



**What should I already know?**

- How to recognise the per cent symbol (%) and
- That per cent relates to 'number of parts per hundred', and
- How to write a percentage as a fraction with denominator 100, and as a decimal
- How to solve problems which require knowing percentage and decimal equivalents of  $\frac{1}{2}$  and  $\frac{1}{4}$

**What will I know by the end of the unit?**

- How to convert fractions to equivalent fractions where the denominator is 100 in order to find the percentage equivalent
- How to use equivalent fractions and decimals to find the equivalent percentage
- How to convert between fractions, decimals and percentages to order and compare them
- How to use fractional equivalences to find percentages of amounts.
- How to use different methods of finding certain percentages e.g. Finding 20% by dividing by 10 and multiplying by 2 or by dividing by 5
- How to find the missing whole or a missing percentage when the other values are given (Using bar models)

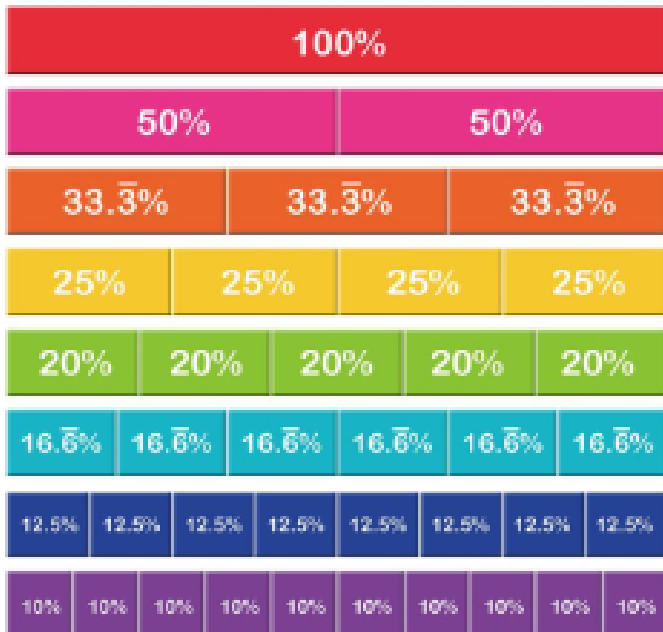
**Vocabulary**

Per cent	equivalent	tenths	compare
fraction	denominator	hundredths	Equal parts
convert	decimal	Order	dividing
whole			

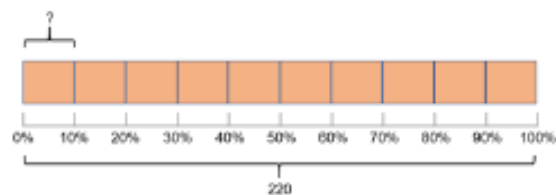
**Investigate/Homework tasks**

- Homework will be set by your teacher using google classroom
- You should complete at least 30 minutes of maths tasks on Maths Whizz (not games). Please attend help sessions if you do not have access to the internet at home
- Additional work you could complete:
  - Find out more about the meaning of the vocabulary list using <http://www.amathsdictionaryforkids.com/>
- To challenge yourself: Answer the key questions to deepen your knowledge

Diagram/ Key Information



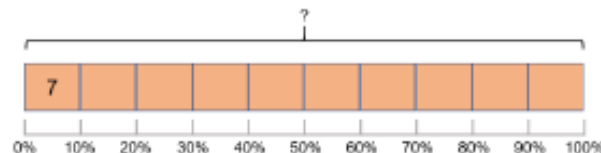
Mo uses a bar model to find 30% of 220



10% of 220 = 22, so 30% of 220 =  $3 \times 22 = 66$

If 7 is 10% of a number, what is the number?

Use the bar model to help you.



Key Questions

- What does the word 'percent' mean?
- How can you convert tenths to hundredths?
- Why is it easy to convert fiftieths to hundredths?
- What other fractions are easy to convert to percentages?
- How does converting a decimal to a fraction help us to convert it to a percentage?
- How do you convert a percentage to a decimal?
- Can you use a hundred square to represent your conversions?
- Why do we divide a quantity by 2 in order to find 50%?
- How do you calculate 10% of a number mentally?
- What's the same and what's different about 10% of 300 and 10% of 30?
- Is dividing by 10 and multiplying by 5 the most efficient way to find 50%? Explain why.
- Is dividing by 10 and multiplying by 9 the most efficient way to find 90%? Explain why.
- How many ways can you think of to calculate 60% of a number?
- If we know a percentage, can we work out the whole?



- If we know the whole and the amount, can we find what percentage has been calculated?