

Knowledge Organiser

Year Group	Subject	Topic
6	Mathematics	Percentages

The Big Picture

It is important that children understand that 'percent' means 'out of 100'. Children will be familiar with converting some common fractions from their work in Year 5. They learn to convert fractions to equivalent fractions where the denominator is 100 in order to find the percentage equivalent.

Children use their knowledge of common equivalent fractions and decimals to find the equivalent percentage.

A common misconception is that 0.1 is equivalent to 1%. Diagrams may be useful to support understanding the difference between tenths and hundredths and their equivalent percentages.

Children convert between fractions, decimals and percentages to enable them to order and compare them.

Encourage them to convert each number to the same form so that they can be more easily ordered and compared. Once the children have compared the numbers, they will need to put them back into the original form to answer the question.

Enquiry Question

What does the word 'percent' mean?

How can you convert tenths to hundredths?

How do you convert a percentage to a decimal?

Can you use a hundred square to represent your conversions?

What is the most efficient way to order them?

Key Vocabulary

Per cent (%) = 'out of 100'

Percentage

Discount

Equivalent fraction

Equivalent decimals

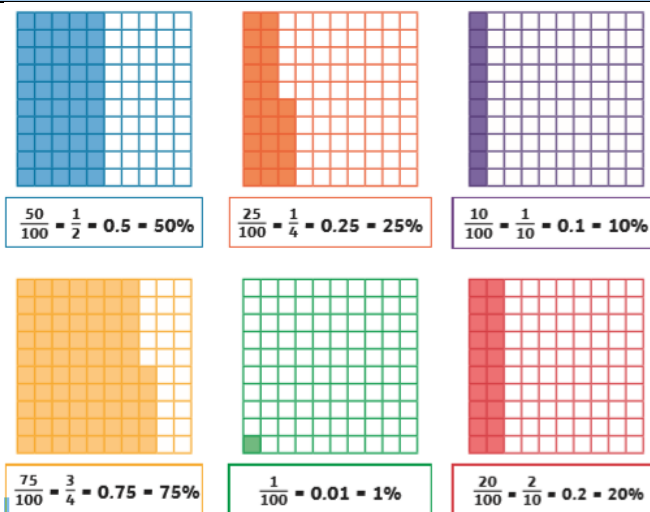
Convert

Compare

Order

The whole

Equivalent Fractions, Decimals and Percentages



Fractions of Percentages

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

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

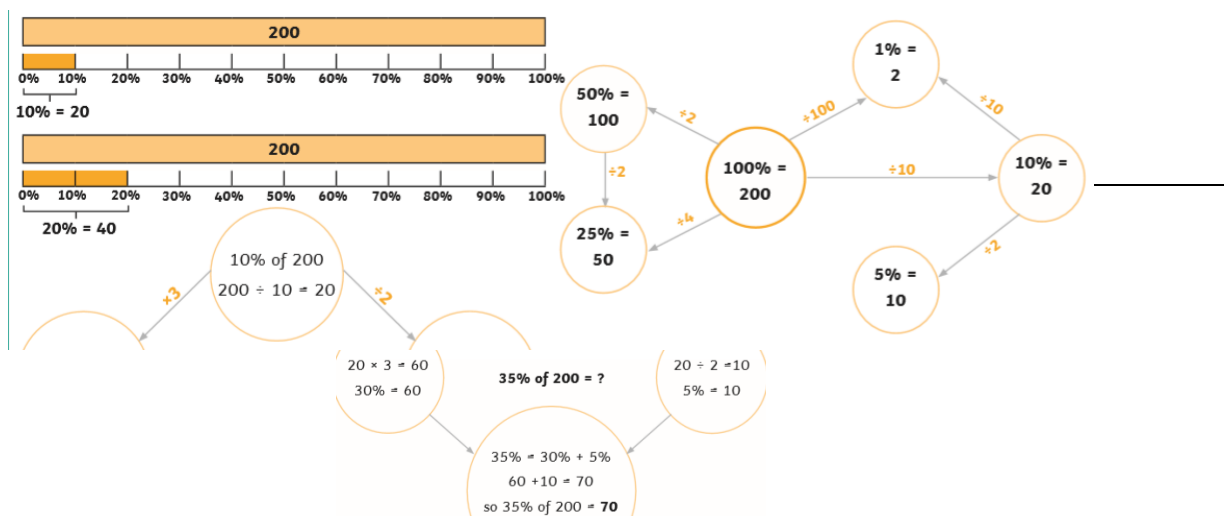
Finding a Percentage of an Amount

$50\% = \frac{1}{2}$ so we can divide by 2

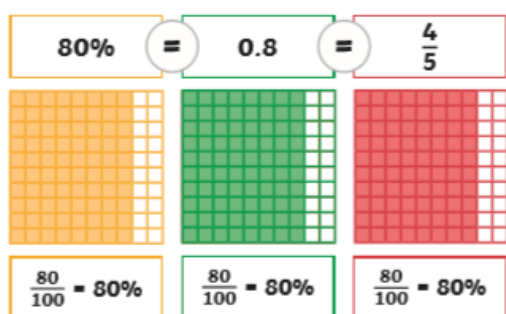
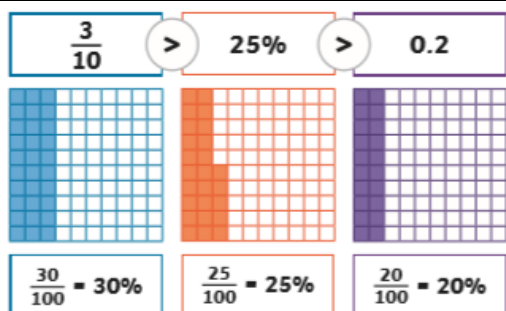
$10\% = \frac{1}{10}$ so we can divide by 10

$25\% = \frac{1}{4}$ so we can divide by 4

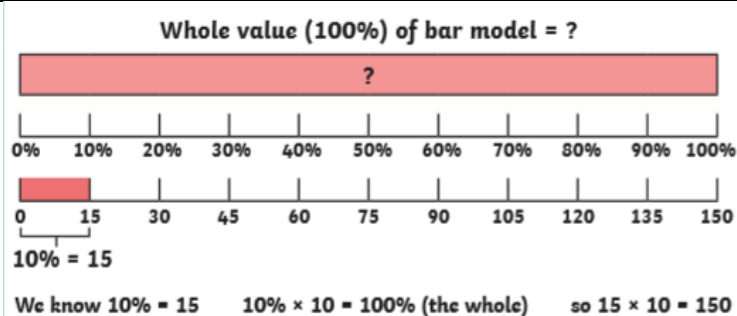
$1\% = \frac{1}{100}$ so we can divide by 100



Order Fractions, Decimals and Percentages



Percentages – Missing Values



What can my child do at home?

- ✓ Have a look through the Knowledge Organiser and study the key terminology, ensuring that they understand what they mean.
- ✓ Use the useful links above, particularly if there is a unit that you find more difficult to grasp
- ✓ Learn weekly times tables and number facts. These will be tested on the same day as spellings.
- ✓ Login to Mathletics to revise topics taught.

