



St John Fisher RC Primary School

Year 5 Maths Knowledge Organiser

Spring Term One: Multiplication & Division

Objectives		Teacher									
I can multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers											
I can divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context											
Multiplication		Division									
M7a: Column Multiplication $ \begin{array}{r} 3647 \\ \times 4 \\ \hline 14588 \end{array} $ <p>2 1 2</p>	M8: Grid Method Long Multiplication $ 43 \times 65 = 2795 $ <table border="1"> <tr><td>x</td><td>40</td><td>3</td></tr> <tr><td>60</td><td>2400</td><td>180</td></tr> <tr><td>5</td><td>200</td><td>15</td></tr> </table> $2400 + 180 + 200 + 15 = 2795$	x	40	3	60	2400	180	5	200	15	D10c: Short Division $ 394 \div 6 = 65\text{r}4 $ $ \begin{array}{r} 65\text{r}4 \\ 6 \overline{)394} \end{array} $
x	40	3									
60	2400	180									
5	200	15									
M9: Long Multiplication <small>Column</small> $ \begin{array}{r} 43 \\ \times 65 \\ \hline 215 \\ + 2580 \\ \hline 2795 \end{array} $ <p>(5 x 43) (60 x 43)</p>		D10e: Short Division $ 5978 \div 7 = 854 $ $ \begin{array}{r} 854 \\ 7 \overline{)5978} \end{array} $									
Key Vocabulary											
Multiple	The product of two numbers (multiplying 2 numbers together).										
Factor	A number that divides exactly into another number without leaving a remainder.										
Common Factor	A number that divides into 2 or more different numbers without leaving a remainder.										
Prime Number	A number with only 2 factors (1 and itself).										
Prime Factor	A prime number that can be a factor of another number (e.g. 3 & 5 are factors of 15).										
Composite Number	A whole number that has more than 2 factors.										
Product	The answer when you multiply 2 numbers together.										
Squared	A number multiplied by itself (e.g. $2 \times 2 = 4$, $3 \times 3 = 9$)										
Cubed	A number multiplied by itself 3 times (e.g. $3 \times 3 \times 3 = 27$)										
Sentence Stems											
First I multiply by ones Then I multiply by tens Finally, I add together and											
Assessment (Self-Assessment)											