## Maths - Year 5

Calculating 7: Multiplying and dividing by 10, 100 and 1000

| Key Vocabulary |  |
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| Scaling up <br> and down | Describes the amount by which something is increased <br> or reduced to make it larger or smaller in proportion. |
| tenths | Refers to the number of tenths (one whole one split into <br> ten equal pieces) in a decimal number e.g. 2.431 has 4 <br> tenths. |
| Hundredths | Refers to the number of hundredths (one whole one <br> split into 100 equal parts) in a decimal number e.g. 2.431 <br> has 3 hundredths. |
| Thousandths | Refers to the number of hundredths (one whole one <br> split into 1000 equal parts) in a decimal number e.g. <br> 2.431 has 1 thousandth. |

## Mathematical Skills

- Notice patterns when multiplying or dividing by 10,100 or 1000.
- Explain what always happens when multiplying or dividing by 10,100 or 1000.
- Use known multiplying facts to derive facts for multiplying with whole tens, hundreds or thousands, or decimal numbers.


## Mathematical Methods

- Consolidating understanding of multiplying and dividing by 10.

- Multiplying and dividing by 100 and 1000.

- Multiplying and dividing by 10 with numbers to one decimal place.

| Ones | - | tenths | Ones | $\bullet$ | tenths |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  |  | 1 | $\xrightarrow{\div 10}$ |  |
| I |  |  | 0 |  |  |

- Multiplying and dividing by 10 with numbers with more than one decimal place.

- Multiplying and dividing by 10,100 and 1000 with decimals e.g. $26.34 \times 10=263.4$



## Can you..?

- Work out $£ 1.50 \div 10$.
- A packet of biscuits costs 70p. How much would 10 packets cost?
- Tennis balls come in a box of 150 balls. A sport shop buys 100 boxes. How many balls will they have?
- Calculate $5 \mathrm{~kg} \div 1000$.
- Calculate $45.8 \times 100$.
- What is happening in this sequence? $0.32,3.2,32,320$.

