

## Length – metres; choosing the right unit

### CURRICULUM ALIGNMENT

MEA.MSR.3a

compare, estimate and measure length, weight, capacity, area and volume using appropriate instruments and record and communicate appropriately.

### INTERACTIVES

Measurement Rulers · display

### LESSON ARC

Stand a real metre stick beside the door and ask which unit suits the corridor. On the IWB the metre ruler lines a whole metre against the stick, and a corridor takes two sticks end to end — hold the real stick against the screen for these. Hold up your classroom ruler for the short examples: a desk under a metre, a pencil tiny. Groups then measure a bench, the space's width, and a 10-metre wall, laying the stick end over end. A copybook sort and an estimate-then-measure Class Challenge consolidate before the metre-and-centimetre link next lesson.

### TEACHING MOVES

- Getting Started.** Stand the real metre stick beside the door as pupils settle and ask whether the corridor suits centimetres or metres. Take three hands-up answers, not call-outs, and steer toward 'metres are easier for big things' — don't name the rule yet.
- Watch and Notice.** The screen carries only the metre-scale examples — hold the real stick against it as one metre lines up and a corridor takes two sticks. For the short half, hold up your classroom ruler: 'a desk is less than one metre stick; a pencil is tiny.' Don't move on until the class can say which examples suit metres and which suit centimetres.
- Try It Together.** Split into three groups, each with a metre stick, all measuring the bench, width and 10-metre wall in parallel so everyone gets a hands-on turn inside eleven minutes. Circulate and watch for the stick lifting before the next mark is made — that's the slip that loses a whole metre.
- Sort the lengths in your copy.** Pupils head two copybook columns 'metres' and 'centimetres' and sort the six lengths. Walk the room glancing — if a hurley lands in centimetres, ask that pupil to picture how many metre sticks long it is.
- Class Challenge.** Keep the estimate-then-measure rhythm brisk across the three groups: whole-metre estimate written first, then measure and compare. Push for a guess even when pupils are unsure, and name out loud when their estimates start landing closer.
- What Did We Notice?.** Ask how pupils decide between ruler and metre stick. Listen for 'the size of the object' rather than 'the tool nearest me', and revoice a strong answer: 'so long things suit the metre stick, short things suit the ruler.'

### COMMON MISCONCEPTIONS

⚠ Pupils lift the metre stick to reposition it before marking where it ended, so the next length starts from a guess and they lose a whole metre.

Stop the group and demonstrate keeping a finger or foot on the far end of the stick before lifting. Re-measure that length together, counting each whole metre aloud as the stick goes down.

⚠ Pupils decide bigger is always better and want to measure a finger or a crayon in metres.

Hold the metre stick beside the finger so the class sees the finger is a tiny sliver of one metre, awkward to name. 'For short things the ruler gives us a number we can actually say.'

## DIFFERENTIATION

### EMERGING

- Give these pupils only the Short and Medium lengths in the Try It Together round so they count fewer whole metres before swapping.
- Mark the floor with chalk or tape where each metre stick ends, so the pupil places the stick to a visible line rather than holding the position in their head.

### DEVELOPING

- After the copybook sort, ask which of the six lengths sits closest to the borderline between metres and centimetres, and why a book is the tricky one.
- On the Class Challenge, ask pupils to record how many whole metres their estimate was off by, not just whether it was close.

### PROFICIENT

- While the groups measure, ask: a wall is 7 metres and a bit — how would you describe that 'bit' without a centimetre number yet? Let them wrestle with it as a bridge to the renaming lesson, then jot their idea in the copybook.

➤ **Cross-curricular:** Tie to PE — pupils pace out the length of a Gaelic football pitch in the yard and estimate it in whole metres before checking.

## ANSWER KEY

W1: 600 cm

W2: 5 cm

Q1: 3100 cm

Q2: 16 cm

Q3: 6000000 cm

Q4: 20 cm

## EXTENSION SHEET · STRETCH ANSWERS

S1: 7 cm

S2: 27000 mm

S3: 7 cm

S4: 26000 m

S5: 7 cm