

**SESSION** : 1  
**CLASS** : IV  
**SUBJECT** : MATHEMATICS  
**CHAPTER NUMBER** : 12  
**CHAPTER NAME** : MEASUREMENT  
**SUBTOPIC** : LENGTH AND CONVERSION OF LENGTH

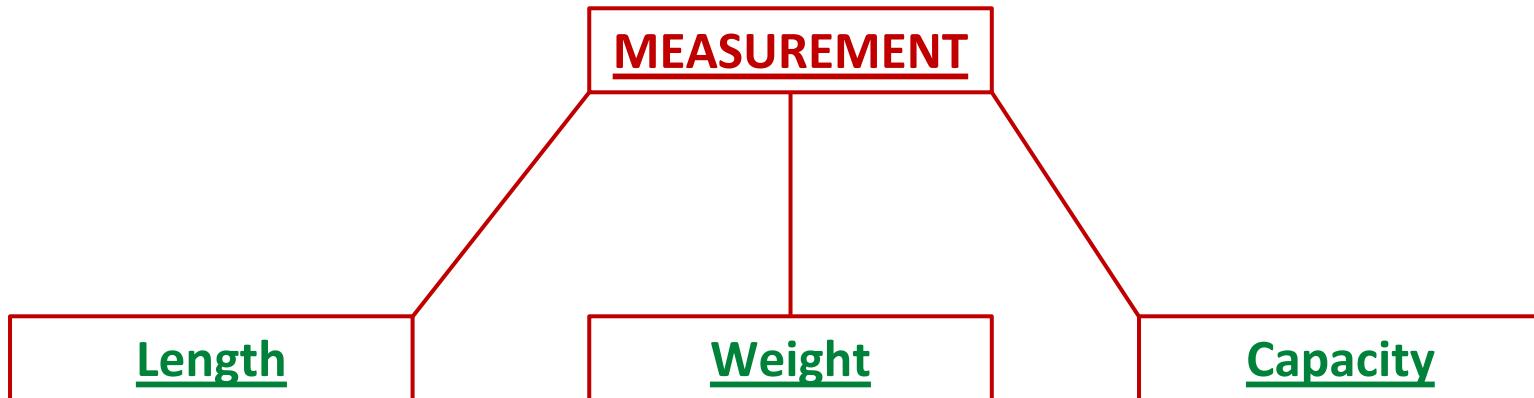
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**CHANGING YOUR TOMORROW**

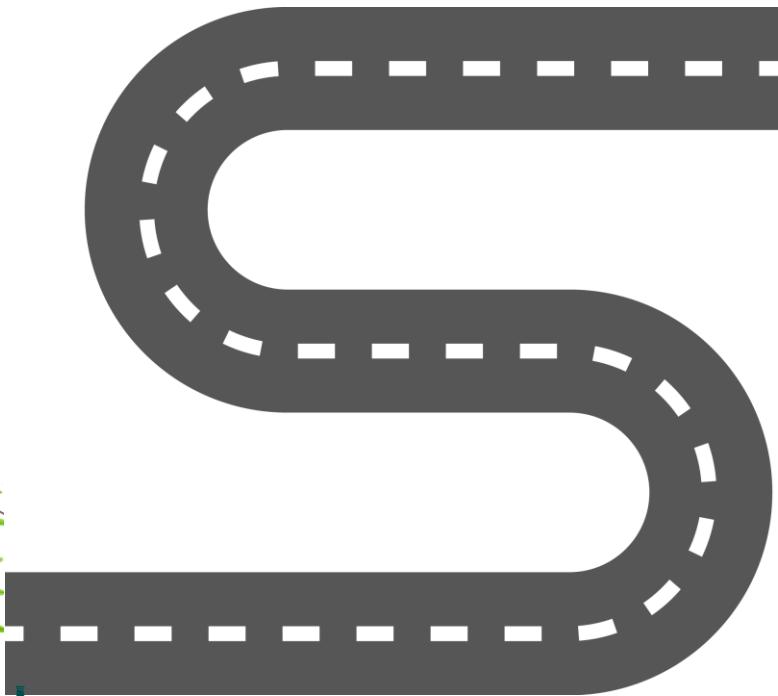
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## LEARNING OBJECTIVE

- Enable the students to understand about the different units of length and to know about the conversion of length.



# MEASUREMENT



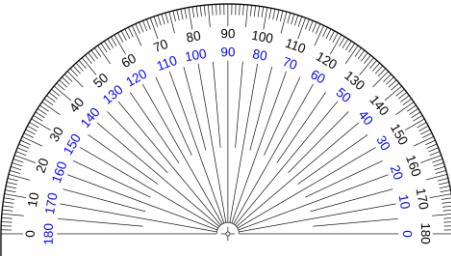
**DELHI**  
VECTOR ILLUSTRATION



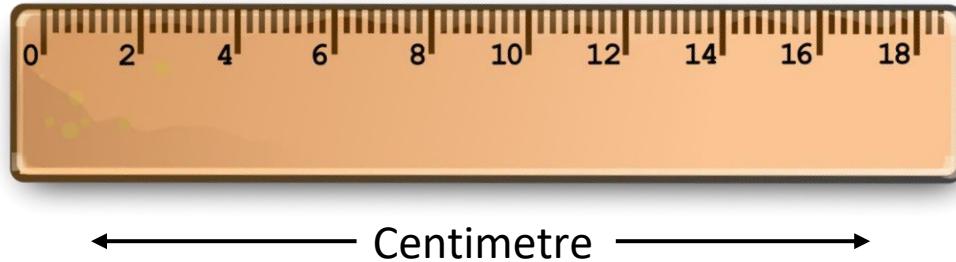
**HYDERABAD**

# MEASUREMENT

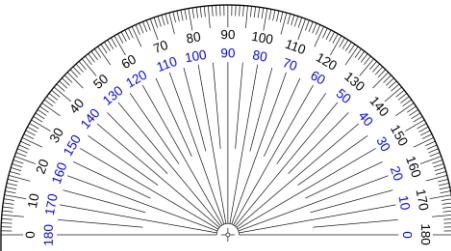
The standard unit used for measuring length is called the **metre (m)**. Other units used for measuring lengths are **millimetre, centimetre, kilometre**, etc.



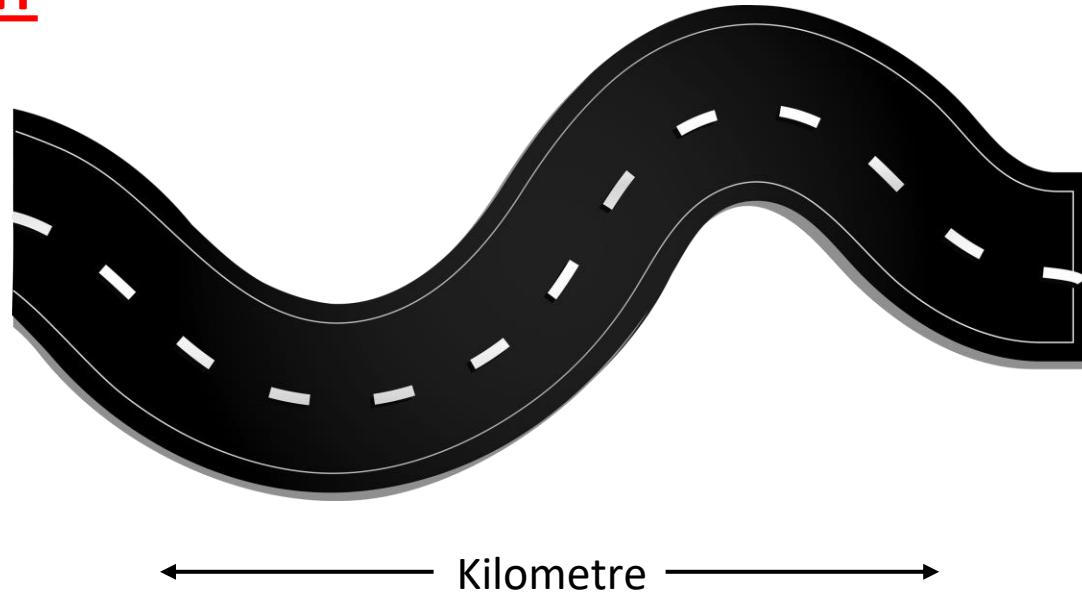
# MEASUREMENT



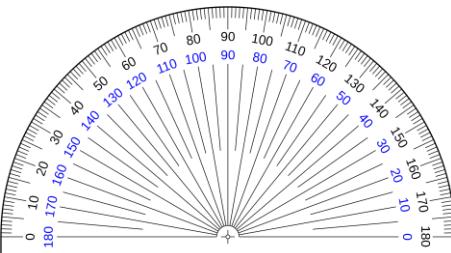
**It is used for measurement of small length**



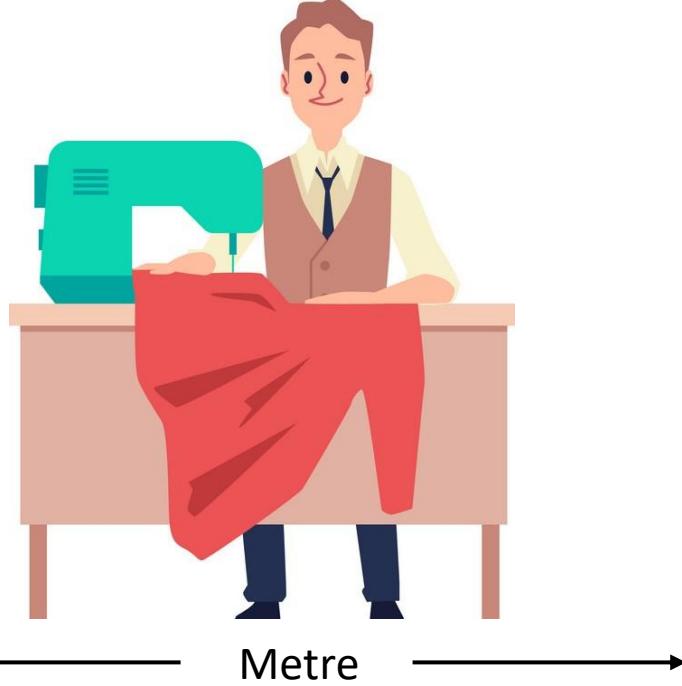
# MEASUREMENT



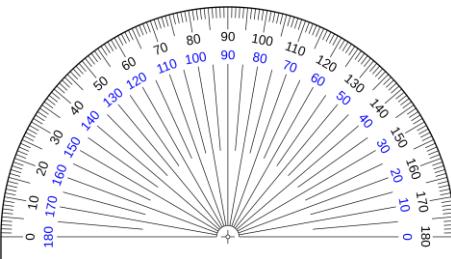
**It is used for measurement of large length**



# MEASUREMENT



Here we use the unit metre for measurement

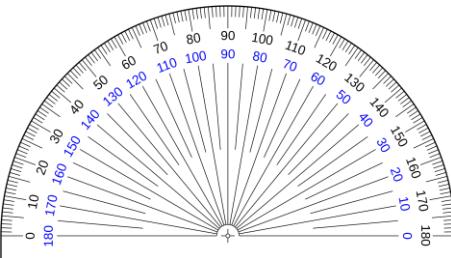


# MEASUREMENT

$$1 \text{ cm} = 10 \text{ mm}$$

$$1 \text{ m} = 100 \text{ cm}$$

$$1 \text{ km} = 1000 \text{ m}$$

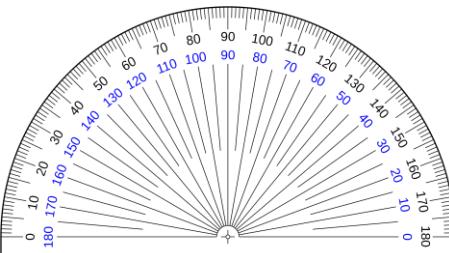


## CONVERSION

### A. Metres into Centimetre

$$1 \text{ m} = 100 \text{ cm}$$

1. To convert metres into centimetres, multiply the number of metres by 100.  
**(to multiply a number by 100, just put two zeroes to the right of the number).**
2. To convert metres and centimetres into **centimetres**, multiply the number of metres by **100** and then **add** the number of centimetres to it.



## CONVERSION

### A. Metres into Centimetre

$$1 \text{ m} = 100 \text{ cm}$$

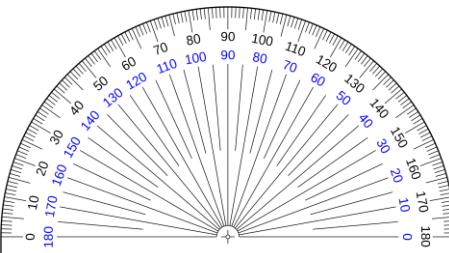
#### Example:

1. Convert 35 metres into centimetres.

$$35 \times 100 = 3500 \text{ cm}.$$

2. Convert 225m 85cm into centimetres.

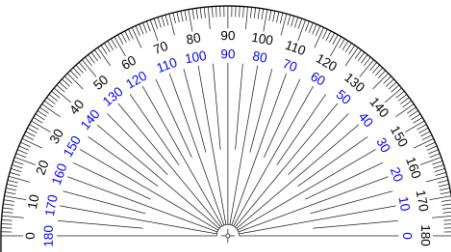
$$225\text{m } 85\text{cm} = 225 \times 100 \text{ cm} + 85 \text{ cm} = 22,585\text{cm}$$



## CONVERSION

**B. Centimetres into metres**  $100 \text{ cm} = 1 \text{ m}$

To convert centimetres into metres, divide the number of centimetres by 100.



### B. Centimetres into metres 100 cm = 1 m

**Example:**

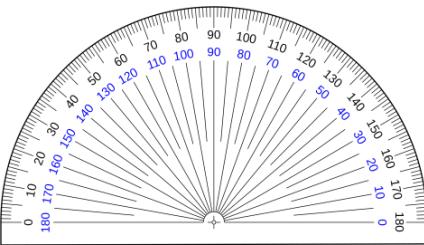
1. Convert 545 centimetres into metres.

$$545 \text{ cm} = 500 \text{ cm} + 45 \text{ cm} = 5 \text{ m } 45 \text{ cm}$$

2. Convert 3,758cm into metres and centimetres.

$$3,758 \text{ cm} = 3700 \text{ cm} + 58 \text{ cm} = 37 \text{ m } 58 \text{ cm}$$

when centimetres are converted into metres and centimetres, the number formed by the last two digits on the right gives the number of centimetres and the number formed by the remaining digits gives the number of metre.



Thus,  $3,767 \text{ cm} = 37 \text{ m } 67 \text{ cm.}$

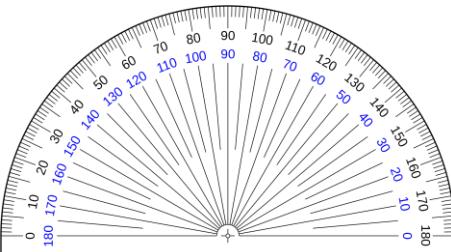
$33,742 \text{ cm} = 337 \text{ m } 42 \text{ cm.}$

## CONVERSION

### C. Kilometres into metres

$$1 \text{ km} = 1,000 \text{ m}$$

1. To convert kilometres into metres, multiply the number of kilometres by 1,000.  
**(To multiply by 1,000, just insert 3 zeros to the right of the number).**
2. To convert kilometres and metres into metres, multiply the number of kilometres by 1,000 and then add the number of metres, to it.



## CONVERSION

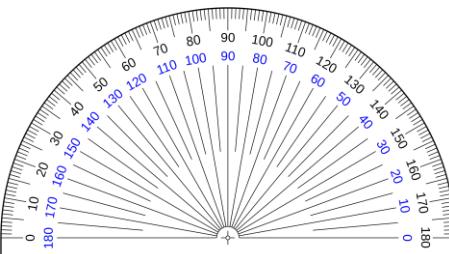
### C. Kilometres into metres

$$1 \text{ km} = 1,000 \text{ m}$$

**Example:** Convert 9 km and 12 km 625 m into metres.

(a)  $9 \text{ km} = 9 \times 1000 \text{ m} = 9,000 \text{ m}$

(b)  $12 \text{ km } 625 \text{ m} = 12 \times 1,000 \text{ m} + 625 \text{ m} = 12,000 + 625 = 12,625 \text{ m}$

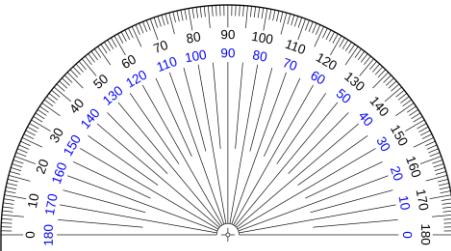


## CONVERSION

### D. Metres into Kilometres

$$1000 \text{ m} = 1 \text{ km}$$

To convert metres into kilometres, divide the number of metres by 1,000.



# MEASUREMENT

## CONVERSION

### D. Metres into Kilometres

$$1000 \text{ m} = 1 \text{ km}$$

**Example:**

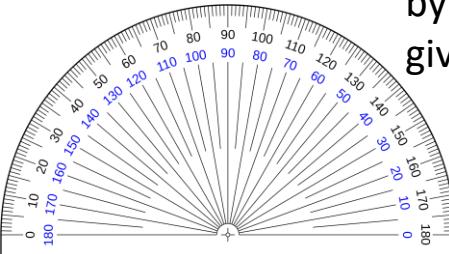
1. Convert 1,775 m into kilometres.

$$1,775 \text{ m} = 1000 \text{ m} + 775 \text{ m} = 1 \text{ km } 775 \text{ m}$$

2. Convert 12,580 m into kilometres.

$$12,580 \text{ m} = 12000 \text{ m} + 580 \text{ m} = 12 \text{ km } 580 \text{ m}$$

when metres are converted into kilometres and metres, the number formed by the last three digits on the right gives the metres and the remaining digit(s) gives the kilometres.



## LEARNING OUTCOME:

**Students are able to understand about the different units of length and to know about the conversion of length.**

**THANKING YOU  
ODM EDUCATIONAL GROUP**