

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

**Subject: Chemistry**

**Class: 9<sup>th</sup>**

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

Q1. Why are we able to sip hot tea or milk faster from a saucer rather than a cup?

Q2. Give reason for the following observations.

a) Naphthalene balls disappear with time without leaving any solid.

b) We can get the smell of perfume sitting several metres away.

Q3. a) Convert the following temperatures to the Celsius scale.

i) 293K

ii) 470K

b) Convert the following temperatures to the Kelvin scale.

i) 25°C

ii) 373°C

Q4. List the points of differences between homogeneous and heterogeneous mixtures.

Q5. To make a saturated solution, 36g of sodium chloride is dissolved in 100g of water at 293K. Find its concentration at this temperature.

Q6. Try segregating the things around you as pure substances or mixtures.

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 8.2g of sodium ethanoate. Show that these observations are in agreement with the law of conservation of mass.

Q8. Hydrogen and oxygen combine in the ratio of 1:8 by mass to form water. What mass of oxygen gas would be required to react completely with 3g of hydrogen gas?

Q9. Write down the formulae of

i) sodium oxide

ii) aluminium chloride

iii) sodium sulphide

iv) magnesium hydroxide

Q10. Convert into mole.

a) 12g of oxygen gas

b) 20g of water

c) 22g of carbon dioxide