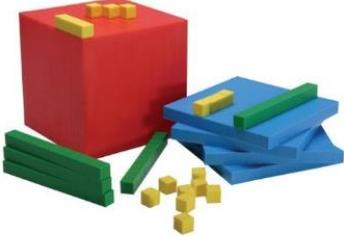
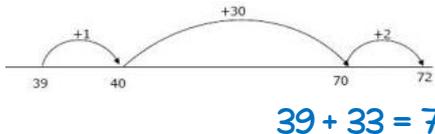
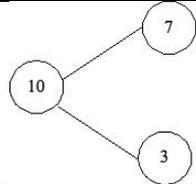
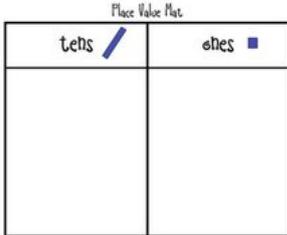
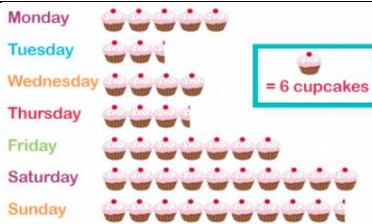
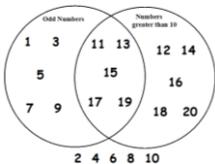


# Maple Maths Glossary

Mathematical Term	Definition/Model/Image
Array	<p>An arrangement of a set of objects or numbers in rows and columns.</p> <p>These are often used to support the corresponding relationships of multiplication and division.</p> <p><i>This array could be seen to represent the multiplication equations: <math>2 \times 4 = 8</math> or <math>4 \times 2 = 8</math> and the division equations <math>8 \div 2 = 4</math> or <math>8 \div 4 = 2</math></i></p> 
Bar Modelling	<p>Bar modelling This is way of representing a problem using pictures. It is often a very useful way of making a complex word problem more accessible to pupils. Although it is not in itself a method of solution, by "seeing" the problem in the visual form, it is them often easier for pupils to see how to approach the problem</p>  <p>Here the bar model may be used to help solve a problem such as: <i>Maple Infants' School's Athletics Club has space for 52 pupils, 37 pupils have already signed up, how many spaces are there left?</i></p>
Carroll Diagram	<p>A sorting diagram used to sort items according to the attributes of two or more categories. Numbers or objects are categorised as belonging or not belonging.</p> 
Dienes	<p>Dienes blocks are concrete representations of numbers which are in exact proportion to each other, so they can represent all powers of tens, such as ones, tens, hundreds and thousands. They help pupils to understand the relationship between place value columns and see why we exchange e.g. one ten for ten ones.</p> 
Digit	<p>Any of the numbers 0-9.</p> <p>This term is often used when identifying the properties of numbers.</p> <p><i>38 is a two-digit number. 6 is a one-digit number.</i></p> <p><i>I am thinking of a number with two digits and the second digit is 3 - What might my number be?</i></p>
Empty Number Line	<p>A blank line used to represent a 'number line'. Children are taught to use it to write numbers on as an aid to solving equations.</p> 
Equal to	<p>Equal to We refer to quantities being "equal to" each other rather than "equals" as this emphasises the fact that equality works in both directions e.g. consider the equation "<math>4 + 1 = 3 + 2</math>". Both sides of the equation are "equal to" each other, as both give the result 5.</p>
Equation	<p>Says that two things are equal.</p> <p>It will have an 'equal to' sign, for example, <math>8 - 3 = 5 \times 1</math></p>
Equivalent	<p>Having exactly the same value e.g. <math>12 \div 2 = 4 + 2</math></p>

Estimation	Make an approximate calculation often based on rounding.
Expression	Numbers, symbols and operators grouped together but without the equal to sign, for example, $5 \times 3$ or $6 - 1$
More/Fewer and Greater/Less	More and fewer are used when we talk about discrete data, i.e. objects that can be counted using positive whole numbers. Greater and less are used when we talk about continuous data, i.e. data that can take any value within a range
Number bond	A way of representing a number using a part-part whole model, for example, if 3 and 7 are the parts then the whole is ten. 
Odd One Out	From a set of items, pupils are asked to identify which one is different from the others and why. Often there can be more than one answer/reason and this is useful in helping pupils to develop their reasoning.
Ones	We refer to the "ones" place value column to the right of the "tens" as the use of the word "units" is both unnecessary and confusing. The "unit" refers to the type of measure – cm, kg etc. whereas we count in "ones". 
Partitioning	A way of breaking a number into at least two parts resulting in a number bond for that number. For example: <i>12 is equal to ten and two.</i>
Pictogram	A graph that uses pictures to represent one or several objects. 
Place Value	The value of a digit determined by its place in a number. <i>The place value of 2 in 26 is 20, the place value of 2 in 246 is 200.</i>
Product	The answer you get when you multiply two numbers. <i>The product of <math>2 \times 5</math> is 10</i>
Skip counting	Selecting a multiple and a starting point and then counting in that multiple, <i>Skip counting in fives from one would be 1, 6, 11, 16, 21, 26, 31, etc.</i>
Standard Unit	The standard units of measurement for lengths, weight, temperature, time, capacity etc. <i>Standard units include: millimetres (mm), centimetres (cm), metres (m), milligrams (mg), grams (g), kilograms (kg), degrees (°C), seconds (s) minutes (min), hours (hrs), millilitres (ml) and litres (l)</i>
Sum	The result of adding two or more numbers. This is often used mistakenly to mean any calculations, but sum should only be used for additions
Venn Diagram	A diagram that allows you to group items into two or more categories, some of which might belong to more than one category – these examples will be placed in the intersection. 

## REASONING QUESTION prompts

Can you explain...?

Can you prove to me?

How have you solved this?

What is the same and what is different between...?

How might you solve this equation?

Can you convince me of this in another way?

Is this true or false...Why?

Is this always true, sometimes true or never true? Convince me.

How do you know you have found all possibilities?