

Thousands	Hundreds	Tens	Units (ones)	tenths $1/10$	hundredths $1/100$
<p>,</p> <p>,</p> <p>,</p> <p>,</p>			<p>.</p> <p>.</p> <p>.</p> <p>.</p>		

Billions	Hundreds of millions	Tens of millions	Millions	Hundreds of thousands	Tens of thousands

Use the place value columns to multiply and divide by powers of 10 (a 1 with any number of zeroes after it)

1. First write a calculation and look at the number that you are multiplying or dividing by a power of 10
2. Where is the decimal point?
3. Position the number correctly on the place value columns.
4. Are we multiplying or dividing?
5. Will the number get bigger or smaller?
6. Which way do we need to move the digits?
7. How many places do we need to move the digits?
8. (a way to remember is that you move it the same number of place value columns as there are zeroes in the power of ten e.g  $10$  /  $100$  /  $1000$  etc.  $14 \times 10$  move the digits one place,  $14 \times 100$  move the digits two places.)
9. Move the digits - they stay in the same order and the same distance apart.
10. Do we need to write any extra zeros? (zero acts as a place value holder if there is a space between the last digit and the decimal point e.g.  $3400.$  or  $0.091$ )
11. Does our answer make sense? - look at the question and then the answer, is it bigger if you multiplied/ smaller if you divided? Have we remembered the decimal point?

Thousands	Hundreds	Tens	Units (ones)	tenths 1/10
		1	4	•
	1	4	0	•
1	4	0	0	

( x 10)

(x 100)

1	2	3	4	5	6
7	8	9	1	2	3
4	5	6	7	8	9
0	0	0	0	0	0

