

Ashfield Valley Primary School— Year 6 -Autumn 1- Maths Knowledge Organiser

Place Value

Rounding to the Nearest 10

239
238
237
236
235

234
233
232
231

Round up to 240

Round down to 230

Rounding to the Nearest 100

7399
7398
...
7351
7350

7349
7348
...
7302
7301

Round up to 7400

Round down to 7300

Rounding to the Nearest 1000

5999
5998
...
5501
5500

5499
5498
...
5002
5001

Round up to 6000

Round down to 5000

Rounding to the Nearest 10,000

29,999
29,998
...
25,001
25,000

24,999
24,998
...
20,002
20,001

Round up to 30,000

Round down to 20,000

Rounding to the Nearest 100,000

699,999
699,998
...
650,001
650,000

649,999
649,998
...
600,002
600,001

Round up to 700,000

Round down to 600,000

Rounding to 1 000 000

Multiplication and Division

M8: Long Multiplication

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

(5 x 43)
(60 x 43)

D10: Short Division

$$136 \div 4 = 34$$

$$\begin{array}{r} 34 \\ 4 \overline{)136} \\ \underline{12} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

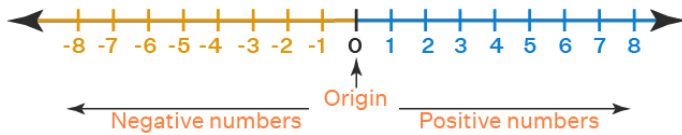
D13: Long division (no remainders)

$$\begin{array}{r} 0325 \\ 25 \overline{)8125} \\ \underline{75} \\ 62 \\ \underline{50} \\ 125 \\ \underline{125} \\ 0 \end{array}$$

(x3)
(x2)
(x5)

8125 ÷ 25 = 325

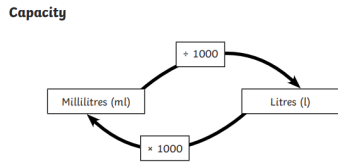
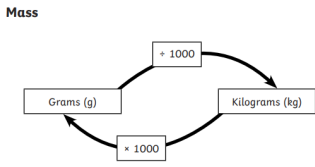
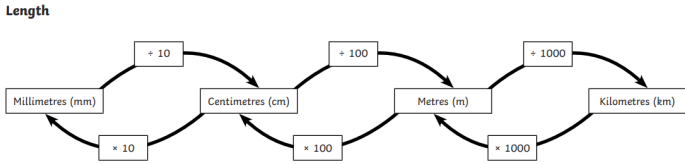
Positive and Negative Numbers



Place Value Chart

M	HTh	TTh	T	H	T	O	1/10	1/100	1/1000
0	0	0	0	0	0	0	0	0	0
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

Converting Units of Measure



Adding and Subtracting Fractions

When Two Fractions Have the Same Denominator

If the two fractions in the calculation have the same denominator, the denominator will stay the same. Then all you need to do is simply add or subtract the numerators to find the sum of the fractions.

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

$$\frac{4}{8} - \frac{2}{8} = \frac{2}{8}$$

When Two Fractions Have Different Denominators

First, find the smallest common denominator (smallest whole number that has both denominators as factors). Rewrite the fractions with that denominator then add or subtract. When working with mixed numbers, add or subtract the whole numbers too.

$$\frac{1}{3} + \frac{1}{2} =$$

$$\frac{1}{2} - \frac{1}{5} =$$

$$\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$$

$$\frac{5}{10} - \frac{2}{10} = \frac{3}{10}$$