

Maths - Year 5

Calculating 11: Percentages

Key Vocabulary

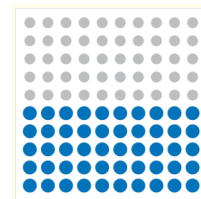
Percentage	Used to show a fraction 'out of 100' with the symbol %, e.g. 50%.
Per cent	Means 'out of 100'.
Proportion	Used to express a fraction of a whole, e.g. the proportion of grapes in a bag that are green could be expressed as $\frac{1}{2}$.

Mathematical Skills

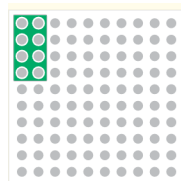
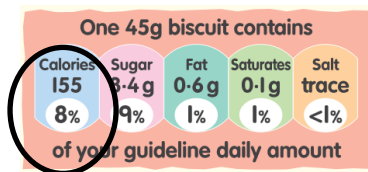
- Notice the relationships between fractions, decimals and percentages.
- Order percentages, fractions and decimals on a number line.
- Apply understanding of number relationships to solve problems involving percentages.
- Use known number facts to solve problems involving percentage e.g. $3 \times 25 = 75$ and $3 \times 12 = 36$, so if 25% is £1.20, then 75% is £3.60.

Mathematical Methods

- Understanding the term 'per cent' e.g. 50 out of 100 (50%) are covered.



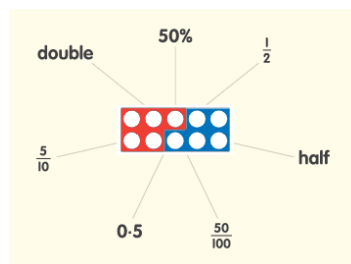
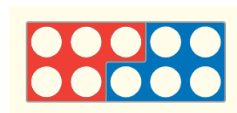
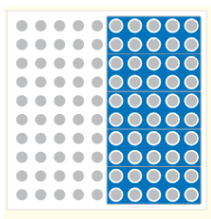
- Consolidating understanding of per cent as 'parts per hundred'.



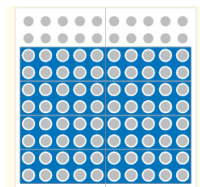
8% is the same as 8 parts per 100 or $\frac{8}{100}$

- Finding percentages that total 100 e.g. $95\% + 5\% = 100\%$.

- Visualizing 50% using knowledge of fractions.



- Using a known percentage to find other percentages e.g. finding 50% of a shirt costing £80.



- Exploring the relationship between percentages, fractions and decimals e.g.

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

Can you..?

- Ben's great-grandma is 100 years old. Ben is 10 years old. What percentage of his great-grandma's age is he?
- Think of a percentage that is less than $\frac{1}{4}$.
- There is a 25% sale. How much would a jumper costing £16 cost you in the sale?
- Order these amounts from smallest to largest.

$\frac{1}{3}$

0.5

10%

1

$\frac{3}{4}$

25%