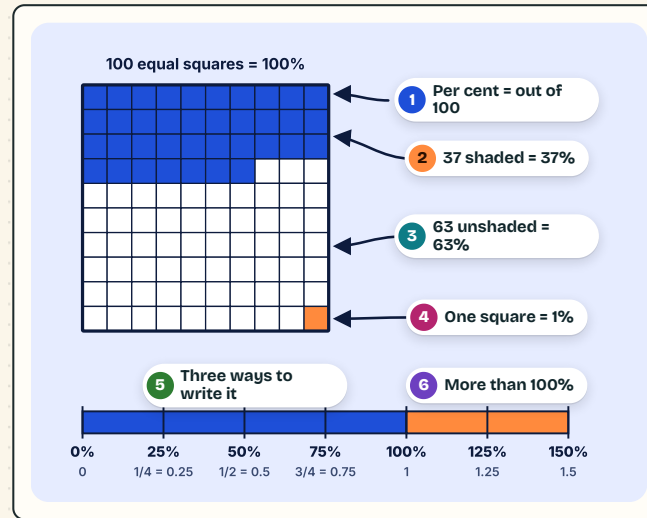


# Percentages Explained

Per cent means 'out of 100'. One grid of 100 squares shows what a percentage is and how it links to fractions and decimals.



## 1 Per cent = out of 100

Per cent comes from the Latin per centum, 'by the hundred'. A percentage counts parts out of 100 equal parts of a whole.

## 2 37 shaded = 37%

37 of the 100 squares are shaded, so 37% of the grid is shaded. As a fraction that is  $\frac{37}{100}$ ; as a decimal it is 0.37.

## 3 63 unshaded = 63%

The parts of a whole add up to 100%:  $37\% + 63\% = 100\%$ . If 37% of a class walk to school, the other 63% do not.

## 4 One square = 1%

1% is one hundredth of the whole:  $\frac{1}{100}$  or 0.01. Ten squares make 10%, which is one tenth of the whole.

## 5 Three ways to write it

Fractions, decimals and percentages can show the same amount:  $\frac{1}{4} = 0.25 = 25\%$  and  $\frac{3}{4} = 0.75 = 75\%$ .

## 6 More than 100%

100% is the whole amount. A plant that grows from 40 cm to 60 cm is now 150% of its old height, because  $60 \div 40 = 1.5$ .



### Percentages make comparisons fair

18 out of 24 and 30 out of 40 look different, but both are 75%. Turning scores into percentages puts different totals on the same scale of 100.

NEXT IN THE SERIES

2. Finding a Percentage of an Amount: Worked Examples