Year 5 — Mathematics Core Knowledge Overview

Number Line

Negative Numbers | **Positive Numbers**

Four Operations

Addition (+)

$$\begin{array}{r} 787567 \\ +\ 446278 \\ \hline 1233845 \\ 1\ 1\ 1\quad 1\ 1 \end{array}$$

Subtraction (-)

$$\begin{array}{r} 7\not{4}^{3}2\not{8}^{12}\not{3}^{1}1 \\ -\ 427358 \\ \hline 315473 \end{array}$$

Multiplication (x)

$$\begin{array}{r} 43 \\ \times\ 65 \\ \hline 215 \\ +\ 2580 \\ \hline 2795 \end{array}$$

(5 x 43)

(60 x 43)

Division (÷)

$846 \div 5 = 169.2$

$$5\overline{)846.0} = 169.2$$

Key Vocabulary - Definitions

Multiple - a number that can be divided evenly by a given number.

Factor - a number that is multiplied by another number, resulting in a product.

Common Factor - a number which is a factor of two or more other numbers.

Prime Number - a number with no divisors other than 1 and itself.

Composite Number - a number that can be divided by numbers other than 1 and itself, leaving no remainders.

Prime Factor - a factor of a number that is also a prime number.

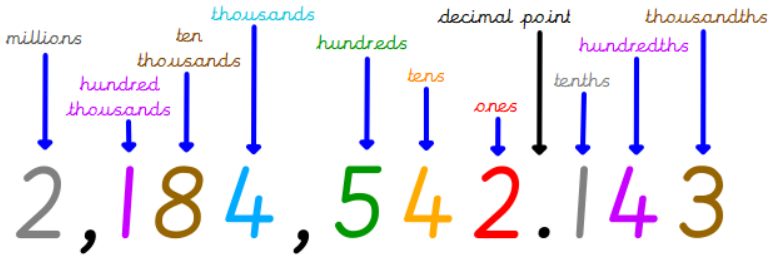
Square Number - $2^2 = 2 \times 2 = 4$

Cube Number - $3^3 = 3 \times 3 \times 3 = 27$

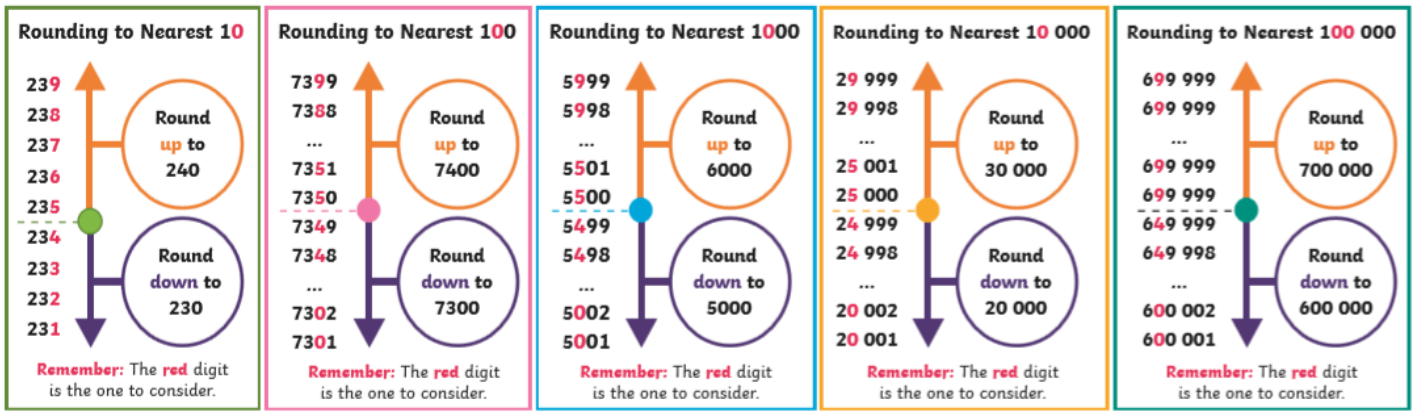
Units of Measure

Length	Capacity	Mass
1mm = 0.1cm	1ml = 0.001l	1g = 0.001kg
10mm = 1cm	10ml = 0.01l	10g = 0.01kg
100cm = 1m	100ml = 0.1l	100g = 0.1kg
1000m = 1km	1000ml = 1l	1000g = 1kg

Place Value



Rounding



Equivalent Fractions, Decimals and Percentages

Adding and Subtracting Fractions

When two fractions have the **same** denominator...

$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5} \qquad \frac{4}{8} - \frac{2}{8} = \frac{2}{8}$$

When two fractions have a **different** denominator...

$$\frac{1}{3} + \frac{1}{2} = \qquad \frac{1}{2} - \frac{1}{5} =$$

$$\frac{2}{6} + \frac{3}{6} = \frac{5}{6} \qquad \frac{5}{10} - \frac{2}{10} = \frac{3}{10}$$