

Delhi public School, Jammu
Periodic Test-III Assignment
Session(2017-18)

Subject: Chemistry Class: 9th

Topics: Matter in our Surroundings, Is Matter around us Pure, Atoms and Molecules .

Q1. Name the term used for the following:

- i) Conversion of vapours to solid.
- ii) Conversion of solid to liquid.
- iii) Conversion of vapours to liquid.

Q2. Melting points of three solids X, Y and Z are 298K, 314K and 398K respectively. Arrange these in increasing order of inter particle forces of attraction.

Q3. How will you justify that water is a compound?

Q4. 4g of a solute is dissolved in 40g of water to form a saturated solution at 25⁰C. Calculate the solubility of the solute.

Q5. Can physical and chemical changes occur together? Illustrate your answer.

Q6. What types of mixtures can be separated by technique known as crystallisation?

Q7. In a reaction, 5.3g of sodium carbonate reacted with 6g of ethanoic acid. The products were 2.2g of carbon dioxide, 0.9g water and some sodium ethanoate. What is the expected weight of sodium ethanoate ?

Q8. The percentage of the three elements calcium, carbon and oxygen in a sample of calcium carbonate is given as:

Calcium = 40.0% ; Carbon = 12.0% ; Oxygen = 48.0%

If the law of constant proportions is true, what weights of these elements will be present in 1.5g of another sample of calcium carbonate?

Q9. Calculate the number of moles in the following:

- (i) 28g of He ii) 46g of Na iii) 60g of Ca

Given gram atomic mass of (i) He = 4g (ii) Na = 23g (iii) Ca = 40g

Q10. Write down the formulae of:

- (i) Aluminium sulphate (ii) Potassium sulphate (iii) Potassium nitrate
- (iv) Sodium carbonate (v) Sodium oxide (vi) Ammonium sulphate