## Maths - Year 3

Calculating 12: Partitioning strategies for adding and subtracting

| Key Vocabulary |  |
| :--- | :--- |
| Partitioning | Splitting a number in different ways <br> e.g. $27=2$ tens and 7 ones. |
| Bridging | Partitioning a number when adding <br> or subtracting by first adding or <br> subtracting to the nearest multiple <br> of 10 or 100. |

## Mathematical Skills

- Notice and explain which digits change when adding or subtracting multiples of 10 or 100.
- Use partitioning to help when adding and subtracting 2 and 3 digit numbers.
- Think about which method of adding or subtracting to use when they are working on a calculating problem, and choose an efficient method.


## Mathematical Methods

- Develop mental strategies to add and subtract multiples of 10 and 100 from 2 and 3 digit numbers

| Hundreds | Tens | Ones |
| :---: | :---: | :---: |
|  |  | $\begin{array}{ll} 6 & 0 \\ 80 \\ 9 & 9 \end{array}$ |

146

- 20

126

- Develop mental strategies to add 2 or 3 digit numbers without crossing multiples of 10.

- Develop mental strategies to subtract 2 or 3 digit numbers without crossing multiples of 10.

- Develop mental strategies for doubling 2 digit numbers and crossing 10 s e.g.
$18+18=10+10+8+8$ so $20+16=36$
- Develop mental strategies to add 2 digit numbers crossing 10 s e.g. $58+35=93$

- Adding/grouping ones first when crossing 10s and 100s in addition calculations e.g. $76+56=132$

- Subtracting 10s and ones when crossing tens e.g. 100-38=62
- Finding the difference when crossing 10s e.g. The difference between 56 and 83



## Can you..?

- Tom has $£ 7.25$ and Jessica has $£ 8.80$. a) They both spend 20 p. How much do they have left? b) Jessica gives Tom 40p. How much do they each have now?
- Double 34. How can you show this?
- Solve 146-25
- How many marbles does each child have?

|  | Red marbles | Blue marbles |
| :---: | :---: | :---: |
| James | 25 | 26 |
| Kelly | 18 | 21 |
| Frank | 19 | 29 |

- Find two different ways to solve 87-62 = $\square$

