## Success Criteria for Dividing by a Decimal

No	Success Criteria	Example
1	Know the parts of a division	265.3 Quotient. 12/317864.40 Divisor Dividend
		0.3 6744
2	Count the digits behind the decimal point in the divisor	0.3 6744 To one digit behind the decinal point.
3	Think of the number that is $10^n$ where n is the number of digits behind the decimal point in the divisor	$x 10^{n}$ $3 \overline{67440}$ $x 10^{n}$ $3 \overline{67440}$ $x 10^{n}$ $n = 1 \text{ so } 10^{1} = 10$ so  multiply by 10
4	Write out the times table of the divisor up to 10 times	1 3 2 6 3 67740 3 9 4 12 5 15 6 18 7 21 8 24 9 27 10 30
5	Divide the first digit of the dividend by the divisor	÷x-+ 3/67740

6	Multiply the last number of the quotient that you calculated by the divisor and write it underneath the first digit of the dividend	÷x-+ 3/67740
7	Subtract these two numbers	$\div x - 4 3 \frac{2}{67740}$
8	Bring down the next column next to the answer to your subtraction	$\div x - 4 3 \frac{2}{67740}$
9	Begin the whole process again from number 5 (in the instructions).	$3 \begin{bmatrix} 22 \\ 67740 \\ -64 \\ -67 \\ -67 \\ -67 \\ -76 \\ -77 \\$
10	Keep repeating it until you have run out of digits in the divisor. At that point, you can either add more zeros (if you are working in decimal fractions).	$\begin{array}{c} 225 \\ 3 \overline{\smash{\big)}67740} \\ -6 \overline{7} \\ -6 \overline{7} \\ -6 \overline{7} \\ -17 \\ -15 \overline{7} \\ 24 \end{array} $
11	Once you have finished, the answer is the answer you do <b>not</b> need to multiply or divide the quotient to "undo" the alteration you made in part 3. $6774 \div 0.3 = 22580$	$\begin{array}{c} 22580\\ 3 \hline 67740\\ -67\\ -7\\ -67\\ -17\\ -15\\ -24\\ -24\\ -24\\ -00\\ 0\\ 0\end{array}$