

This is how mathematics looks in Year 6...

Facts We Must Know

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

$$\text{e.g. } 6.12 \times 1000 = 6120$$

$$3858 \div 100 = 38.58$$

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				
	1	4	2	7	2				
+	1	1	5	8	9				
<hr/>									
	2	5	8	6	1				

				3	1	1	6		
	5	4	2	7	2				
-	3	1	5	8	9				
<hr/>									
	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
<hr/>										
	2	.	3	5	6					
+	3	.	1	5	3					
<hr/>										
	5	.	5	0	9					

3	.	1	5	3	-	1	.	0	2	7
<hr/>										
	3	.	1	5	3					
-	1	.	0	2	7					
<hr/>										
	2	.	1	2	6					

Multiplication

We Are Learning To (WALT):

Multiply numbers using the Short Formal Written Method:

342×7 becomes

	3	4	2	
×			7	
<hr/>				
	2	3	9	4
		2	1	

Answer: 2394

2741×6 becomes

	2	7	4	1	
×				6	
<hr/>					
	1	6	4	4	6
		4	2		

Answer: 16 446

Multiply numbers using the Long Formal Written Method:

24×16 becomes

		2		
	2	4		
×	1	6		
<hr/>				
	2	4	0	
	1	4	4	
<hr/>				
	3	8	4	

Answer: 384

124×26 becomes

			1	2	
	1	2	4		
×		2	6		
<hr/>					
	2	4	8	0	
		7	4	4	
<hr/>					
	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

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

Answer: 14

$432 \div 5$ becomes

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

Answer: 86 remainder 2

$496 \div 11$ becomes

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

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

Multiply numbers using the Long Formal Written Method:

$432 \div 15$ becomes

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

Answer: 28 remainder 12

$432 \div 15$ becomes

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

15×20
 15×8

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

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

$432 \div 15$ becomes

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

Answer: 28.8