

Length – metres and centimetres; choosing the unit

WHAT THIS LESSON TEACHES

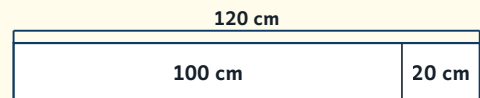
Centimetres (cm) are small units marked along your ruler, best for short things you can hold or that sit on a desk. Metres (m) are longer units, best for tall or long things like doors and walls. Remember 1 m is the same as 100 cm.

- A pencil is about 18 cm long.
- A classroom door is about 2 m tall.
- A bookshelf 1 m 20 cm tall is the same as 120 cm.

MODEL THIS ON THE BOARD

BOOKSHELF IN M OR CM

- 1 The bookshelf is **1 m 20 cm** tall.
- 2 Swap the metre: 1 m = **100 cm**.
- 3 Add the rest: **100 cm + 20 cm = 120 cm**.
- 4 It is taller than a metre, so metres is clearer: **1 m 20 cm**.



DISCUSSION STARTER

REFLECT How do you decide whether centimetres, metres or kilometres fit a length best?

ANSWER KEY

- a) cm
b) m
c) 1 m and 20 cm

Q1: cm

Q2: m

Q3: cm

Q4: 145

a) Always — 1 m equals 100 cm by the renaming relationship taught.

b) Always — 1 cm equals 10 mm by the renaming relationship taught.

c) Always — Rename 200 cm as 2 m; 2 m is longer than 1 m.

d) Always — Going m to cm multiplies by 100, cm to mm multiplies by 10; the number always increases.

EXTENSION SHEET · STRETCH ANSWERS

S1: 27000 mm

S2: 9300000 cm

S3: 46000 m

S4: 1 cm

S5: 19 cm

Investigation: Measure the classroom — open-ended; scan pupils' working for valid solution paths rather than a single answer.