Tadpole Farm
CE Primary Academy

Year 5 and 6 Maths at Tadpole Farm

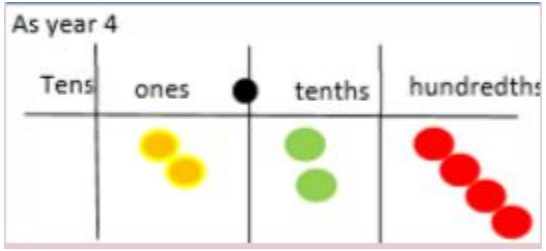
This booklet has been written to help you understand the methods used in mathematics in our year group. These methods will be taught as part of the maths lessons and revisited through their home learning. We would encourage parents to use the same methods so that the children can become confident with them.

Addition

Year 5

$$\begin{array}{r} 56793 \\ +\,13567 \\ \hline 70360 \\ \hline \end{array}$$

$$\begin{array}{r} 7285.84 \\ +\;\;416.93 \\ \hline 7702.77 \\ \hline \end{array}$$



Year 6

$$\begin{array}{r} 9241462 \\ +\;\;478557 \\ \hline 9720019 \\ \hline \end{array}$$

Example 1:
Adding Decimals

9.8 + 9.7 + 9.425 + 9.85

9.800	* line up decimals
9.700	
9.425	* use zeros as placeholders
+ 9.850	
38.775	ADD, remembering the decimal

Subtraction

Year 5

$$\begin{array}{r} 6^{\cancel{7}}7^{1}3^{\cancel{3}}3^{1}1 \\ -\ 12\ 123 \\ \hline 55208 \end{array}$$

$$\begin{array}{r} 456.^{1}3^{\cancel{2}}2^{1} \\ -242.14 \\ \hline 214.18 \end{array}$$

Year 6

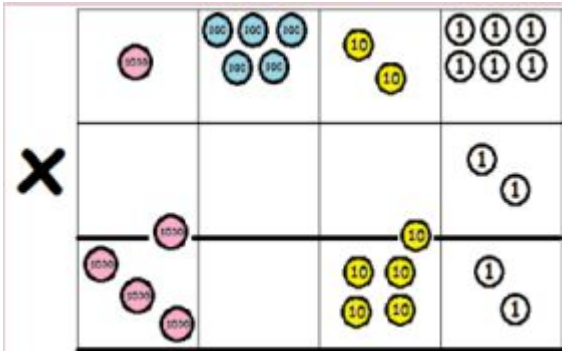
$$\begin{array}{r} 8^{\cancel{9}}9^{5}5^{1}2^{\cancel{6}}6^{1}4 \\ -235245 \\ \hline 660019 \end{array}$$

$$\begin{array}{r} 9^{\cancel{5}}4^{1}6^{\cancel{2}}2^{1}4.^{1}2^{\cancel{3}}1^{1} \\ -22312.03 \\ \hline 72312.18 \end{array}$$

3.65km - 2804m = ?

Multiplication

Year 5



	1	5	2	6
×				2
	3	0	5	2

		1	2	4
×			2	6
		7	4	4
+	2	4	8	0
	3	2	2	4

Year 6

		2	6	1	7
×				3	2
		5	2	3	4
+	7	8	5	1	0
	8	3	7	4	4

Division

Year 5

$$5 \overline{)\,6^{1}1^{1}5} \quad 123$$

432 ÷ 5 becomes

$$5 \overline{)\,4\ 3^{3}\ 2} \quad 8\ 6\ \text{r}\ 2$$

Answer: 86 remainder 2

Year 6

$$25 \overline{)\,3798} \quad 151\ \text{r}23$$

25

129

125

48

25

23

432 ÷ 15 becomes

$$15 \overline{)\,4\ 3\ 2 \cdot 0} \quad 2\ 8 \cdot 8$$

3 0

1 3 2

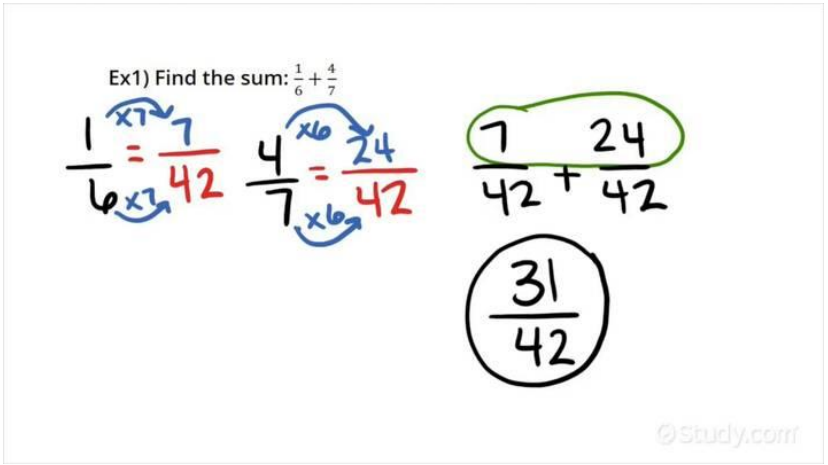
1 2 0

1 2 0

1 2 0

0

Fractions



Subtract Fractions

$$\frac{5}{6}-\frac{1}{4}$$

Subtract fractions $\frac{5}{6}-\frac{1}{4}=\frac{10}{12}-\frac{3}{12}=\frac{7}{12}$

$$Q:\frac{4}{5}\div\frac{2}{6}=?$$

leave the first, change the sign, flip the second

$$\frac{4}{5}\times\frac{6}{2}=\frac{24}{10}=2\frac{4}{10}=2\frac{2}{5}$$

$$\frac{4}{5}\times\frac{3}{7}=\frac{4\times3}{5\times7}=\frac{12}{35}$$

Decimals

Addition and Subtraction of Decimals and Whole Numbers

Addition

$$\begin{array}{r} 15.00 \\ +\ 12.56 \\ \hline 27.56 \end{array}$$

Subtraction

$$\begin{array}{r} {\scriptstyle 9}\ \ {\scriptstyle 5}\ {\scriptstyle 10}\ {\scriptstyle 10} \\ \not{6}.\not{0}\not{0} \\ -\ 2.25 \\ \hline 3.75 \end{array}$$

Multiplying with Decimals

4.25 x 2 = 850

4.25 x 2 → 850 = 8.50 (2 places over)

Decimal Places	2	0

So, 4.25 x 2 = 8.50

Multiplying with Two Decimals

2.2 x 1.2 = 264

2.2 x 1.2 → 264 = 2.64 (2 places over)

Decimal Places	1	1

So, 2.2 x 1.2 = 2.64

Long Division

$$\begin{array}{r|l} & 67.54 \\ \hline 5 & 337.70 \\ & -30\ \downarrow\ \ \downarrow \\ \hline & 37\ \ \downarrow \\ & -35 \\ \hline & 27 \\ & -25 \\ \hline & 20 \\ & -20 \\ \hline & 0 \end{array}$$

Percentages

$$30\% \text{ of } 20 = ?$$

$$= \frac{30}{100} \times 20 = \frac{30 \times 20}{100}$$

$$= \frac{600}{100} = 6$$

60% of 140

140 ÷ 2 = 70 (50%)

140 ÷ 10 = 14 (10%)

84 (60%)

Percentage	To find
50%	÷ 2
25%	÷ 4
10%	÷ 10
1%	÷ 100

28% of 650 = **182**

$$\frac{28}{100} \quad 650 \div 100 = 6.5$$

$$6.5 \times 28$$

$$520$$

$$1300$$

$$182.0$$