## At-Home Investigation

Come up with a plan to divide your metre strip into smaller sections. You will eventually need to show each centimetre, but start by thinking about the line as representing 100
centimetres. Where might 50 cm go? How about 25 cm and 75 cm ?
My plan: answer these questions

- What could I do to accurately mark the 50,25 and 75 cm positions without using a ruler or measuring tape?
- How will I make sure that my numbers are accurate?


## Carry out my plan: follow these steps and answer the questions

- Try out your idea. Did it work? Is it accurate enough?
- Use a ruler or measuring tape to check how close you were. Mark on the correct position (you might need to use the other side of the paper strip). How many 50s make up 100? How many 25 s make up 100 ? How does this relate to your folding?

Apply your learning: follow this step
Check where 23 cm is on your ruler and compare it with your strip. Add in numbers for each 10 cm and lines for each centimetre to make sure that you can accurately use your strip as a measuring tool for tomorrow.

## At-Home Investigation

Come up with a plan to compare the length of your bedroom, lounge room and kitchen, then order them from the shortest to the longest room.

## My plan: answer these questions

- Look at the lengths that you will have to measure for each room. What problems can you see? Come up with a plan for measuring the length of each room without having to move your furniture.
- How will I make sure that I am measuring accurately when there is furniture in the way? What would happen if I didn't measure straight along?

Carry out my plan: follow these steps and answer the questions

- Measure each room. Explain how you did it in the space below and give the final measurement for each.

Extend your learning: follow this step and answer the question The perimeter of your bedroom would be the distance all the way around it, along every wall, and back to the start. Work out the perimeter of your bedroom.

| $x$ | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Record your time here for the 49 questions:

Mark your answers using a calculator or with an adult. Circle any that are wrong.

E4. Measure and estimate length in $m$ and cm
Sometimes we need to guess how long something is so that we know if our measurement is about right. Answer these questions using cm and m .

## For measuring the distance around your head:

1. What instruments could you use to measure it?
2. Would you measure it in metres or centimetres or both? Why?
3. Have a guess: what do you think the distance will be? Why?
4. Choose an instrument and measure it. What did you get?
5. How good was your guess?

## For measuring the distance around your school oval:

1. What instruments could you use to measure it?
2. Would you measure it in metres or centimetres or both? Why?
3. Have a guess: what do you think the distance will be? Why?
4. Choose an instrument and measure it. What did you get?
5. How good was your guess?

## For measuring the distance around your desk:

1. What instruments could you use to measure it?
2. Would you measure it in metres or centimetres or both? Why?
3. Have a guess: what do you think the distance will be? Why?
4. Choose an instrument and measure it. What did you get?
5. How good was your guess?


How did you decide whether to use metres or centimetres or both?

How did you measure around curved things?

## BACKWARDS QUESTION:

If the distance around a square measured 40 cm , how long would one of the sides be?

## Interleaved practise

Number:

1. Starting at 14326 , count in 10 s until you get past 14500 .
2. $2478+$ $\qquad$ $=2629$
3. Read this number and say it: 23748 . Write it in words. How many tens of thousands, thousands, hundreds, tens and ones does it have?
4. Find two ways that you can make $\$ 62.70$ using coins and notes and draw them here.
5. Share 24 counters equally to show halves, then thirds, quarters, and eighths. Draw it.

## Measurement/Geometry:

6. Find 4 objects that would be measured in kilograms. Find 4 objects that would be measured in grams. List them here.
7. What time is it? What time will it be in half an hour?
8. Cut these rectangles to make triangles in as many ways as you can.


Chance/Data:
9. What could the weather be like tomorrow? List as many possibilities as you can. Which is most likely? Which is least likely?

E2. Estimating length, mass, area, volume
In the olden days people used to measure things with their bodies and familiar objects. Examine the examples to see how you can use objects to estimate.

## Length estimations:

1. About how long is your arm span with both arms stretched out horizontally, finger tip to finger tip?

- When might you use this for estimating?

2. About how wide is your hand span when stretched out from thumb to little finger?

- When might you use this for estimating?

3. About how wide is one of your fingers?

- When might you use this for estimating?


4. About how wide is your hand when your fingers are not spread out?

- When might you use this for estimating?

5. About how long is your foot?

- When might you use this for estimating?

6. About how long is your stride? (Average step that you take)

- When might you use this for estimating?

7. About how long is the distance from your elbow to finger tip?

- When might you use this for estimating?

