In the Annual Sports week of Dulumoni's school, let us find out, how the students are doing in the sport-event of shot-put (a heavy ball) throwing?

Name	Distance thrown	Position
Karobi	3 meter 50 centimeter	
Nafisa	3 meter 10 centimeter	
Proneet	2 meter 50 centimeter	Fourth
Supriyo	3 meter	
Dulumoni	2 meter 20 centimeter	
Rukmini	1 meter 40 centimeter	

Look at the table above and answer the following questions

* What are the individual positions in the table? —————

* Who has thrown the longest distance and how far is it? ——— ———

* Who has thrown the least distance and how far is it? ——— ———

* What is the difference between the longest and the least distance thrown? ———

* How far did Nafisa threw than Supriya? ———

* How much more distance Dulumoni will have to throw to reach the first position? ———

Let us make a scale
Things required

⇨ A piece of long split bamboo (approximate length of 4 span)

⇨ A scale with marking

⇨ A sharpened pencil

How will you proced

* Mark at one end of the bamboo split to denote '0'.
* Place '0' mark of the scale at '0' mark of the bamboo split.
* Now, mark with the pencil every point 1cm apart.
* On the bamboo split write 10 at the mark of 10cm and 20 at the mark of 20 cm.
* When you reach 100 cm. write 100 and cut the bamboo split thereof.
* Divide each centimeter into small ten divisions and mark them as done in the scale.

You can also make such a scale with paper
Things required :

(Art paper, scissor, gum, scale, pencil)

* Along the length of the art paper cut two pieces each of 4 centimeter thick. Join the two pieces with gum to make it long

* Mark '0' at one end of the long artpaper and match it with '0' mark of the scale.

* Go on marking with the pencil each point one centimeter apart. When you reach 100 centimeter mark the point. Mark it as 1 meter.

* Cut the paper at that mark. Now you have two 'meter scales' of bamboo and paper. Because,
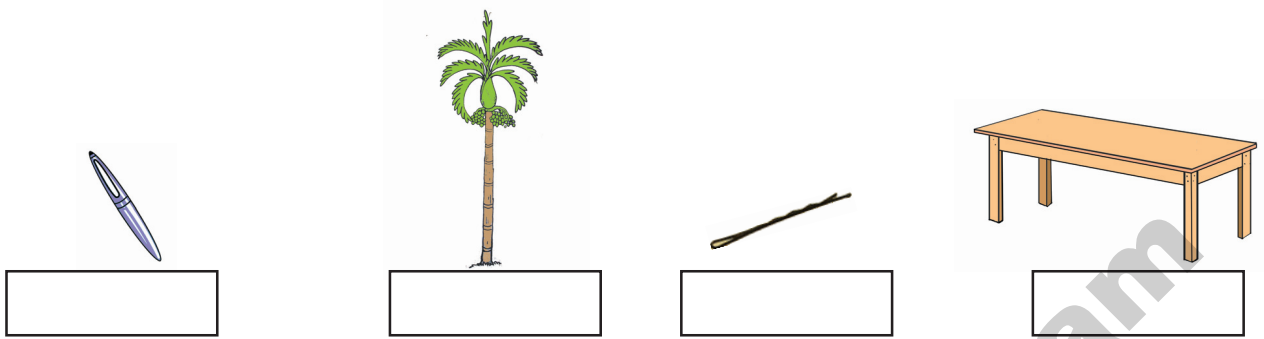

$$100 \text{ centimeter} = 1 \text{ meter}$$
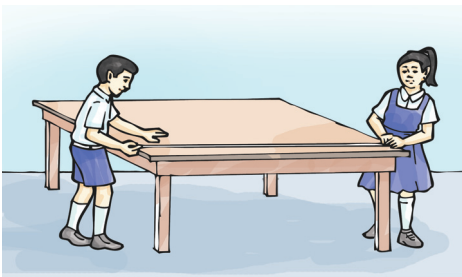
Let us know-

Length of long objects are measured in meter and short objects are measured in centimeter. Meter and centimeter are written as **'m'** and **'cm'** in short.

In which units will you express the following objects? (centimeter/meter)

[ ]   [ ]   [ ]   [ ]

Let us take measurement with the scales we have made

Length of the table

= ——— centimeter
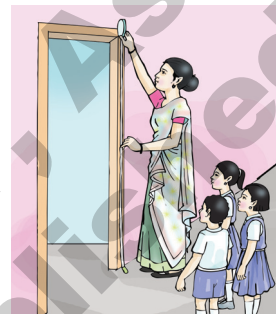
Height of the class-room door

= ——— centimeter

Length of the cloth cut for
making a handkerchief

= ——— centimeter

Riman's height

= ——— centimeter

Let us remember

     1 meter = 100 centimeter

Therefore, 2 meter = 2 × 100 centimeter = 200 centimeter

     4 meter = 4 × 100 centimeter = 400 centimeter

Do by yourself

6 meter = ... = ... centimeter

10 meter = ... = ... centimeter

12 meter = ... = ...centimeter

Let us convert meter and centimeter into centimeter

5 meter 25 centimeter

$= 5 \times 100$ centimeter $+ 25$ centimeter

$= 500$ centimeter $+ 25$ centimeter

$= 525$ centimeter

Convert meter and centimeter into centimeter

(a) 7 meter 24 centimeter

= ....

= ....

= .... centimeter

(b) 12 meter 15 centimeter

= ....

= ....

= .... centimeter

(c) 3 meter 60 centimeter

= ....

= ....

= .... centimeter

(d) 15 meter 75 centimeter

= ....

= ....

= .... centimeter

(e) 17 meter 8 centimeter

= ....

= ....

= .... centimeter

(f) 10 meter 4 centimeter

= ....

= ....

= .... centimeter
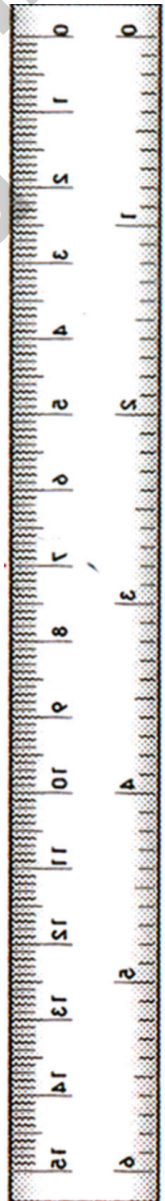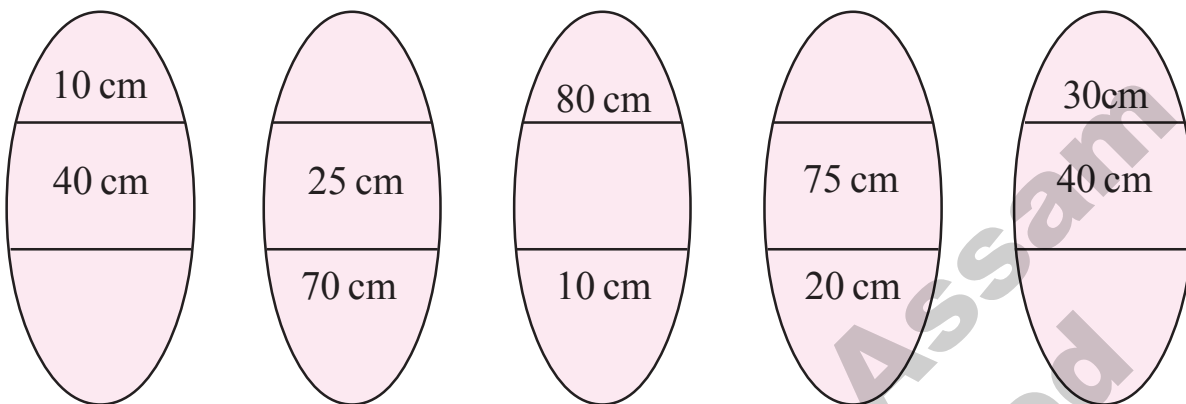
Fill in the blanks to show, how much centimeter is required to add to make it equal to 1 meter-

Instruction to teacher : Ask the students to write in the gap so that it adds to 1 meter

10 cm		80 cm		30cm
40 cm	25 cm		75 cm	40 cm
	70 cm	10 cm	20 cm	

Let us convert centimeter to meter

200 centimeter   =   100 centimeter+ 100 centimeter

                     =   1 meter   + 1 meter

                     =   2 meter

Convert centimeter to meter

(a) 300 centimeter

= ....

= ....

= .... meter

(b) 400 centimeter

= ....

= ....

= .... meter

(c) 500 centimeter

= ....

= ....

= .... meter

(d) 600 centimeter

= ....

= ....
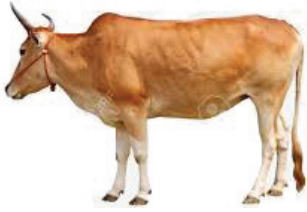
= .... meter

How many centimeters will they be?

The approximate height of the animals are given below. Express the measurement in centimeters.

1 meter 15 centimeter

= 1×100 centimeter + 15 centimeter

= 115 centimeter

1 meter 10 centimeter

= ....

= ....

1 meter 5 centimeter

= ....

= ....

5 meter

= ....

= ....

1.20 meter

= ....

= ....

3 meter

= ....

= ....
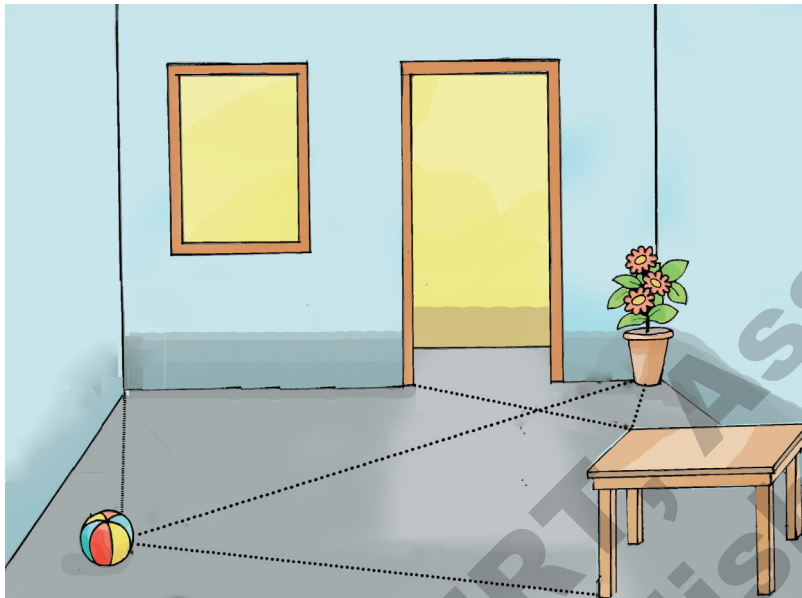
Let us look at the picture below and guess the distances in between the objects.

Instruction to the teachers : Ask the students to guess the distance and write. Let the students actually measure the distances with scale.

(a) The distance from the ball to the flower tub   = ... centimeter

(b) The distance from the ball to the corner of the room = ... centimeter

(c) The distance from the table to the ball   = ... centimeter

(d) The distance from the door to the table   = ... centimeter

(e) The distance from the flower tub to the table   = ... centimeter

Try to guess the distance between places and then calculate the actual distance

Instruction to the teachers : Teachers will take the students outside the classroom and ask the students to guess distances between various positions and then verify them by actual measurements.

Positions	Assumed distance	Actual distance
From the classroom door to the flower garden	...... meter	.... meter
From the classroom to the kitchen	...... meter	.... meter
From the kitchen to classroom	..... meter	.... meter
From the flower garden to the water tap	.... meter	.... meter
From the classroom door to the school gate	..... meter	.... meter

Let us know

The unit kilometer is used to measure distances of road, length of river, height of mountains etc. Kilometer is written as (km) in short.

Length of a river

Length of a road

1 kilometer = 1000 meter

Let us add

(a)
$$\begin{array}{r} 3 \text{ m } 50 \text{ cm} \\ + 4 \text{ m } 20 \text{ cm} \\ \hline \\ \hline \end{array}$$

(b)
$$\begin{array}{r} 2 \text{ m } 25 \text{ cm} \\ + 1 \text{ m } 70 \text{ cm} \\ \hline \\ \hline \end{array}$$

(c)
$$\begin{array}{r} 4 \text{ m } 30 \text{ cm} \\ + 3 \text{ m } 20 \text{ cm} \\ \hline \\ \hline \end{array}$$

(d)
$$\begin{array}{r} 5 \text{ m } 35 \text{ cm} \\ + 7 \text{ m } 60 \text{ cm} \\ \hline \\ \hline \end{array}$$

(e)
$$\begin{array}{r} 11 \text{ km } 25 \text{ m} \\ + 10 \text{ km } 24 \text{ m} \\ \hline \\ \hline \end{array}$$

(f)
$$\begin{array}{r} 12 \text{ km } 50 \text{ m} \\ + 9 \text{ km } 40 \text{ m} \\ \hline \\ \hline \end{array}$$

Let us subtract

(a)
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  3 m 80 cm
- 2 m 40 cm
_____
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(b)
```
  5 m 50 cm
- 4 m 40 cm
_____
```

(c)
```
  4 m 50 cm
- 3 m 30 cm
_____
```

(d)
```
  7 m 55 cm
- 6 m 25 cm
_____
```

(e)
```
  24 km 32 m
- 14 km 15 m
_____
```

(f)
```
  15 km 640 m
- 14 km 330 m
_____
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Let us solve the problems :

(a) Romen's father bought 1 m 50 cm cloth of blue colour and 1 m 40 cm cloth of white colour. What is the total length of cloth he bought?

(b) The door bolt of your room is at height of 190 cm. You can reach upto 160 cm. How much taller should you be to reach the door bolt.

(c) If 3m cloth is required to stich one pair of dress, how much cloth will be required to stitch such 3 pairs of dress?

(d) If you cut a piece of 4m length bamboo from a bamboo pole of 5 m long, what is the length of the remaining piece of bamboo?

(e) Mili bought 5 m 50 cm long red ribbon. She gave to Reema 3 m 30 cm from it. What is the remaining length of ribbon with her?

(f)	Papari travelled a distance of 150 m on cycle and 50 m on foot. What is the total distance she travelled?	
(g)	During school sports in the running event, Priya ran two rounds from one end to the other end of the playground which has a length of 50m. What is the total distance she covered?	
(h)	Meghali is 1m 50 cm tall. Her sister Gungun is shorter to her by 30 cm and her father Paresh is taller than her by 35 cm. How short is Gungun than her father Paresh?	
(i)	Along the gateway to Runjun's house there are three trees a Nahar, a Sewali and a Krishnsoora. The distance from the Nahar tree to the Sewali tree is 20m. The distance from the Sewali to the Krishnasoora is 12 meter. What is the distance from the Nahar tree to the Krishnasoora tree?	

Measure by yourself

● Plant a sapling ● Water it everyday ● Measure the height of the plant every week ● Keep a record of the growth of the plant each week

Week	Centimeter
First week	......................cm
Second week	......................cm
Third week	......................cm
Fourth week	......................cm

Instruction to the teachers : *Ask the students to do such projects.*