



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



**Sub: Physical Science**

**Class: 8**

**Date: 08.02.21**

**Duration: 40 min**

**Worksheet 08**

**Full Marks: 15**

## PHYSICAL QUANTITIES AND MEASUREMENT

**Choose the Correct options:**

- The density of mercury is  $13.6 \text{ g/cm}^3$ . So, the mass of  $10 \text{ cm}^3$  of mercury is
  - 1 g
  - None of these
  - 136000 g
  - 136.0 g
- Water has the maximum density at
  - $0^\circ\text{C}$
  - $40^\circ\text{C}$
  - $-4^\circ\text{C}$
  - $4^\circ\text{C}$
- The density of carbon dioxide is  $1.8 \text{ kg/m}^3$ . So, the volume occupied by 9.0 kg of carbon dioxide is
  - $5 \text{ m}^3$
  - $0.2 \text{ m}^3$
  - $16.2 \text{ m}^3$
  - None of these
- Density is defined as
  - mass  $\times$  volume
  - volume / mass
  - mass  $\times$  acceleration
  - mass / volume
- Which of the following statements is true?
  - Sea water is more dense than fresh water.
  - Sea water has the same density as fresh water.
  - Sea water may be more dense or less dense than fresh water.
  - Sea water is less dense than fresh water.
- Which of these has the lowest density?
  - Water
  - Aluminum
  - Cork
  - Glass
- The mass of  $150 \text{ cm}^3$  of stone is 400 g. Its density is
  - $3.2 \text{ g cm}^{-3}$
  - $2.67 \text{ g cm}^{-3}$
  - $4 \text{ g cm}^{-3}$

d)  $3.5 \text{ g cm}^{-3}$

8. SI unit of density is

- a)  $\text{kgm}^{-4}$
- b)  $\text{kgm}^{-3}$
- c)  $\text{kgm}^{-2}$
- d)  $\text{kgm}$

9. (Density/mass) is equal to

- a) power
- b) area
- c) energy
- d) volume

10. If the density of air is  $1.3 \text{ kgm}^{-3}$ . The mass of air in a room measuring  $8\text{m}\times 5\text{m}\times 4\text{m}$  is

- a) 210 kg
- b) 208 kg
- c) 215 kg
- d) 220 kg

11. The density of water is

- a)  $100 \text{ kgm}^{-3}$
- b)  $10 \text{ kgm}^{-3}$
- c)  $1000 \text{ kgm}^{-3}$
- d)  $2000 \text{ kgm}^{-3}$

12. The physical quantity that differentiates one substance from other is called

- \_\_\_\_\_
- a) Area
  - b) Volume
  - c) Mass
  - d) Density

13. Liquids are \_\_\_\_\_ dense than gases

- a) Less
- b) More
- c) Equal
- d) None of these

14. Density of an irregular solid can be measured by \_\_\_\_\_

- a) Eureka can
- b) Measuring cylinder
- c) R-D- Bottle
- d) Both (a) and (b)

15. If a body floats in liquid it means its density is \_\_\_\_\_ than the density of liquid.

- a) less

- b) more
- c) may be (a) or (b)
- d) none of these