## Maths - Year 4

Numbers and the Number System 3: Estimating and rounding

| Key Vocabulary |  |
| :--- | :--- |
| Estimate | A good guess, close to the actual. |
| Rounding | Increasing or decreasing a number or <br> amount to make it closer to (usually) a <br> multiple of ten, or a whole measuring <br> unit, e.g. rounding 353 to 350 or 89 <br> cm to 1 metre. |
| Approximate | Close to the actual, but not <br> completely accurate or exact. |

## Mathematical Skills

- Explain that we often talk about 'rough' or approximate' amounts.
- Locate a number and the multiple of 10 closest to it on a number line.
- Recognise situations in which it is useful to estimate.
- Know when to use rounding to simplify calculations and give an approximate answer.
- Use a rough sense of a calculation to help check their solution.
- Round 3- or 4-digit numbers to a multiple of 10, 100 or 1000.


## Mathematical Methods

- Round amounts and approximations in everyday use e.g. My 300 ml bottle of shampoo is half full. How much have a used?
- Measuring to the nearest 10.


10


17


20


| 0 | 7 | 10 |
| ---: | ---: | ---: |
| 10 | 17 | 20 |
| 20 | 27 | 30 |
| 30 | 37 | 40 |
| 40 | 47 | 50 |

- Estimating to the nearest metre or the nearest 100 e.g. 170 cm is closest to 200 ( 2 metres).

- Rounding to the nearest metre e.g. 6543 cm would round to 7000 cm ( 70 metres).
- Rounding in other contexts e.g. using money.
- Rounding calculations to support estimation.

| 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $28+38$ |  |  |  |  |
|  |  |  | $30+40$ |  |  |  |  |

## Can you..?

Estimate the missing number.


- Abi travels 162 cm each time her bicycle wheels go round. Her wheels have gone round twice. Roughly how many metres has she travelled?
- Raj is thinking of a whole number. It rounds to 6000 to the nearest 1000. Can you find the lowest number and the highest number it could be?
- Estimate answers to a) $248+38$ b) $182-59$

