Exercise 9A

1 Convert to cm.

   a   3 m   **b** 8 m   **c** 7 m   **d** 3 m 20 cm

   e 6 m 75 cm   **f** 9 m 90 cm   **g** 5 m 5 cm   **h** 8 m 9 cm
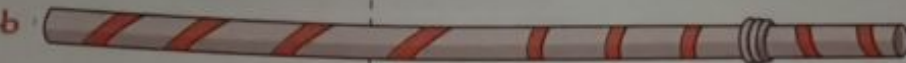
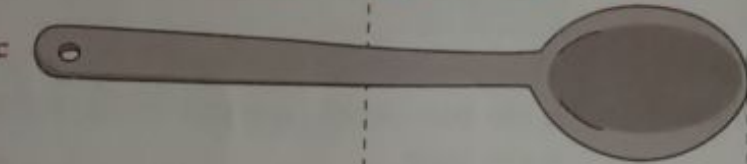**2** Measure the length of these objects. Remember to use the correct unit.
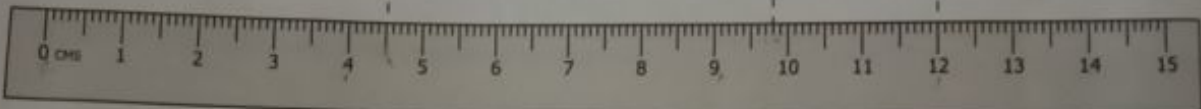
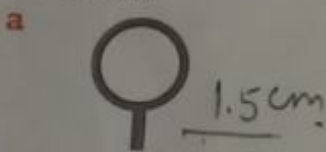   **a**   About _4.5 Cm_

   b   About _12 Cm_

   c   About _9 8 Cm_

3 Use a ruler to measure how wide the objects above are. Measure to the nearest half cm or cm.

   a _1.5 cm_   **b** _1.3 cm_   **c** _2.5 cm_

4 Join the dot next to each animal to the dot next to its house with a ruler. Then measure the line.

   a About _5_ cm   **b** About _2_ cm   **c** About _5_ cm

   d About _3.5_ cm   **e** About _3.5_ cm

Thiruvananthapuram to Chandigarh you cannot do it using metres. You will need a bigger unit of measurement called kilometres (km). ...ow wide the ocean is or the distance from

1 kilometre = 1000 metres

A school bus is about 10 m long. So, 100 school buses standing one behind the other will be 1 km long.

The longest train in the world is in Belgium and is 1 km 733 m long.

If we write the three units of measuring length that we have learnt so far, from the largest to the smallest units, it would be

It takes me about 10 minutes to walk 1 km.

It takes me about 15 minutes to walk 1 km.

KILOMETRE   METRE   CENTIMETRE

Longest of the three units

Shortest of the three units

Exercise 9B

1 What would you use to measure these? cm, m or km?

a Height of a building ___M___

b Distance from Mumbai to Chennai ___Km___

c Length of a mouse's tail ___Cm___

d Length of a saree ___m___

e Length of India's coastline ___Km___

f Length of a scissor ___Cm___

2 Fill in the blanks using cm, m or km.

a Height of a coconut tree 10 ___m___

b Length of a table 2 ___m___

c Length of an earthworm 6 ___Cm___

d Distance from the railway station to home 5 ___km___

e Length of a shoelace 30 ___Cm___

f Height of a flagpole 5 ___m___

3 Anil's home and the places close to it are shown on the map. Study the map first to answer these questions.

3+2
 a The shortest route from Anil's house to the market is via the _School_ and is _5_ km.

 b The shortest route from Anil's house to the airport is _6 km_ km and is past the _Railway Station_

 c If Anil has to go to the post office from school one day, what is the best route for him to go back home? _Via School._

 d What is the shortest route from the post office to the market? _Via School, Only 5 km_

Railway Station

4km

Market

Anil's House

3km

Airport

6km

School

Post Office

4 Give the air distance in km from:

 a Kolkata to Bangalore _1881 km_

 b Chennai to Thiruvananthapuram _708 km_

 $2059 + 876$

 c Srinagar to Shillong (via Delhi) _2935 km_

 d Delhi to Ahmedabad (via Hyderabad)
 $1499 + 1208 = 2707 \text{ km}$

 e Shillong to Hyderabad (via Delhi)
 $2059 + 1499 = 3558 \text{ km}$

876 km

Delhi

2059 km

1499 km

1208 km

1881 km

708 km
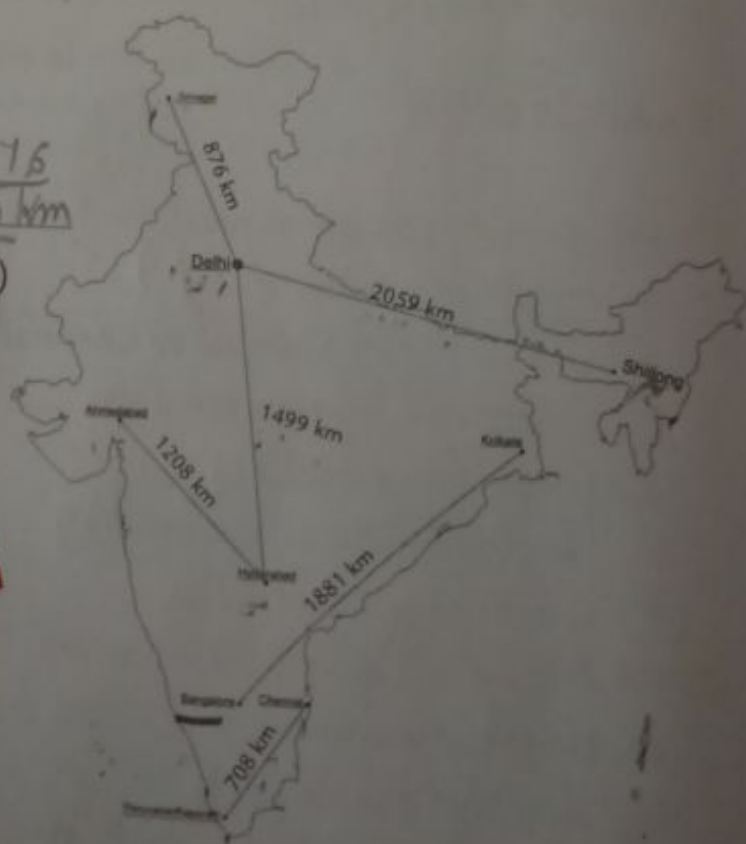
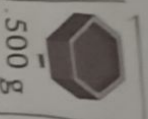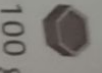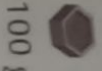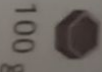**Project** Take 4 different kinds of glasses. Use a measuring tape and find the length (A) of the first glass. Then measure around it (B). Record the measurement. Repeat with all the other glasses. What do you notice? Which is always the greater measurement?

Exercise 9C

1 Mark the least number of weights required.

a

750 g | 2 kg | 1 kg | 500 g | 250 g | 100 g | 100 g | 100 g

b

2 kg 600 g | 2 kg | 1 kg | 500 g | 250 g | 100 g | 100 g

1 kg = 1000 g

c

3 kg 350 g | 2 kg | 1 kg | 500 g | 250 g | 100 g | 100 g | 100 g

2 How many more gram to make 1 kilogram?

a 800 g + _200_ = 1 kg   **b** 600 g + _400_ = 1 kg   **c** 300 g + _700_ = 1 kg

3 These are the ingredients that Mrs Khanna uses to make *bhel puri*. How much would she need to make double this amount? Make a table like the one below and fill in the first column in 'g'. Then fill in the second column with double the measure.

Ingredient	Single recipe	Double recipe
$\frac{1}{2}$ cup onion	75 g	
1 cup potatoes	200 g	
1 cup puris	150 g	
1 cup puffed rice	50 g	
1 tbsp chaat masala	15 g	
$\frac{1}{2}$ tsp salt	20 g	

Ingredient	Single recipe	Double recipe
Onions	75 g	150 g
Potatoes	200 g	400 g
Puris	150 g	300 g
Rice	50 g	100 g
Chaal masala	15 g	30 g
Salt	20 g	40 g

4 a People are allowed to carry 20 kg of luggage on a plane. How many kg can 5 people carry? 20 × 5 = 100 kg

b Lions at the zoo eat 5 kg of meat everyday. How many lions can be fed with 75 kg of meat? 5)75(15

15 lions

Exercise 9D

1 The jug holds 1 litre. Will the glasses fill up the jug? One has been done for you.

	Enough	Extra	Less
a			✓
b		✓	
c	✓		

2 This is a mango milkshake recipe. Show the quantity needed in mℓ in the first column. Then show how much will be needed if only half the quantity has to be made. Do this in your notebook.

a 2 cups mango pulp

b 2 cups vanilla ice-cream

c 1 bottle milk

d 2 tablespoons honey

Ingredients	Full recipe	Half recipe
a Mango pulp	400 mℓ	200 mℓ
b Vanilla	70 mℓ 35 mℓ	
c Milk	1000 mℓ 500 mℓ ✓	

1 cup = 200 mℓ
1 tablespoon = 35 mℓ
1 bottle = 500 mℓ

3 The table below shows the amount of water a person uses for different activities.

Brushing teeth with tap running	Washing dishes	Shower	Toilet flush	Drinking and cooking
5 ℓ	50 ℓ	100 ℓ	10 ℓ	10 ℓ

a How much water is used for a shower and brushing? 100 + 5 = 105 ℓ

b How much more water do we use to wash dishes than drinking and cooking? 50 - 10

c If you keep the tap closed while brushing, you can save 3 ℓ of water. How much water will you save if you brush twice a day by keeping the tap closed? 6 ℓ

Challenge!

Ramu the milkman has only 3 ℓ and 5 ℓ measures. How will he sell milk to Anjana who needs 4 ℓ of milk?