

# KNOWLEDGE

# STAGE 8


Advanced Proportional

## Part- Whole

At this stage these are the key pieces of knowledge the children need to learn.

### Learning Outcomes Knowledge

I am learning to...

Sequencing & Ordering	Count forwards and backwards in $\frac{1}{1000}$ 's, $\frac{1}{100}$ 's, $\frac{1}{10}$ 's, 1's, 10's, etc.	1.2, 1.3, 1.4 6.43, 6.43, 6.41								
	Say the number 0.001, 0.01, 0.1, 1, 10 before/after decimal numbers	6.42, 6.52, _____ 								
	Order fractions, decimals and percentages	0.4, 50%, $\frac{4}{5}$								
Grouping / Place Value	Know how many $\frac{1}{10}$ 's, $\frac{1}{100}$ 's, & $\frac{1}{1000}$ 's, are in numbers to 3 d.p.	1.873 → 18 tenths, or 187 hundredths etc.								
	Know what happens when any number is multiplied or divided by a power of ten.	$1.23 \times 100 = 123$ $6.53 \div 10 = 0.653$								
	Round decimals to the nearest 100, 10, 1, 0.1 or 0.01	9.876 → 9.88								
Basic Facts	Recall fraction, decimal & % conversions for commonly used fractions: ( $\frac{1}{8}$ 's, $\frac{1}{10}$ 's, $\frac{1}{20}$ 's etc)	$\frac{1}{8} = 0.125 = 12.5\%$								
	Know simple powers of numbers to 10	$2^3 = 8$								
	Use divisibility rules for 2,3,4,5,6,8,9,10	276 is divisible by 3 because $2 + 7 + 6 = 15$								
	Identify common factors of pairs of numbers to 100	Highest common factor of 72 & 81 = 9								
	Identify lowest common multiple of pairs of numbers to 10	The LCM of 6 & 8 = 24								
	Recall prime numbers to 20	e.g. 1, 2, 3, 5, 7..								