ME5-8: Centimetres

A **centimetre** is a unit of measurement for <u>length</u> (or <u>height</u>, or <u>thickness</u>).
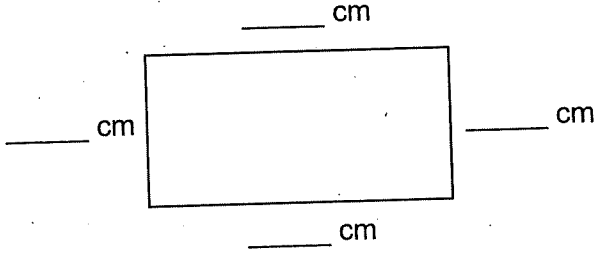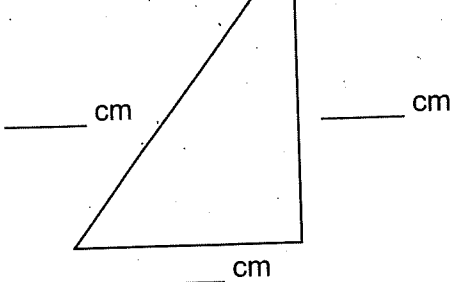
1. Measure the length of each line using your ruler.

   a) _____ _____ cm

   b) _____ _____ cm

   c) _____ _____ cm
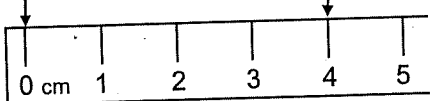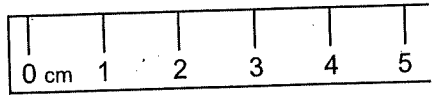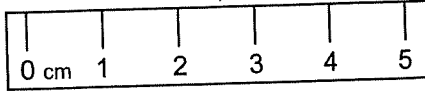
2. Measure the length of each object using your own ruler.

   a) _____➤

   _____ cm

   b)

   _____ cm

3. Measure all the sides of each shape.

   a)

   _____ cm

   _____ cm   _____ cm

   _____ cm

   b)

   _____ cm   _____ cm

   _____ cm

4. Draw two arrows on each ruler that are the given distance apart.

   a) Two arrows 4 cm apart.

   0 cm 1 2 3 4 5

   b) Two arrows 3 cm apart.

   0 cm 1 2 3 4 5

   c) Two arrows 5 cm apart.

   0 cm 1 2 3 4 5

5. Draw the following objects.

   a) a line 3 cm long

   b) a line 5 cm long

   c) a ladybug 1 cm long

   d) a shoe 4 cm long

6. Your index finger is about 1 cm wide. Measure an object on your desk with your index finger:

   My _____ is approx. _____ cm long.

7. How far do you need to spread your fingers to make 10 cm?

   Use your hand to find the approximate length of your desk in cm.

   Then measure the exact length of your desk in cm:

   10 cm

   0 cm 1 2 3 4 5 6 7 8 9 10

   Approximate length: _____   Exact length: _____
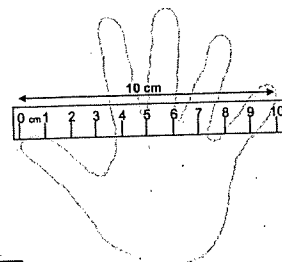
Measurement

If you look at a ruler with **millimetre** markings, you can see that 1 cm is equal to 10 mm.

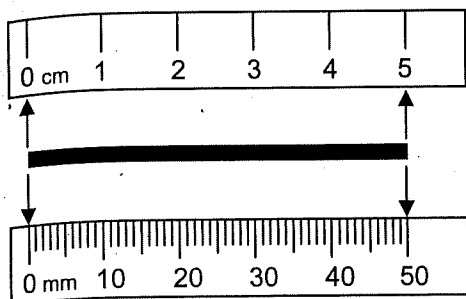How long is the line in cm? How long is it in mm?

The line is _____ cm long, or _____ mm long.

To convert a measurement from cm to mm,
we have to multiply the measurement by _____.
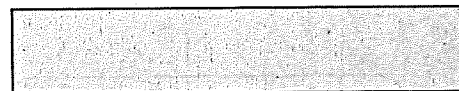
1. Your index finger is about 1 cm or 10 mm wide.
   Measure the objects below using your index finger.
   Then convert your measurement to mm.

   a)

   The paper clip measures about _____ index fingers.
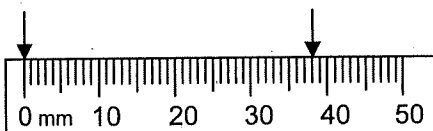
   So, the paper clip is approximately _____ mm long.

   b)

   The rectangle measures about _____ index fingers.

   So, the rectangle is approximately _____ mm long.
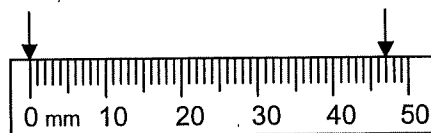
2. Measure the distance between the two arrows on each ruler.

   a)

   _____ mm

   b)

   _____ mm

3. Measure the sides of the rectangle in cm.
   Then measure the distance between the two diagonal
   corners in cm and mm.
   NOTE: Your answer in cm will be a decimal.

   _____ cm

   _____ cm

   _____ mm

   _____ cm
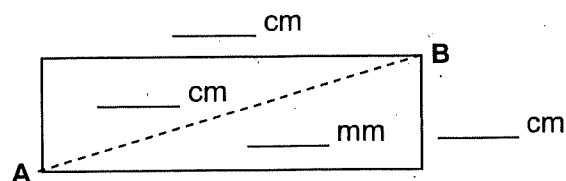
4. Use a ruler to draw the following objects to the exact millimetre.

   a) A line 20 mm long.

   b) Draw a line 52 mm long.

   c) A beetle 35 mm long.

   d) A pencil 70 mm long.

jump math
MULTIPLYING POTENTIAL

Measurement 2

ME5-9: Millimetres and Centimetres (continued)

5. Estimate whether each line is <u>less</u> than 40 mm or <u>more</u> than 40 mm.
   Place a checkmark in the appropriate column.
   Then measure the actual length.

	Less than 40 mm	More than 40 mm
a)		
b)		
c)		

a) _____ mm   b) _____ mm   c) _____ mm

6. To change a measurement from centimetres (cm) into millimetres (mm), what should you <u>multiply</u> the measurement by?

7. Fill in the numbers missing from the following charts.

mm	cm
	13
	32

mm	cm
	8
	18

mm	cm
213	
170	

mm	cm
	9
	567

8. To change a measurement from mm to cm what should you <u>divide</u> by? _____
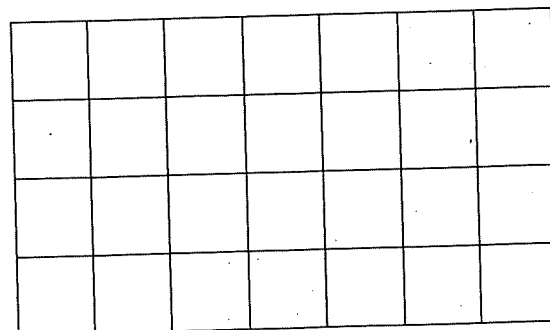
9. Change the measurements.
   a) 460 mm = ____ cm   b) 60 mm = ____ cm   c) 580 mm = ____ cm

10. Circle the greater measurement in each pair.
    HINT: Convert one of the measurements so that both units are the same. Show your work.

    a) 5 cm   70 mm
    b) 83 cm   910 mm
    c) 45 cm   53 mm
    d) 2 cm   12 mm
    e) 60 cm   6200 mm

11. Draw a rectangle 2 cm high and 50 mm long.

jump math
MULTIPLYING POTENTIAL

Measurement

12. Using your ruler, draw a second line so that the pair of lines are the given distance apart. Complete the chart.

	Distance apart	
	in cm	in mm
	4	40
	3	
		80

13. In the space provided, draw a line that is between ...

    a) 4 and 5 cm.

        How long is your line in mm? _____

    b) 6 and 7 cm.

        How long is your line in mm? _____

14. Write a measurement in mm that is between ...

    a) 7 and 8 cm: _____ mm   b) 27 and 28 cm: _____ mm

15. Write a measurement in a whole number of cm that is between ...

    a) 67 mm and 75 mm: _____ cm   b) 27 mm and 39 mm: _____   c) 52 mm and 7 cm: _____
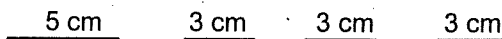
16. Draw a line that is a whole number of centimetres long and is between ...

    a) 35 and 45 mm   b) 55 and 65 mm   c) 27 and 33 mm

17. Carl has a set of sticks: some are 5 cm long and some are 3 cm long.
    The picture (not drawn to scale) shows how he could line up the sticks to measure 14 cm:

        5 cm   3 cm   3 cm   3 cm

    Draw a sketch to show how Carl could measure each length by lining the sticks up end to end.

    a) 8 cm   b) 11 cm   c) 13 cm   d) 26 cm   e) 19 cm   f) 17 cm

    BONUS
    g) Use two 5 cm sticks and one 3 cm stick to draw a line 7 cm long.

jump math
MULTIPLYING POTENTIAL

Measurement 2