As outcomes, Year 5 pupils should, for example:

Use, read and write, spelling correctly:
share, group, divide, divided by, divided into, divisible by, factor, quotient, remainder, inverse…
and the division signs ÷ or /.

Understand the operation of division as either sharing equally or repeated subtraction (grouping):
- sharing is better for dividing by small numbers;
- grouping is better for dividing by larger numbers.

Understand that:
- with positive whole numbers, division makes a number smaller;
- division is non-commutative: that is, 72 ÷ 9 is not the same as 9 ÷ 72;
- a number cannot be divided by zero.

Understand that division is the inverse of multiplication and use this to check results.

See also mental calculation strategies (pages 60–65) and checking results of calculations (page 73).

Respond to oral or written questions, explaining the strategy used. For example:
- Share 48 between 8.
- Divide 56 by 7. Divide 3 into 72.
- How many groups of 8 can be made from 73?
- What is the remainder when 74 is divided by 8?
- How many lengths of 20 cm can you cut from 270 cm?
- Is 156 divisible by 6? How do you know?
- What are the factors of 36?
- Tell me two numbers with a quotient of 100.

Relate division and fractions. Understand that:
- $\frac{1}{3}$ of 24 is equivalent to 24 ÷ 3 or $\frac{24}{3}$;
- 16 ÷ 5 is equivalent to $\frac{16}{5}$ or $3\frac{1}{5}$.

Complete written questions, for example:
- with rapid mental recall:
  $\frac{63}{7}$ = □ 56 ÷ □ = 8 □ ÷ 9 = 8
- using pencil and paper jottings and/or mental strategies:
  172 ÷ 4 = □ $\frac{54}{□}$ = 18 □ ÷ 21 = 90

Use written methods or a calculator to work out:
(125 ÷ □) + 2 = 27 (□ ÷ 5) – 22 = 30
900 ÷ 36 = □ 1560 ÷ □ = 120
$\frac{□}{28}$ = 46

As outcomes, Year 6 pupils should, for example:

Use, read and write, spelling correctly:
share, group, divide, divided by, divided into, divisible by, factor, quotient, remainder, inverse…
and the division signs ÷ or /.

Continue to understand the operation of division as either sharing or repeated subtraction (grouping):
- sharing is better for dividing by small numbers;
- grouping is better for dividing by larger numbers.

Understand that division is the inverse of multiplication and use this to check results.

See also mental calculation strategies (pages 60–65) and checking results of calculations (page 73).

Respond to oral or written questions, explaining the strategy used. For example:
- Share 108 between 9.
- Divide 112 by 7. Divide 15 into 225.
- How many groups of 16 can be made from 100?
- What is the remainder when 104 is divided by 12?
- How many lengths of 25 cm can you cut from 625 cm?
- Is 156 divisible by 8? How do you know?
- What are the factors of 98?
- Tell me two numbers with a quotient of 0.5.

Relate division and fractions. Understand that:
- $\frac{1}{8}$ of 72 is equivalent to 72 ÷ 8 or $\frac{72}{8}$;
- 4 ÷ 7 is equivalent to $\frac{4}{7}$;
- 13 ÷ 7 is equivalent to $1\frac{6}{7}$.

Complete written questions, for example:
- with rapid mental recall:
  6.3 ÷ 7 = □ 9.9 ÷ □ = 1.1 □ ÷ 5 = 0.8
- using pencil and paper jottings and/or mental strategies:
  17.2 ÷ 4 = □ $\frac{□}{25}$ = 39

Use written methods or a calculator to work out:
4123 ÷ 365 = □ □ ÷ 2.8 = 4.6
(□ ÷ 25) – 22 = 30 (56 + 97)/(133 – 85)
(100 ÷ □) + 5 = 7.5