

CALCULATIONS

Pupils should be taught to:

Understand the idea of a remainder, and when to round up or down after division

As outcomes, Year 4 pupils should, for example:

Give a remainder as a **whole number**.

For example:

- $41 \div 4$ is 10 remainder 1 $28 = (5 \times 5) + \square$
- $72 \div 5$ is 14 remainder 2 $97 = (9 \times 10) + \square$
- $768 \div 100$ is 7 remainder 68 $327 = (3 \times 100) + \square$

- There are 64 children in Year 5.
How many teams of 6 children can be made?
How many children will be left over?

Divide a whole number of pounds by 2, 4, 5 or 10. For example:

- Four children collected £19 for charity.
They each collected the same amount.
How much did each one collect? (£4.75)

Decide what to do after division and round up or down accordingly

Make sensible decisions about rounding up or down after division. For example, $62 \div 8$ is 7 remainder 6, but whether the answer should be rounded up to 8 or rounded down to 7 depends on the context.

Examples of rounding down

- I have £62. Tickets cost £8 each.
 $62 \div 8 = 7$ remainder 6.
I can buy only 7 tickets.
- I have 62 cakes. One box holds 8 cakes.
I could fill only 7 boxes of cakes.

Examples of rounding up

- I have 62 cakes. One box holds 8 cakes.
I will need 8 boxes to hold all 62 cakes.
- There are 62 people. There are 8 seats in a row.
8 rows of seats are needed to seat everyone.

See also rounding whole numbers (page 12).