

D. V. S PUBLIC SCHOOL BURARI - 84

CLASS - 9<sup>th</sup>

Sub - English

Name -

class -

Assignment - 1

Roll No -

Q.1. Where was Margie's school? Did she have any classmates?

Q.2. Why did Margie's mother send for the county inspector?

Q.3. Why does Tris realise that he has lost his way? How have his anxiety and insecurity been described?

Q.4. How did the mother distract the child's mind from the toy seller?

Q.5. Fill in the blanks in each of the following sentences with the present simple Tense.

(a) If he \_\_\_\_\_ (work) hard, he will succeed.

(b) What time \_\_\_\_\_ you \_\_\_\_\_ (reach) home in the evening?

(c) The wind \_\_\_\_\_ (set) the leaves of the trees rustling.

(d) I shall not go to his house unless he \_\_\_\_\_ (invite) me.

(e) \_\_\_\_\_ you \_\_\_\_\_ (take) part in the debate?

# D.V.S PUBLIC SCHOOL

## ASSIGNMENT CH-2

### Class 09 - Science

1. A solution contains 40 g of common salt in 320 g of water. Calculate the concentration in terms of mass by mass percentage of the solution. [1]
2. To make a saturated solution, 36 g of sodium chloride is dissolved in 100 g of water at 293 K. Find its concentration at this temperature. [2]
3. Classify the following as chemical or physical changes:- [2]
  - i. Cutting of trees
  - ii. Melting of butter in a pan
  - iii. Rusting of almirah
  - iv. Boiling of water to form steam
  - v. Passing of electric current through water and the water breaking down into hydrogen and oxygen gases
  - vi. Dissolving common salt in water
  - vii. Making a fruit salad with raw fruits
  - viii. Burning of paper and wood
4. Try segregating the things around you as pure substances or mixtures. [1]
5. List the points of difference between homogeneous and heterogeneous mixtures. [3]
6. Write the steps you would use for making tea. Use the words solution, solvent, solute, dissolve, soluble, insoluble, filtrate and residue. [2]
7. Pragya tested the solubility of three different substances at different temperatures and collected the data as given below (results are given in the following table, as grams of substance dissolved in 100 grams of water to form a saturated solution). [5]

| Temperature in K    |     |     |     |     |     |
|---------------------|-----|-----|-----|-----|-----|
| Substance dissolved | 283 | 293 | 313 | 333 | 353 |
| <b>Solubility</b>   |     |     |     |     |     |
| Potassium Nitrate   | 21  | 32  | 62  | 106 | 167 |
| Sodium Chloride     | 36  | 36  | 36  | 37  | 37  |
| Potassium Chloride  | 35  | 35  | 40  | 46  | 54  |
| Ammonium Chloride   | 24  | 37  | 41  | 55  | 66  |

- a. What mass of potassium nitrate would be needed to produce a saturated solution of potassium nitrate in 50 grams of water at 313 K?
- b. Pragya makes a saturated solution of potassium chloride in water at 353 K and leaves the solution to cool at room temperature. What would she observe as the solution cools? Explain.
- c. Find the solubility of each salt at 293 K. Which salt has the highest solubility at this temperature?
- d. What is the effect of change of temperature on the solubility of a salt?

8. Explain the Suspension. [1]
9. Explain the Colloid. [2]
10. Explain the Pure substance. [1]
11. Explain the Saturated solution. [1]