Year 6 Ravens

Mathematics

Spring Term 1

Number:

Ratio

Algebra

Decimals
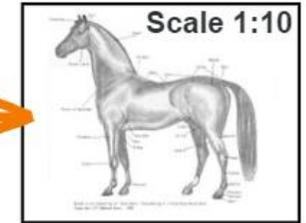
In this example the horse is drawn to scale. The ratio is for every 10mm in real life it has been drawn as 1mm on the page. This keeps the horse in the correct perspective.

Key Vocabulary		Definition
Ratio	Colon	A mathematical symbol (:) which is used to show ratio.
	Factor	Numbers which can be multiplied together to create another number. For example: 2 and 3 are factors of 6, because 2 × 3 = 6
	Ratio	A ratio shows the relative sizes of two or more values so that bigger objects can be shown smaller but the dimensions remain consistent.
	Scale	The ratio of the length in a drawing (or model) to the length of the actual object.
Algebra	Algebra	Algebra uses letters (like x or y) or other symbols in place of values, and then with them using special rules.
	Equation	An equation shows that two things are equal. It will contain an equals sign = an example of an equation could be 7 + 2 = 10 − 1
	Expression	Numbers, symbols and operators (such as + and ×) grouped together that show the value of something such as 4a where the value of a could change so therefore does not have a fixed answer therefore no = sign is used.
	Formula	A rule or fact written with mathematical symbols. The plural of formula is Formulae.
	Inverse Operation	The operation that reverses the effect of first operation. An example would be the relationship between addition and subtraction which are inverse operations.
Decimals	Decimal	Often used to mean a number that uses a decimal point followed by digits that show a value smaller than one 1.2
	Round	Rounding means making a number simpler but keeping its value close to what it was. The result is less accurate, but easier to use. Example: 73 rounded to the nearest ten is 70, because 73 is closer to 70 than to 80. But 76 would be closer to 80 than 70.
	Tenth	When a whole is split into ten equal parts. It can be represented as a fraction (1/10) or as a decimal (0.1)

Formula

Formulas use letters to represent unknown numerical data. The value can then calculated by putting the numerical value in.
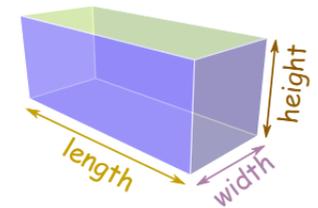
Volume = lwh (length x width x height)

If they measure as such l = 10m; w = 5m and h = 2m
The volume would be 10 x 5 x 2 or 10 x 10 so 100 m^3

Function Machine

A function machine is a way of showing how maths operations have been applied to a number in the order that they have happened. They are a bit like a flow diagram that is specifically used for mathematical purposes.