

# Examples!

When multiplying or dividing whole numbers or decimals by 10 or 100 or even 1000 we are just moving the digits! Look!

Place value! Th Th H T U. t h th

The place value changes by 1 place

$$\begin{array}{r} 75.0 \\ \leftarrow 750.0 \end{array}$$

Q.  $75 \times 10 = 750$

$$\begin{array}{r} 819.0 \\ \leftarrow 8190.0 \end{array}$$

Q.  $819 \times 10 = 8190$

$$\begin{array}{r} 3.0 \\ \leftarrow 300.0 \end{array}$$

Q.  $3 \times 100 = 300$  The place value changes by 2 places

$$\begin{array}{r} 4100.0 \\ 410.0 \rightarrow \end{array}$$

Q.  $4100 \div 10 = 410$

place value changed 1 place

$$\begin{array}{r} 2000.0 \\ 20.0 \rightarrow \end{array}$$

Q.  $2000 \div 100 = 20$

$$\begin{array}{r} 1.63 \\ \leftarrow 163.0 \end{array}$$

Q.  $1.63 \times 100 = 163$

$$\begin{array}{r} 0.04 \\ \leftarrow 40.0 \end{array}$$

Q.  $0.04 \times 1000 = 40$

place value changed 3 places!

$$\begin{array}{r} 37.0 \\ 0.37 \rightarrow \end{array}$$

Q.  $37 \div 100 = 0.37$

$$\begin{array}{r} 3940.0 \\ 3.9 \rightarrow \end{array}$$

Q.  $3940 \div 1000 = 3.9$

place value changed 3 places

multiplying the digits move LEFT!

dividing the digits move RIGHT!