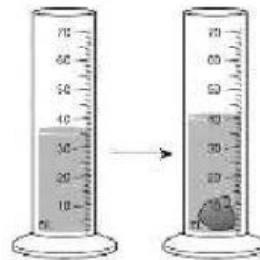


**Q1\ MULTIPLE CHOICE**

1. Ritaj partially filled a graduated cylinder with water. She then dropped a rock into the water. The illustration below shows what happened to the level of the water inside the graduated cylinder.

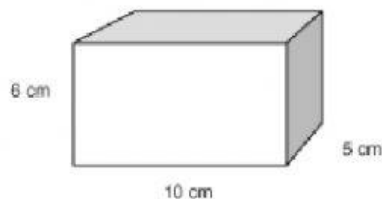
**Which property of matter is Josie measuring?**

- A. mass
- B. length
- C. Weight
- D. Volume



**2. What is the volume of this solid?**

- A. 21 cm<sup>3</sup>
- B. 30 cm<sup>2</sup>
- C. 60 cm<sup>2</sup>
- D. 300 cm<sup>3</sup>



**3. .... are the third type of mixture that falls somewhere between suspensions and solutions**

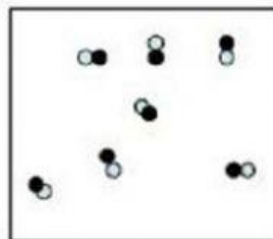
- A. Colloids
- B. Atoms
- C. Pure Substance
- D. Metalloids

**4. Which of the following is an example of a homogeneous mixture?**

- A. Salt + water
- B. Salt + Sand
- C. Sand + Water
- D. Sand + Rocks

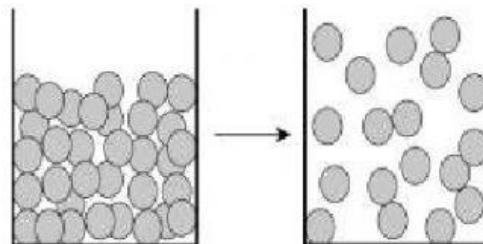
**5. The picture shows .....**

- A. Mixture
- B. Atoms
- C. Pure substance
- D. Element



6. This change of state could be occurring to the substance in the beaker if it?

- A. Gain Energy
- B. Loose some Particles.
- C. Gain more particles
- D. Loose Energy



7. At which temperature does ice melt into liquid water?

- A. 0 °C
- B. 32 °C
- C. 100 °C
- D. 212 °C



8. Which process is an example of a physical change?

- A. Sodium metal and water are combined to form a basic compound and a flammable gas.
- B. an iron nail rusting
- C. Carrots are cut into small pieces and mixed into a salad.
- D. Baking a cupcake

9. When the solid changes into a gas this is :

- A. Evaporation
- B. Condensation
- C. Sublimation
- D. Deposition



10. What happens to the particles of a sample of matter as its temperature increases?

- A. The particles melt.
- B. The particles move faster.
- C. The particles grow in size.
- D. The particles become smaller .

**Q2\ Write an example of each of the following:**

***(((Now you will choose but in the midterm you will write )))***

1. Chemical Change: Flammability - Malleability - Burning - Melting
2. Physical Property: : Flammability - Malleability - Burning - Melting
3. Heterogeneous mixture: Lemonade – Sugar and water – Salt and water - Sand and water

**Q3\ Find out the mistake in these problems:**

***( in the midterm you will solve it by yourself)***

An unknown substance has a volume of  $2\text{ cm}^3$  and a mass of 38.6 grams. What is the density of the sample?



## E.P.S.E

### Problem Solving Model

|                                                                                                                                   |                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <p><b>E</b>xplore – Fact Finding.</p> <p>We have:</p> <p><math>V = 2\text{ cm}^3</math></p> <p><math>M = 38.6\text{ g}</math></p> | <p><b>P</b>lan – How will I solve this problem?</p> <p>We need to find D so we'll use the formula:</p> $D = \frac{V}{M}$ |
| <p><b>S</b>ubstitute and Solve</p> $D = \frac{2}{38.6}$                                                                           | <p><b>E</b>xamine – Add the suitable unit</p> $D = .05\text{ g}\backslash\text{cm}^3$                                    |



The mistake is:

2\ The density of aluminum is  $2.7 \text{ g/cm}^3$ . What is the volume of a piece of aluminum if its mass is 8.1 grams?



## E.P.S.E Problem Solving Model

**E**xplore – Fact Finding.

We have :

$$\text{Density} = 2.7 \text{ g/cm}^3$$

$$\text{Mass} = 8.1 \text{ g}$$

**S**ubstitute and Solve

$$V = \frac{2.7}{8.1}$$



**The mistake is:**

**P**lan – How will I solve this problem?

We need to find the volume

$$\text{The formula is: } V = \frac{M}{D}$$

**E**xamine – Add the suitable unit

$$\text{Volume} = .33 \text{ g}$$



Q4\ Fill in the blank with a word from the list:

**(Physical change – Matter – Element- Mixture – Chemical change)**

1. .... is anything that has mass and takes up space.
2. .... can be measured without changing the identity of the substance.
3. .... is a substance that is made up of one type of atom.

**QUESTION FIVE: Put true (T) or false ( F) for the following sentences:**  
**( in the midterm you have to write the correction)**

1. A liquid has both a definite shape and a definite volume. (       )  
 .....  
 .....
2. The boiling point of water is  $100 \text{ C}^0$  (       )  
 .....  
 .....
3. Saltwater and sand can be separated By Evaporation (       )  
 .....  
 .....