



CHEMISTRY (Class IX)

Chapter-2

Is Matter Around Us Pure?

WORK SHEET-5

(Temperature – Kelvin)

Temperature	283	293	313	333	353
Substance dissolved	Solubility				
A	22	33	63	104	166
B	37	37	37	38	38
C	36	37	41	45	53
D	25	38	42	54	64

Answer the following questions on the basis of the given data:

- Q.1. What mass of A would be required to produce its saturated solution in 50 grams of water at 313 K?
- Q.2. Find the solubility of C at 293 K.
- Q.3. Which salt has the highest solubility at 293K?
- Q.4. What is the effect of change of temperature on the solubility of salt?
- Q.5. The student prepares a saturated solution of C at 353 K and then cools it to room temperature. What would he observe?
- Q.6. Which salt has lowest solubility at 353 K ?
- Q.7. A student prepared a saturated solution of D in 100 g.e, added 50 g water to it. What mass of the salt D should he dissolved in it to make it saturated once again.
- Q.8. On the solubility of which salt the effect of temperature is minimum?
- Q.9. On the solubility of which salt the effect of temperature is maximum?
- Q.10. A saturated solution of the salt C was prepared at 333 K and then it was cooled to 293 K. What mass of the salt would reappear?
- Q.11. Name two more substances which undergo sublimation.
- Q.12. Suggest the sequence of separation technique you will use for separation of a mixture of camphor, common salt and sand
- Q.13. Label the diagram given below.



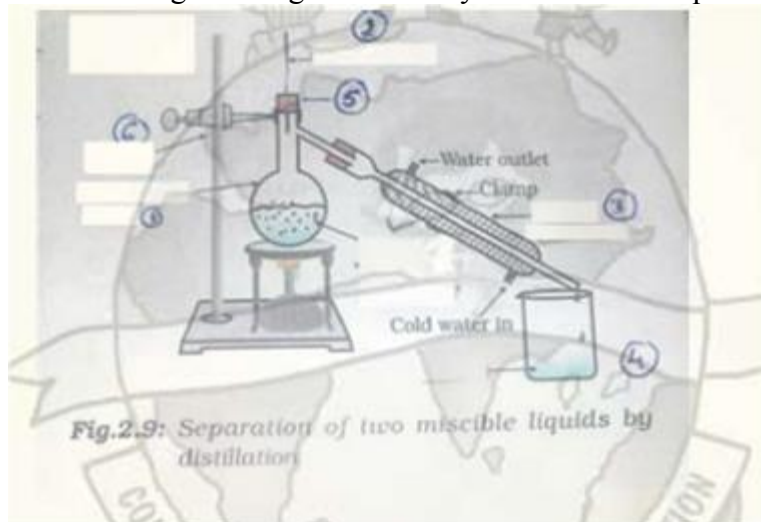
CHEMISTRY (Class IX)

Chapter-2



WORK SHEET-6

Look at the given diagram carefully and answer the questions which follow:



Q. 1 The process of separation of a mixture shown in the diagram is called [1]

Q. 2 The above procedure is used to separate a mixture of two _____ liquids with sufficient difference in their _____ [0.5 x 2=1]

Q. 3 Label the areas marked 1-6 in the diagram [0.5 x 6=3]

WORK SHEET-7

Experiment---

Procedure: Activity no. 2.7 on page 19 of NCERT Science Textbook

The following informations are given to the students.

- Dye in ink is not a single colour but a mixture of colours
- These colours can be separated through the technique of chromatography
- This technique is used when the mixture contains different colours soluble in same



CHEMISTRY (Class IX)

Chapter-2

solvent. The substance which is more soluble in the solvent will rise faster.

Instructions: Answer the following questions based on the demonstration [1 x 5=5]

- Q.1. After the completion of the activity what do you observe on the filter paper?
- Q.2. Why do you observe the spots above on line while the ink spot was put on the line drawn at bottom?
- Q.3. Why did the two colours rise to different heights?
- Q.4. What do you infer from the demonstration?
- Q.5. What could be the essential conditions to separate any dye using this method?

WORK SHEET-8

- Q.1. A solution contains 60 g of common salt in 240 g of water. Calculate the concentration in terms of mass by mass percentage of the solution.
- Q.2. 10 g of sugar is present in 1 liter of sugar solution. Calculate the concentration in terms of mass by volume percentage of a solution.