

Measuring Lengths

Relate metric units of length to each other.

an and Patrick are making life-sized models of selves. They use string to measure because they have a measuring tape.



Norman's Strategy

I cut a piece of string as long as my arm.
I measured the string using a 30 cm ruler.
My left arm is 484 mm long.

How can you measure a 484 mm long piece of string with a 30 cm ruler?

- How do you know that 484 mm is longer than 30 cm?
- About how many centimetres long is Norman's arm?

You will need

- a 30 cm ruler
- string



- scissors



- C. Is Norman's arm longer or shorter than your estimate in Part B? How do you know?
- D. Use your ruler to measure and cut a piece of string 484 mm long.

Reflecting

1. How did you measure 484 mm with your ruler?
2. How is measuring 484 mm with your ruler different from measuring 284 mm with your ruler?
3. How does knowing the number of millimetres in a centimetre help you to complete the task?

Checking

4. Cut string for each measurement. Describe what you did.
a) 75 cm b) 642 mm c) 0.1 m

Practising

5. Describe how to measure a 0.45 m long piece of fabric using a 30 cm ruler.
6. Draw each length.
a) a 53 mm line segment
b) a 1.32 m zigzag path
7. The length of Jasleen's step is about 60 cm. She wants to know the length of the room in metres, but she doesn't have a ruler. How can she use what she knows about her step to estimate the length of the room?
8. Tegan says she lives 90 000 cm from her grandmother.
a) Do you think they live in the same town? Explain.
b) What would be a better unit for describing the distance? Why?
9. How can you calculate the thickness of a piece of photocopy paper in millimetres? Use the information in the picture.

