

## My mathematical journey

## What do I need to remember from before?

Place value of numbers up to 10 000 000 (KS2)

Rounding numbers to the nearest 10, 100, 1000, 10 000 and 100 000 (KS2)

Rounding decimals to 1, 2 or 3 decimal places (KS2)

Ordering negative numbers on a number line (KS2)

Multiplying and dividing numbers by 10, 100 and 1000

## What will I learn about in this unit?

Writing integers and decimals in expanded form and words

Ordering numbers

Rounding to decimal places and to significant figures

Converting metric units

Finding the midpoint of two numbers

Finding the median of discrete data

## Where does this lead?

Addition & subtraction (NP2)

Multiplication & division (NP3)

Percentages, fractions & decimals (NP8)

Estimation (NP9)

Analysing discrete data (SP1)

Using units of measure (all GM units and many SP units)

Standard form (NP12)

Indices & surds (NP15)

## Key words &amp; symbols

Word	Explanation	Symbol	How to read it
number	a value or a quantity used to count or measure	<	is less than
digit	a symbol we use to make numbers, such as "0" or "9"	>	is greater than
numeral	a number written with digits, such as "213" or "0.5"	≤	is less than or equal to
integer	a "whole" number (with no decimal part), such as 15 or 510, but <u>not</u> 2.5	≥	is greater than or equal to
base 10	our numeral system, where each column is worth a different power of 10	=	is equal to
decimal	means "base 10" but more often used for non-integers written like this: 2.5 or 38.7	≠	is not equal to
less than	numbers further left on the number line	≈	is approximately equal to
greater than	numbers further right on the number line		
ascending	going up		
descending	going down		

## Fingertip facts: what I need to learn by heart

Prefix	micro-	milli-	centi-	kilo-	mega-	giga-
Symbol	$\mu$	m	c	k	M	G
Scale factor	0.00 001	0.00 1	0.01	1000	1 000 000	1 000 000 000
Example (using grams)	1 $\mu$ g is one millionth of a gram	1 mg is one thousandth of a gram	1 cg is one hundredth of a gram	1 kg is one thousand grams	1 Mg is one million grams	1 Gg is one billion grams