

Key Vocabulary Explained-KS2

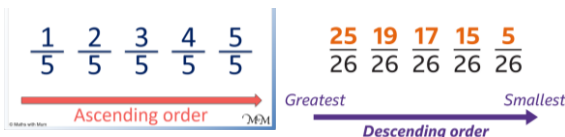
Bar Model

A pictorial representation of a problem or concept where bars or boxes are used to represent the known and unknown quantities.



Ascending & Descending

Ascending order means the process of arranging numbers from smallest to largest from left to right and descending is largest to smallest.



Numerator & Denominator

The numerator of a fraction, which is above the line, shows how many parts we have out of the whole. While the denominator below the line shows how many equal parts there are in total.

$$\frac{3}{5}$$

← numerator
← denominator

Improper & Mixed Number Fraction

An improper fraction has a numerator greater than its denominator. A mixed number, fraction, is a combination of an integer (whole number) and fraction (part of a whole number).

$$\frac{9}{4} \quad 3\frac{4}{5}$$

Exchanging

In subtraction it is the process of taking one 'ten' from the 'tens' column and exchanging it into ten 'ones'. In division it is when digits are moved to a lower value column to assist with the division.

$$\begin{array}{r} 71 \\ 783 - \\ 458 \\ \hline 325 \end{array}$$

$$\begin{array}{r} 28 \\ 3 \overline{) 84} \end{array}$$

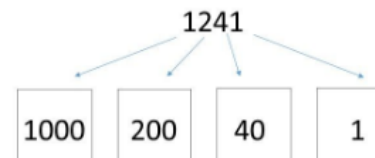
Fact Families

A collection of related addition and subtraction facts, or multiplication and division facts, made from the same numbers.

$$\begin{array}{l} 12 \div 3 = 4 \quad 4 \times 3 = 12 \\ 12 \div 4 = 3 \quad 3 \times 4 = 12 \end{array}$$

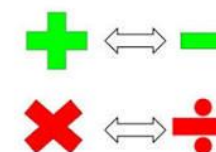
Partitioning

Partitioning is separating numbers into each place value e.g. 782 can be partitioned into: $700 + 80 + 2$.



Inverse Operation

Inverse operations are opposite operations. They are the operation that reverses the effect of another operation.



Distributive law

States that multiplying a group of large 2 or 3-digit numbers will create the same value as those numbers being partitioned, multiplied and added together. Some examples are: $52 \times 8 = 416$. This is the same as $(50 \times 8) + (2 \times 8)$.

$$\begin{array}{r} 5 \times 123 = \\ 100 \quad 20 \quad 3 \\ (5 \times 100) + (5 \times 20) + (5 \times 3) \end{array}$$

Two-Step Problem

Two-step problems mean the children have to perform two different calculations to get the answer.

There are seventeen boys and fourteen girls in a class. The children sit at tables of 4. How many tables are needed?

Place Value

The place value is the position of each digit in a number. The place value of digits is determined as ones, tens, hundreds, and so on, based on their position in the number.



Multiples & Factors

A multiple in math are the numbers you get when you multiply a certain number by an integer (whole number). A factor is an integer that divides exactly into a whole number without a remainder.

$$5 \times 4 = 20$$

factor of 20 factor of 20 multiple of 4 multiple of 5