

Multiplying decimals investigation

This investigation uses multiplication with **decimal** numbers.

You'll need a coin, dice, a calculator, pen and paper. You're going to use the dice and the coin to make some **decimal numbers with 1 or 2 decimal places**.

All the decimal numbers will have 4 digits. Roll the dice to find the digits - eg you might roll:



This gives the digits 3 1 4 1.

Now to put in a decimal point, flip the coin.

Heads: put the point one before the end, making the number 314.1.

Tails: put the point in the middle, making the number 31.41.

So now you have a way of making numbers with 1 or 2 decimal places.

Put your decimals into the table in the first column. Fill in the row by working out $\times 10$, then $\times 100$ and $\times 1,000$.

Number	$\times 10$	$\times 100$	$\times 1,000$

- Fill in the first few rows of the table.
- Check your answers with a calculator.
- Can you see a quick way to work out the answers?
- Have a go at completing the whole table.