Can I relate simple fractions to their decimal equivalents?

Teaching guidance

Key vocabulary

numerator, denominator, equivalent, proper fraction, decimal fraction, decimal place, decimal point

Models and images

Use the *Moving digits* ITP to make links between fraction and decimal equivalents of tenths, hundredths, and so on. For example, $\frac{3}{10} = 0.3$ and $\frac{13}{100} = 0.13$.


Moving digits ITP

Use number lines or the *Fractions* ITP to reinforce the decimal equivalent of fractions such as $\frac{2}{5}$ or $\frac{1}{20}$.
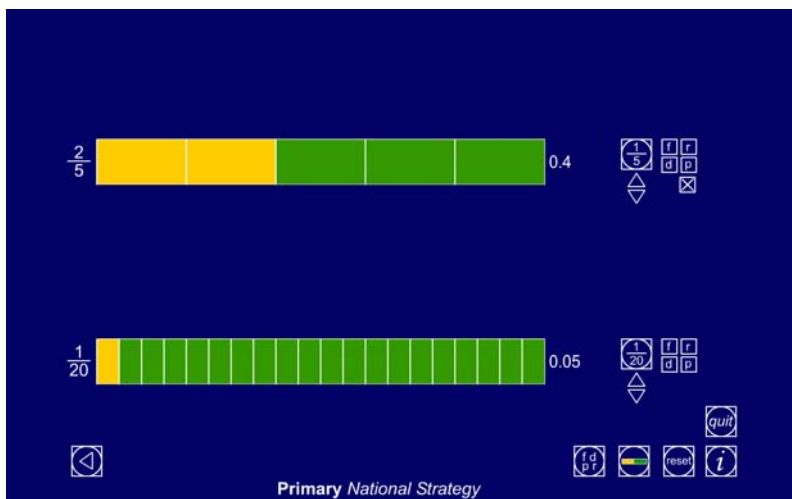
Fractions ITP

Teaching tips

- Use a calculator and the language of fractions to find decimal and fraction equivalents. For example, $\frac{2}{5}$ is keyed into the calculator as 2 divided by 5 ($2 \div 5$) and shows a decimal equivalent of 0.4 (four tenths). Key in equivalent fractions to demonstrate that they all produce the same decimal, for example, $\frac{6}{15} = \frac{8}{20} = 0.4$.

- Use resources such as equivalent dominoes or washing lines with fraction and decimal equivalent cards. Invite children to peg the cards on the line and justify their choice of location.

- Present children with commonly confused fraction and decimal equivalents, for example, 0.4 and $\frac{1}{4}$. Ask them to use images or practical resources to investigate whether these are actually equivalent; for example, they could use the *Fractions* ITP.
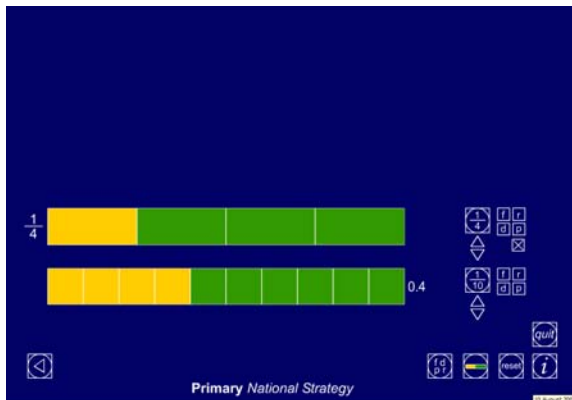
Fractions ITP

- Ensure that children understand that multiplying and divideing the numerator and denominator of a fraction by the same number creates an equivalent fraction and that these are all equivalent to the same decimal number.