

Addition and subtraction

Use the formal column methods to add and subtract larger numbers.

E.g.

$$\begin{array}{r} 81686 \\ + 66549 \\ \hline 148235 \\ 111 \end{array}$$

$$\begin{array}{r} 23005 \\ - 1467 \\ \hline 1538 \end{array}$$

Read, write and order large numbers.

Understand the value of each digit.

E.g.

7,830,374

Seven million, eight hundred and thirty thousand, three hundred and seventy four

3 = thirty thousand = 30,000

Angles

To be able to estimate, measure and draw all angles (acute, obtuse and reflex) of any size up to 360°.

Multiplication

Partitioning grid method and the formal column method.

E.g.

$$23 \times 4 =$$

'Grid Multiplication'

	20	3
4		

$$\begin{array}{r} 23 \\ \times 4 \\ \hline 92 \end{array}$$

$$57 \times 26 =$$

X	50	7
20	1000	140
6	?	

$$\begin{array}{r} 57 \\ \times 26 \\ \hline 342 \\ + 1140 \\ \hline 482 \end{array}$$

Rounding

Rounding Poem

Find your place
Look next door
5 or greater, add one more
All digits in front stay the same
All digits behind, zero's your name

Example:

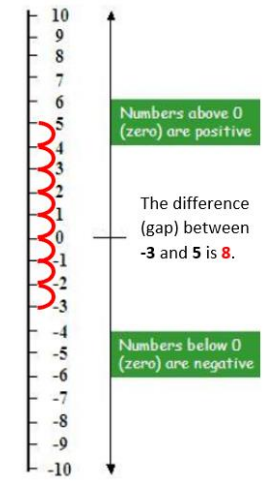
Round to nearest ten

$$\begin{array}{l} 63 \rightarrow 60 \\ 65 \rightarrow 70 \\ 524 \rightarrow 520 \\ 528 \rightarrow 530 \end{array}$$

Round to nearest hundred

$$\begin{array}{l} 435 \rightarrow 400 \\ 462 \rightarrow 500 \\ 7328 \rightarrow 7300 \\ 7356 \rightarrow 7400 \end{array}$$

Negative numbers



Year 5 Maths Placemat

Prime numbers and factors of numbers

To be able to recognise and identify numbers that fall into these categories.

Squared and cubed numbers

Recognise and use the symbols ($^2/3$).
To be able to square a number, find the square root of a number and cube numbers.

Fractions

To compare and order simple fractions.



E.g.

To be able to convert improper fractions and mixed number fractions.

E.g.

$$\frac{6}{4} = 1 \frac{2}{4} \quad \frac{3}{3} = \frac{11}{3}$$

Be able to convert fractions so that they have the same denominator, where the denominators are multiples of the same number.

E.g.

$$\begin{array}{l} \frac{2}{3} \times 6 = \frac{12}{3} \\ \frac{3}{4} \times 6 = \frac{18}{4} \\ \frac{5}{6} \times 3 = \frac{15}{6} \\ \frac{6}{6} \times 3 = \frac{18}{6} \end{array}$$

Division

Use their knowledge of times tables and multiples of 10 to answer division calculations.

E.g.

96 ÷ 5 = 19r1
10 lots of 5 make 50
9 lots of 5 make 45
So 19 lots of 5 make 95
With 1 left over, making 96

Use the formal method for short division (the bus stop method), including remainders.

E.g.

$$186 \div 6 =$$

0	3	1
6	1	8
6	1	8

no groups of 6 can be made 3 x 6 = 18

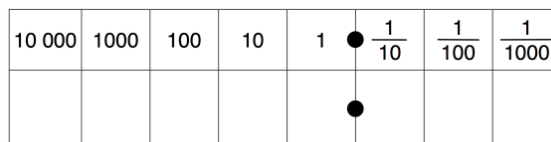
$$\begin{array}{r} 86 \text{ r } 2 \\ 5 \overline{) 432} \\ \underline{40} \\ 32 \\ \underline{30} \\ 2 \end{array}$$

Answer: 86 remainder 2

Linking decimals, percentages and fractions

FRACTION	DECIMAL	PERCENTAGE
1	1.0	100%
1/2	0.5	50%
1/4	0.25	25%
1/5	0.2	20%
1/10	0.1	10%
1/20	0.05	5%

Multiplying by 10, 100 and 1000



Multiplying

X 10
X 100
X 1000



Dividing

÷ 10
÷ 100
÷ 1000



Jigsaw number recognition

Using their knowledge of jigsaw numbers to ten, make links between calculations and work mentally.

E.g.

4 + 6 = 10
14 + 6 = 20
34 + 6 = 40
40 - 4 = 36
16 + 84 = 100
346 + 54 = 400