

# This is how mathematics looks in Year 6...

## Facts We Must Know

How to multiply or divide any number by 10, 100 or 1000

e.g.  $6.12 \times 1000 = 6120$

$3858 \div 100 = 38.58$

The order of calculation in problems involving mixed operations (i.e. BIDMAS)

How to use rounding to estimate with appropriate accuracy

e.g.  $2500 + 1300$  as an estimate for  $2521 + 1289$

## Addition and Subtraction

We Are Learning To (WALT):

Add and subtract quickly using the formal written method for whole numbers of 4+ digits:

			1	1				3	1	1	6
	1	4	2	7	2		5	4	2	7	2
+	1	1	5	8	9	-	3	1	5	8	9
	2	5	8	6	1		2	2	6	8	3

Add and subtract numbers up to 3 decimal places using formal method

	2	.	3	5	6	+	3	.	1	5	3
	2	.	3	5	6						
+	3	.	1	5	3						
	5	.	5	0	9						

	3	.	1	5	3	-	1	.	0	2	7
	3	.	1	5	3						
-	1	.	0	2	7						
	2	.	1	2	6						

## Multiplication

We Are Learning To (WALT):

Multiply numbers using the Short Formal Written Method:

$342 \times 7$  becomes

	3	4	2		
×				7	
	2	3	9	4	
		2	1		

Answer: 2394

$2741 \times 6$  becomes

	2	7	4	1	
×					6
	1	6	4	4	6
		4	2		

Answer: 16 446

Multiply numbers using the Long Formal Written Method:

$24 \times 16$  becomes

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

Answer: 384

$124 \times 26$  becomes

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

Answer: 3224

## Division

We Are Learning To (WALT):

Multiply numbers using the Short Formal Written Method:

$98 \div 7$  becomes

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \\ \underline{7} \phantom{0} \\ 28 \\ \underline{28} \\ 0 \end{array}$$

Answer: 14

$432 \div 5$  becomes

$$\begin{array}{r} 86 \text{ r } 2 \\ 5 \overline{) 432} \\ \underline{40} \phantom{0} \\ 32 \\ \underline{30} \\ 2 \end{array}$$

Answer: 86 remainder 2

$496 \div 11$  becomes

$$\begin{array}{r} 45 \text{ r } 1 \\ 11 \overline{) 496} \\ \underline{44} \phantom{0} \\ 56 \\ \underline{55} \\ 1 \end{array}$$

Answer:  $45\frac{1}{11}$

Multiply numbers using the Long Formal Written Method:

$432 \div 15$  becomes

$$\begin{array}{r} 28 \text{ r } 12 \\ 15 \overline{) 432} \\ \underline{30} \phantom{0} \\ 132 \\ \underline{150} \\ 12 \end{array}$$

Answer: 28 remainder 12

$432 \div 15$  becomes

$$\begin{array}{r} 28 \\ 15 \overline{) 432} \\ \underline{30} \phantom{0} \\ 132 \\ \underline{150} \\ 12 \end{array}$$

$15 \times 20$   
 $15 \times 8$

$$\frac{12}{15} = \frac{4}{5}$$

Answer:  $28\frac{4}{5}$

$432 \div 15$  becomes

$$\begin{array}{r} 28.8 \\ 15 \overline{) 432.0} \\ \underline{30} \phantom{0} \\ 132 \\ \underline{150} \\ 120 \\ \underline{150} \\ 0 \end{array}$$

Answer: 28.8