

SUBJECT : SCIENCE  
 GRADE : 7  
 PACKAGE : A  
 Day/Date : Thursday /March 19, 2009  
 Hour : 08.00 10.00

### GENERAL INSTRUCTIONS

1. Choose the best answer by crossing a, b, c, or d on your answer sheet.
2. You have 120 minutes to finish the test.
3. There are 50 test items, each with 4 options.
4. Check and read the test items before you answer them.
5. Report to the test supervisor if you find a blurred, damaged, or incomplete test paper.
6. If necessary, ask the test supervisor for a piece of scrap paper.
7. You are not allowed to use a calculator, a mobile phone, a mathematical table, or other calculating devices.
8. Check your answer sheet before you submit it to the test supervisor.
9. You are not allowed to make notes on, photocopy, or multiply the test paper.

1. A student measures some objects in his observation. Look at the table below.

NO	Quantity	Unit
1	length of book	1.20 m
2	area of field	0.75 second
3	mass of a gravel	10.24 m <sup>3</sup>
4	Speedof car	5 Sm <sup>-1</sup>

Length, area, mass and speed are quantities. The correct pair of quantity and its unit is

- a. 1 and 4
- b. 1 and 3
- c. 2 and 4
- d. 2 and 3

2. Study the table below.

NO	Quantity	Unit
1	volume	derived from length unit
2	area	derived from length unit
3	density	derived from mass and length unit
4	speed	.....

The unit of speed is derived from fundamental quantity units. They are....

- a. length and mass
- b. length, mass and time
- c. time and length
- d. mass and time

3. Look at the table below.

No.	Quantity	SI Unit	Equipment
1	length	meter	micrometer
2	mass	gram	balance
3	time	second	stopwatch
4	temperature	Fahrenheit	thermometer

The fundamental quantities, SI units and their equipments are ...

- a. 1 and 2
- b. 1 and 3
- c. 2 and 3
- d. 2 and 4.

4. The speed of a car is 108 km/h. That speed in SI can be expressed as... ..:
- $30 \text{ Sm}^{-1}$
  - $10 \text{ Sm}^{-1}$
  - $9 \text{ Sm}^{-1}$
  - $3 \text{ Sm}^{-1}$
5. Experimental results on the mass and volume of some substances are displayed in Table 1. Use Table 2 as reference to determine the name of the substances in Table 1.

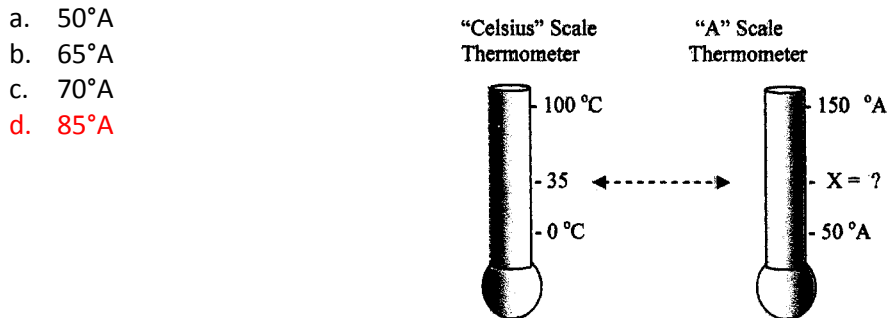
Table 1 Table 2

Substance	Mass (kg)	Volume ( $\text{m}^3$ )
A	96.5	5
B	340	25
C	445	50
D	592.5	75

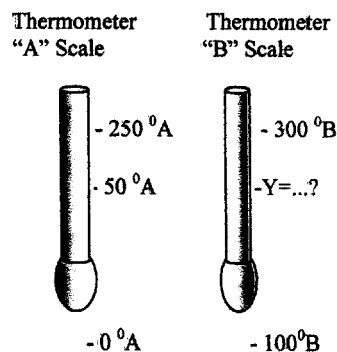
Substance	Mass/volume ( $\text{kg}/\text{m}^3$ )
Iron	7.90
Copper	8.90
Mercury	13.6
Gold	193

According to the data in Table 1 and Table 2, copper is substance ...

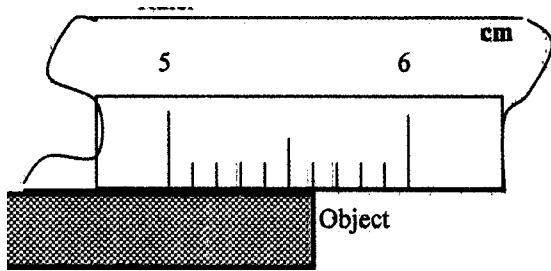
- A
  - B
  - C
  - D
6. The temperature of the body is  $20^\circ\text{C}$ . What is the temperature in **Fahrenheit** scale?
- 48°F
  - 52°F
  - 56°F
  - 68°F
7. Look at the figure below. What is X according to "A" scale?



8. Look at the figure on the right. What is Y according to "B" scale?
- $50^\circ\text{A}$
  - $140^\circ\text{A}$
  - $160^\circ\text{A}$
  - $180^\circ\text{A}$



9. Ruler

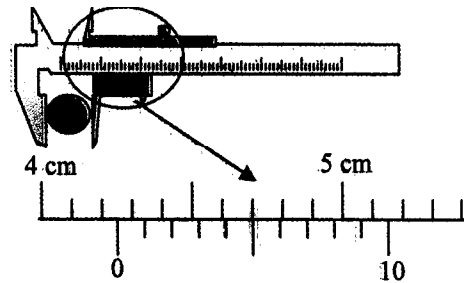


A student measures the length of an object as shown in the figure above. The length of the object is

- a. 5.5 cm
- b. 5.6 cm
- c. 5.5 mm
- d. 5.6 mm

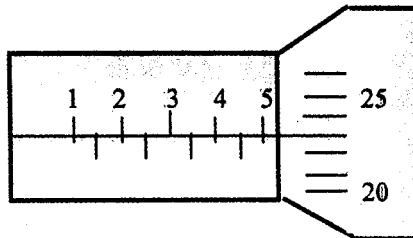
10. The diameter of a circle is measured with a vernier caliper as shown on the right. The diameter of the circle is ...

- a. 4.20 cm
- b. 4.21 cm
- c. 4.24 cm
- d. 4.25 cm



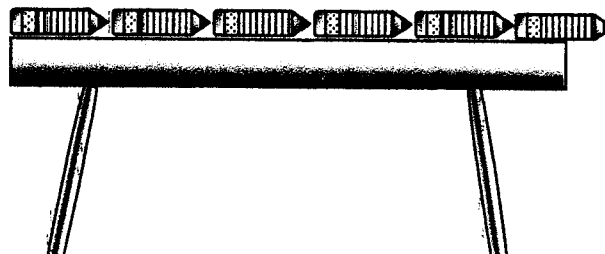
11. A micrometer is used to measure the thickness of a metal. Look at the figure below. The thickness of the metal is

- a. 5.21 mm
- b. 5.22 mm
- c. 5.23 mm
- d. 5.24 mm



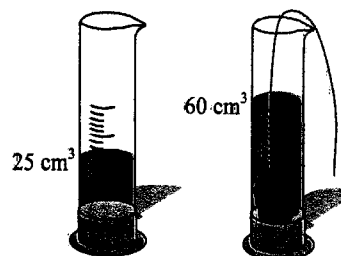
12. A boy is measuring the length of a table using his pencil. What is the length of the table above?

- a. 4.5 pencils
- b. 4,13 pencils
- c. 5 pencils
- d. 5.5 pencils



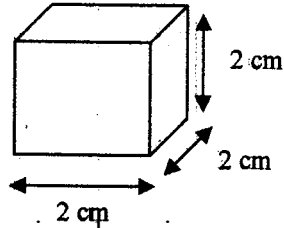
13. The figures below show the level of water in a measuring cylinder before and after a stone is put in. The volume of the stone is ...

- a. 25 ml
- b. 30 ml
- c. 35 ml
- d. 40 ml



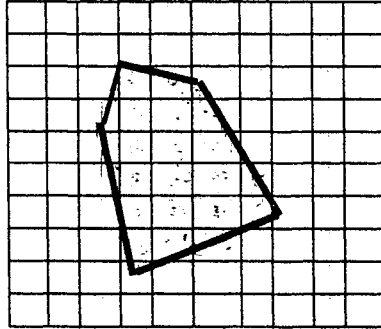
14. Look at the figure below. The mass of this cube is 0.5 gram. The volume of the cube is....

- a.  $4 \text{ cm}^3$
- b.  $6 \text{ cm}^3$
- c.  $8 \text{ cm}^3$
- d.  $6 \text{ cm}^3$



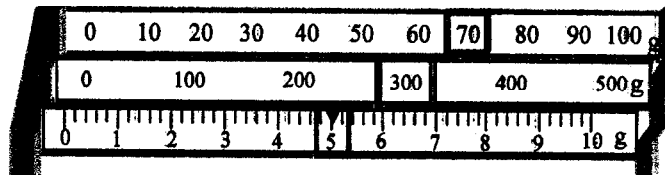
15. Study the figure below. The area of the following shape is....

- a. 35 squares
- b. 28 squares
- c. 20 squares
- d. 18 squares



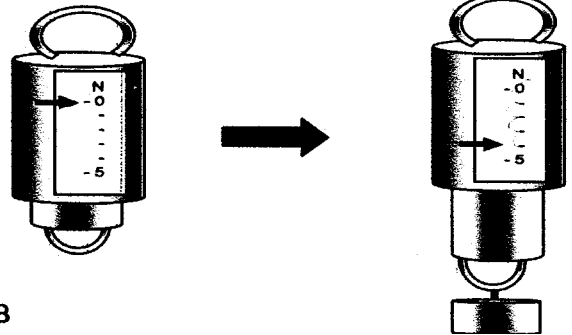
16. The figure below shows the mass of an object on a triple beam balance. The mass of the object is ...

- a. 357 grams
- b. 375 grams
- c. 537 grams
- d. 735 gram

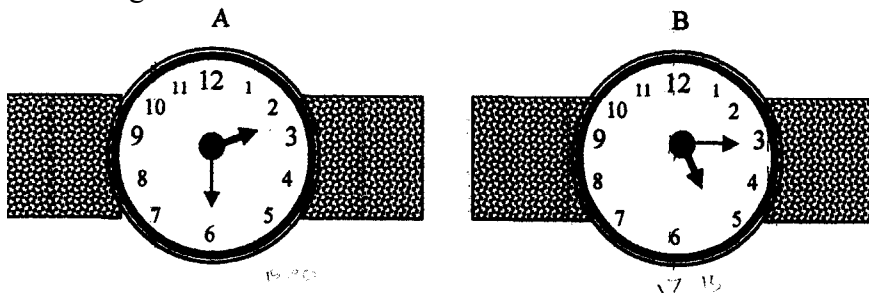


17. Look at the figure. The weight of the object above is...

- a. 4N
- b. 3N
- c. 2N
- d. 1N



18. Look at the figure below

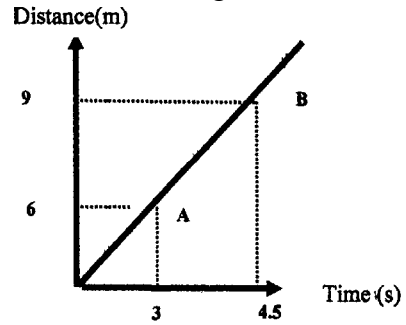


A student goes to Solo from Yogyakarta by bus. He starts from Yogyakarta at "A" and arrives at Solo at "B". How long is his trip?

- a. 2 hours and 15 minutes
- b. 2 hours and 25 minutes
- c. 2 hours and 35 minutes
- d. 2 hours and 45 minutes

19. Below is a graph of a bicycle motion. The graph shows the distance against time.  
Based on the graph, the speed is

- a. unchanged
- b. changed
- c. changed and then unchanged
- d. unchanged and then changed



20. Below is the density graph of an object. The graph shows mass against volume.  
Based on the graph, above, What is the volume of the object if its mass is 5 grams?

- a. 0,04 ml
- b. 0,06 ml
- c. 0,08 ml
- d. 0,10 ml

