

## NUMBERS AND THE NUMBER SYSTEM

### Pupils should be taught to:

Round numbers, including to a given number of decimal places (continued)

### As outcomes, Year 7 pupils should, for example:

#### Round positive whole numbers and decimals.

Know that if a measurement is half way between two numbers it is normally rounded up to the next number. Recognise that in some practical situations, such as a division problem, this may not be appropriate. For example:

- 124 children want to go on a school trip. If each coach holds 49 people, how many coaches are needed?
- I have 52 drawing pins. If each poster for my bedroom needs 6 pins, how many posters can I put up?
- A pupil in technology needs to cut a 1 metre length of wood into three pieces. How long should each piece be?

[Link to understanding division \(pages 82–5\).](#)

#### Round decimals to the nearest whole number or to one decimal place.

When rounding a decimal to a whole number, know that:

- if there are 5 or more tenths, then the number is rounded up to the next whole number; otherwise, the whole number is left unchanged;
- decimals with more than one decimal place are not first rounded to one decimal place, e.g. 7.48 rounds to 7, not to 7.5 which then rounds to 8.

When rounding a decimal such as 3.96 to one decimal place, know that the answer is 4.0, not 4, because the zero in the first decimal place is significant.

For example:

- 4.48 rounded to the nearest whole number is 4.
- 4.58 rounded to the nearest whole number is 5, and rounded to one decimal place is 4.6.
- 4.97 rounded to the nearest whole number is 5.
- 4.97 rounded to one decimal place is 5.0.

Answer questions such as:

- Round 5.28:
  - a. to the nearest whole number;
  - b. to one decimal place.
- Here are the winning heights and distances for some women's field events in an international competition. Round each height or distance:
  - a. to the nearest whole number;
  - b. to one decimal place.

Women's events	
High jump	2.09 metres
Long jump	7.48 metres
Shot-put	21.95 metres
Discus throw	76.80 metres
Javelin throw	80.00 metres

See Y456 examples (pages 12–13, 30–1, 56–7).