

CLASS: IX CHEMISTRY – WORKSHEET FOR SA 1

1. Define the following terms:

- (i) Boiling point
- (ii) Compressibility
- (iii) Rigidity
- (iv) Density
- (v) Latent heat of fusion
- (vi) Sublimation
- (vii) Latent Heat of evaporation (viii) Density

2. Give reasons for the following

- (i) Smell of hot sizzling food reaches us several meters away but to get the smell from cold food we have to go close.
- (ii) Cooling effect of ice at 0°C is more than same amount of water at 0°C
- (iii) Clothes get dry faster in summer than rainy season
- (iv) Trees bear more leaves in summer
- (v) A gas fills completely the vessel in which it is kept
- (vi) A diver is able to cut water in a swimming pool

3. Convert the following to celcius scale.

- a) (i) 300 K (ii) 573 K
- b) Convert to Kelvin scale - (i) 576°C (ii) 393°C

4. Answer the following questions

- (i) What type of clothes should we wear in summer? Why?
- (ii) What do you mean by concentration of a solution? Give expression for its calculation.

5. Explain the meaning of

- (i) 10% NaOH solution by mass
- (ii) 10% NaOH solution by volume

6. What is Tyndall effect? Give two examples.

7. 18g of sodium chloride is dissolved in 82 g of water. Calculate the concentration of solution in Terms of Mass by mass percentage.
8. How can you separate Kerosene oil from water? Describe an activity to explain?
9. What is centrifugation? Write its two applications.
10. Explain the following with example.
 - (i) Chromatography
 - (ii) Crystallisation
11. Differentiate between
 - (i) Mixture and compounds
 - (ii) Physical change and chemical change
 - (iii) Homogeneous Mixture and Heterogeneous Mixture
 - (iv) Metals and non-metals
12. Classify the following as chemical or physical change
 - (i) Melting of butter
 - (ii) Burning of paper
 - (iii) Boiling of water to steam
 - (iv) Cutting of trees
 - (v) Making of fruit salad