

PHYSICS – Grade 9

1. Lengths are measured using different instruments and in different units. Complete the table below.

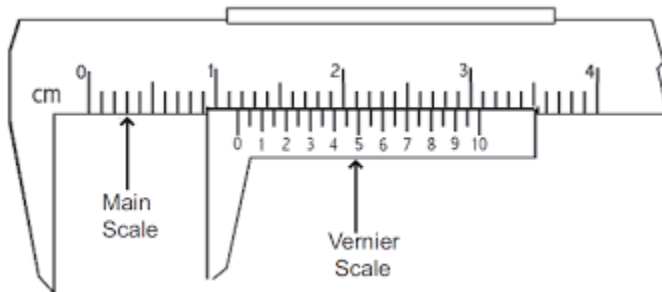
Length	Measuring instrument	Unit
Diameter of coin		
Width of table		
Height of desk		
Length of football ground		

2. Convert the following.

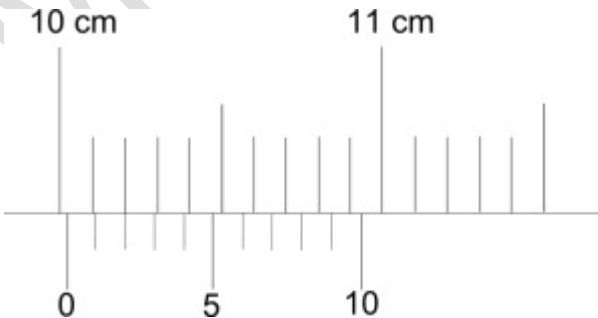
- a. $2.3 \text{ m} = \dots\dots\dots \text{ cm}$
- b. $0.876 \text{ km} = \dots\dots\dots \text{ m}$
- c. $54300 \text{ mm} = \dots\dots\dots \text{ m}$
- d. $0.00654 \text{ cm} = \dots\dots\dots \text{ Mm}$

3. Read the following vernier calipers.

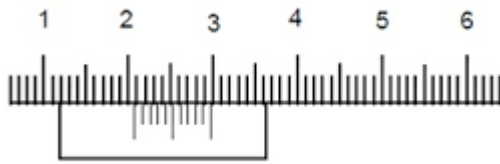
a.



b.



c.



4. Time is the interval between 2 events.

- Give the SI unit of time.
- Read the following stopwatches.



c. Convert the following.

- $2.3 \text{ min} = \dots\dots\dots \text{ s}$
 - $0.47 \text{ h} = \dots\dots\dots \text{ min}$
 - $0.091 \text{ h} = \dots\dots\dots \text{ s}$
5. A stopwatch is used to determine the time period of a pendulum. Two students record the time for 30 oscillations and they obtain 61s and 59s.
- What is meant an oscillation?
 - What is meant time period?
 - What is the average time for 30 oscillations?
 - Calculate the time period of the pendulum.
6. Temperature is a physical property.
- Define temperature.
 - Give the SI unit of temperature

c. Convert the following:

i. $313\text{ K} = \dots\dots\dots ^\circ\text{C}$

ii. $21\text{ }^\circ\text{C} = \dots\dots\dots \text{K}$

d. Which thermometer is most accurate in to measure temperature, laboratory thermometer or digital thermometer?

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