

Multiplication investigation






This investigation looks at **multiplying by 10, 100 and 1,000**.

You'll need dice, a calculator, a pen and paper. You're going to use the dice to make numbers to use in the investigation.

You can do this in two steps. Here is an example:

Step 1 How many digits does the number have? Throw one die to decide.
So if you throw a 3 the number has 3 digits. If you throw a 6 then it has 6 digits etc.

Step 2 Throw a die to find each of the digits.

Example	Step 1 gives a 4		Step 2 is to find 4 digits				
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Now put the number 1,213 into the table in the first column. Fill in the row by working out $1,213 \times 10$, then $1,213 \times 100$ and $1,213 \times 1,000$.

Follow steps 1 and 2 to make more numbers. 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?

Try completing the whole table.

Number	$\times 10$	$\times 100$	$\times 1,000$
1,213	12,130	121,300	1,213,000