

### Mental Maths Strategies

## Compensation for 8 or 9

For adding or subtracting where a number has 8 or 9 in units.

Add 9 - add 10 and subtract 1  
Subtract 8 - subtract 10 and add 2

Use strategy for:

Add 39 - add 40 and subtract 1  
Subtract 79 - subtract 80 and add 1

$$\begin{aligned} 34 + 9 &= \\ 34 + 10 &= 44 \\ 44 - 1 &= 43 \end{aligned}$$

or

$$\begin{aligned} 83 - 38 &= \\ 83 - 40 &= 43 \\ 43 + 2 &= 45 \end{aligned}$$

### Mental Maths Strategies

## Near Doubles

For adding similar numbers.

Double one of the numbers and adjust by adding or subtracting the difference.

$$26 + 25 =$$

I know double 25 is 50

$$\begin{aligned} 26 + 25 &= \\ 1 \text{ more than double } 25 &= 51 \end{aligned}$$

### Mental Maths Strategies

## Using Pairs to Ten

For adding where numbers add to 10, or ends with a 0.

$$23 + 67 =$$

I know  $3 + 7 = 10$

$$23 + 67 = 20 + 60 + 10 = 90$$

$$160 - 37 =$$

I know  $10 - 7 = 3$

$$160 - 37 = 160 - 30 - 7 = 130 - 7 = 123$$

### Mental Maths Strategies

## Front-end Adding

For addition.

$$\begin{array}{r} 69 \\ \downarrow \\ 60 \\ \downarrow \\ 9 \\ 90 \end{array} + \begin{array}{r} 37 \\ \downarrow \\ 30 \\ \downarrow \\ 7 \\ 16 \end{array} = \begin{array}{r} 90 \\ 16 \\ \hline 106 \end{array}$$