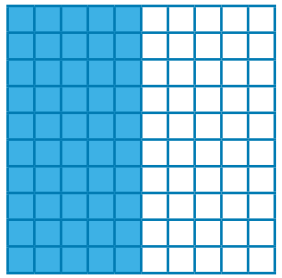
Percentages

Knowledge Organiser

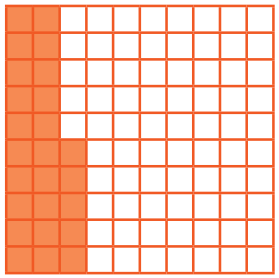
Key Vocabulary

- per cent (%) = 'out of 100'
- percentage
- discount
- equivalent fraction
- equivalent decimal
- convert
- compare
- order
- the whole

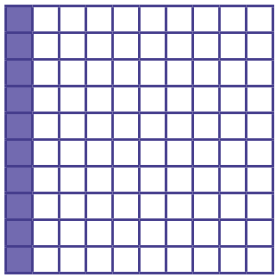
Equivalent Fractions, Decimals and Percentages



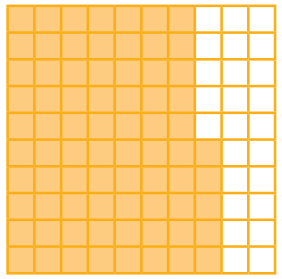
$\frac{50}{100} = \frac{1}{2} = 0.5 = 50\%$



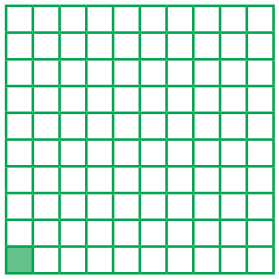
$\frac{25}{100} = \frac{1}{4} = 0.25 = 25\%$



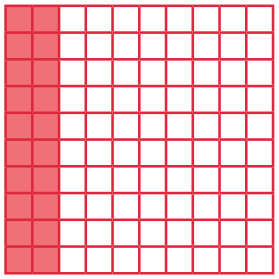
$\frac{10}{100} = \frac{1}{10} = 0.1 = 10\%$



$\frac{75}{100} = \frac{3}{4} = 0.75 = 75\%$



$\frac{1}{100} = 0.01 = 1\%$



$\frac{20}{100} = \frac{2}{10} = 0.2 = 20\%$

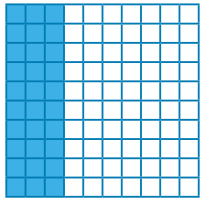
Fractions to Percentages

$\frac{15}{50} \xrightarrow{\times 2} \frac{30}{100} = 0.3 = 30\%$

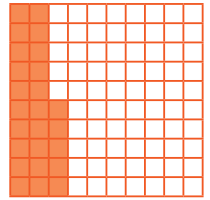
$\frac{60}{200} \xrightarrow{\div 2} \frac{30}{100} = 0.3 = 30\%$

Order Fractions, Decimals and Percentages

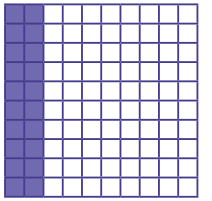
$\frac{3}{10} > 25\% > 0.2$



$\frac{30}{100} = 30\%$

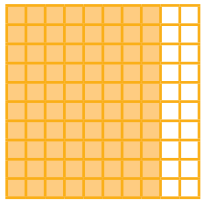


$\frac{25}{100} = 25\%$

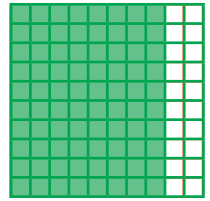


$\frac{20}{100} = 20\%$

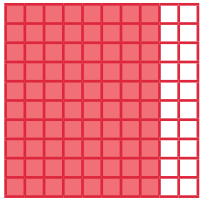
$80\% = 0.8 = \frac{4}{5}$



$\frac{80}{100} = 80\%$



$\frac{80}{100} = 80\%$

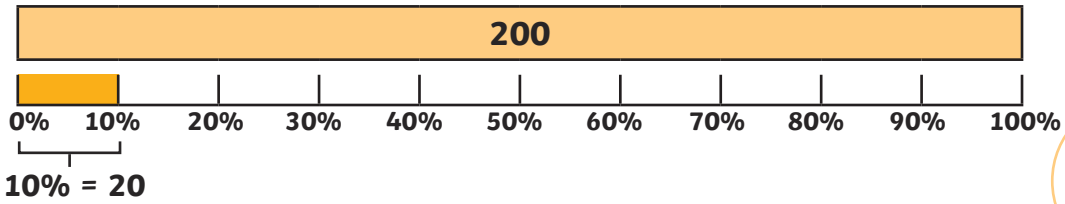


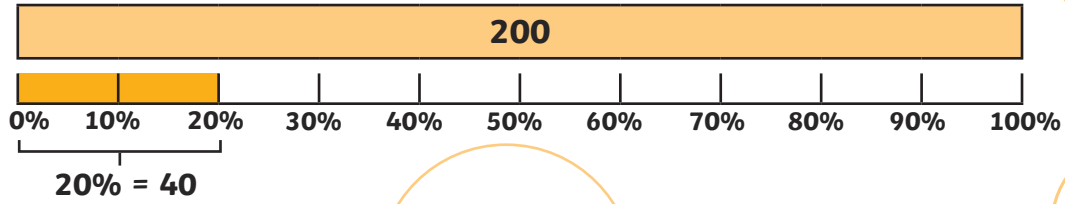
$\frac{80}{100} = 80\%$

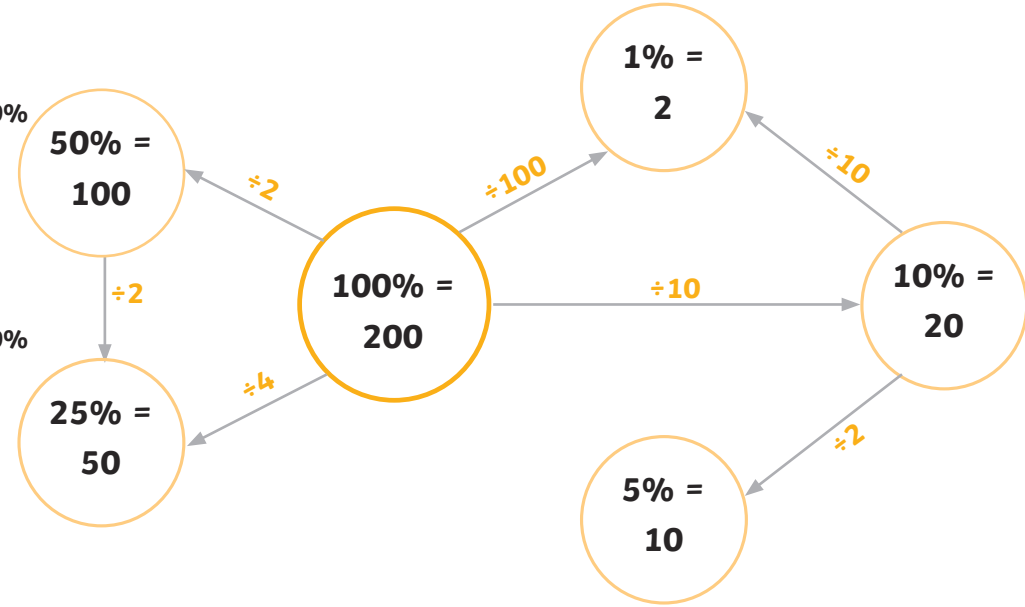
Percentages — Knowledge Organiser

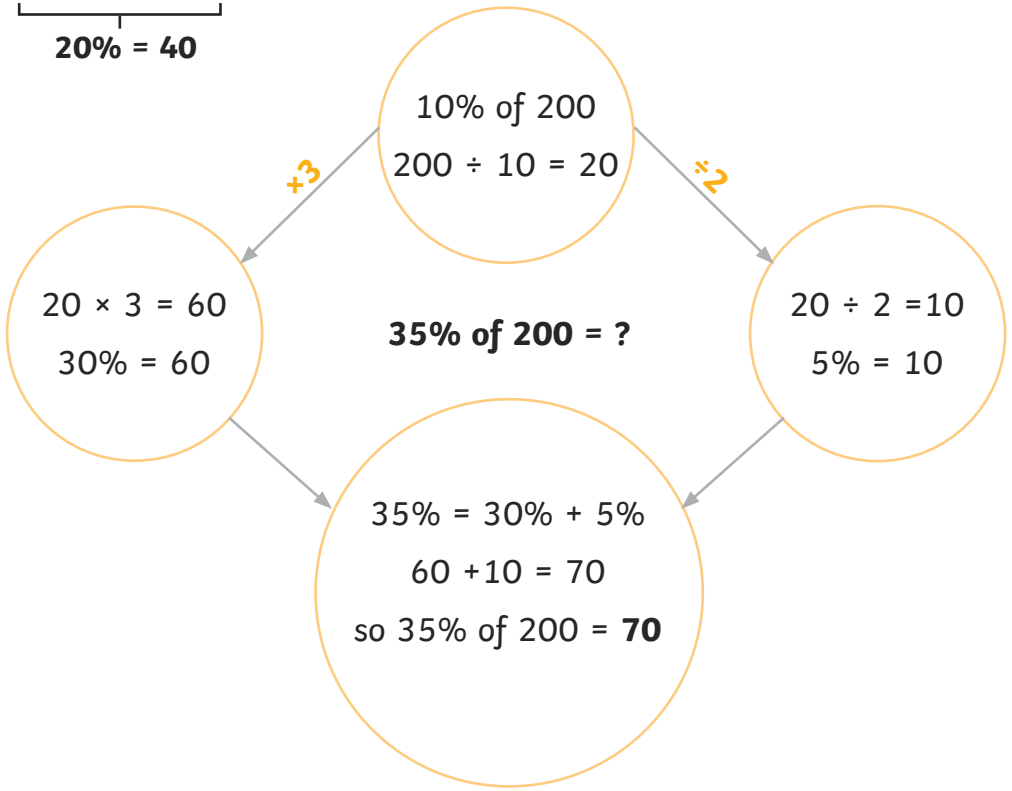
Finding a Percentage of an Amount

50% = $\frac{1}{2}$ so we can divide by 2	10% = $\frac{1}{10}$ so we can divide by 10	25% = $\frac{1}{4}$ so we can divide by 4	1% = $\frac{1}{100}$ so we can divide by 100



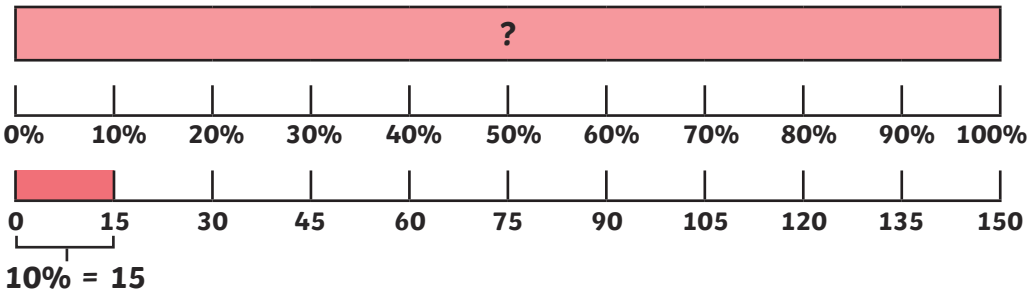






Percentages – Missing Values

Whole value (100%) of bar model = ?



We know 10% = 15 10% × 10 = 100% (the whole) so 15 × 10 = 150