

As outcomes, Year 5 pupils should, for example:

Understand, read and write, spelling correctly: *percentage, per cent, %...*

Recognise the % sign on clothes labels, in sales, on food packets...

Recognise what percentage of 100 Multilink cubes are red, yellow, blue, green...

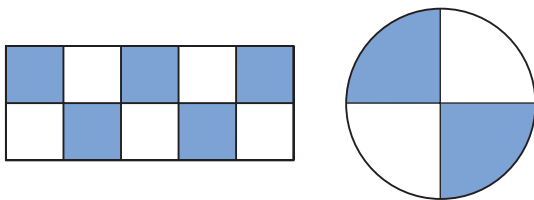
Know that:

one whole = 100% one quarter = 25%
one half = 50% one tenth = 10%

Know that:

10% = 0.1 = $\frac{1}{10}$ 25% = 0.25 = $\frac{1}{4}$
20% = 0.2 = $\frac{1}{5}$ 50% = 0.5 = $\frac{1}{2}$
1% = 0.01 = $\frac{1}{100}$ 75% = 0.75 = $\frac{3}{4}$

Identify a percentage of a shape: for example, what percentage of each shape is shaded?



Without a calculator answer questions such as:

- Find:
25% of £100 30% of £1 70% of 100 cm
10% of £40 10% of 5 kg 10% of 3 metres
- 35% of the children in a class are boys. What percentage are girls?
- 70% of the children in a school stay for lunch. What percentage do not stay?
- Richard got 40 marks out of 80 in his maths test. Sarah got 45%. Who did better: Richard or Sarah?

Find percentages by using halving and quartering. For example, to find 75% of £300:

50% is one half = £150
25% is one quarter = £75
75% is three quarters = £225

As outcomes, Year 6 pupils should, for example:

Understand, read and write: *percentage, per cent, %, discount, profit, loss... proportion...*

Identify the proportion of wool, cotton, polyester... in clothes by examining labels.

Work out, for example, what proportion of the pupils in the class are girls, aged 11, have brown eyes...

Know that, for example:

- 43% = 0.43 = $\frac{43}{100}$
- 33% and 67% are roughly one third and two thirds.

Answer questions such as:

- Which of these percentages is equivalent to 0.26?
0.26% 2.6% 26% 260%
- Ring each number that is more than one half:
 $\frac{3}{4}$ 37% $\frac{3}{8}$ 0.34 $\frac{3}{5}$ 70% 0.55
- Calculate as percentages, rounding up or down:
6 out of 9 14 out of 70 8 out of 40

Without a calculator answer questions such as:

- Find:
25% of £300 30% of £5 70% of 300 cm
60% of £40 70% of 5 kg 40% of 3 metres
- A school party of 50 is at the Tower of London. 52% are girls. 10% are adults. How many are boys?
- A football team played 15 games. They won 60%. How many games did they lose?
- Amy scored 60 out of 80. Kim scored 148 out of 200. Who did better: Amy or Kim?
- A coat costs £35. It has a 10% discount in a sale. What is its sale price?
- 10 red sweets are 25% of the total in a jar. How many sweets altogether are in the jar?

Find percentages by using halving and quartering. For example, to find 12.5% of £36 000:

50% = £18 000
25% = £9 000
12.5% = £4 500

With a calculator answer questions such as:

- Find 20% of £362. Find 75% of 850.
- Calculate as percentages, rounding up or down to the nearest whole number:
27 out of 42 36 out of 70