Can I calculate simple percentages of whole numbers or quantities?

Teaching guidance
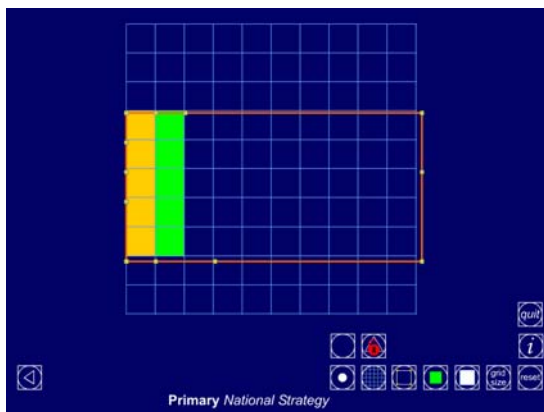
Key vocabulary

hundredths, percentage, equivalent, %, tenths

Models and images

Demonstrate how finding 10% can often be a useful starting point when finding other percentages. For example, you can find 20% by doubling 10%, find 5% by halving 10% or find 15% by adding 10% and 5%.
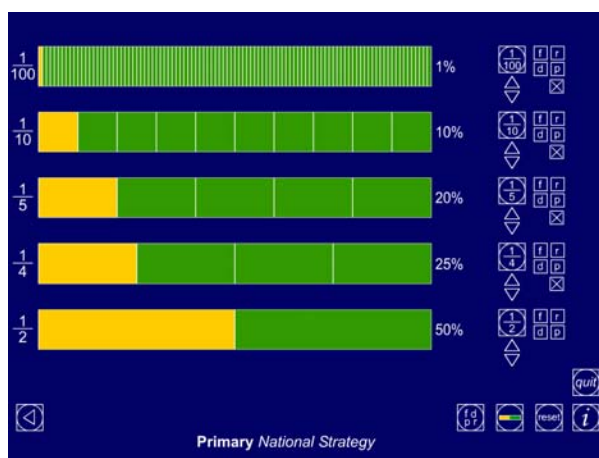
The diagram helps model how 20% of 50 is 10.

Area ITP

Links can be made between fractions and percentages, using the *Fractions* ITP.

This can help children realise that finding 50% is the same as halving, to find 25% they are finding one quarter, etc.

Fractions ITP

Teaching tips

- Emphasise that percentage means 'the number of parts per 100'.

- Establish that finding 1% of numbers or quantities is the same as dividing by 100 and finding 10% is the same as dividing by 10. Make sure that children do not therefore assume that 20% is equivalent to dividing by 20.

- Demonstrate how finding 10% and 1% of a number or quantity is often a useful starting point when finding other percentages. For example you can find 20% by doubling 10% or find 5% by halving 10%. To find 15% you could add 10% and 5%. This could be modeled practically or using the *Area* ITP.

- Ensure that children are confident about dividing by 10 and 100.

- Remind children, when they are finding a percentage of a quantity, that:
    – they may need to decide whether their answer needs rounding up or down;
    – if the question is in the context of money and measures, they will need to remember to include the relevant unit in their answer.

- Help children make links by creating webs of percentages of numbers and then comparing the different amounts. For example, 'What would £2.48 buy in comparison with £248?'

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