

Name: _____

Solutions

DATA SHEET

I. The effect of circulation

II. The effect of the size of the particle

III. The effect of temperature

IV. The effect of the polarity of a solvent

A. Iodine

B. Vegetable oil

C. Water/hexane

D. Iodine/hexane

V. Instructor Demo

A. Water/ CuSO_4

B. $\text{Ba(OH)}_2/\text{NH}_4\text{Cl}$

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Solutions

REVIEW QUESTIONS

1. What solubility effects influence the speed of dissolving a substance?
2. What are the parts of a solution? Which part is present in the highest molar quantity?
3. Why do solids dissolve in liquids? Describe.
4. What is an alloy?
5. Describe the atmosphere as a solution.
6. Why are molecules polar?
7. What chemical in this experiment can stain your fingers and turn your skin yellow?
8. Is hexane a polar or non-polar molecule? Why?
9. You have dissolved several colorful materials in water and hexane. Describe how you would determine which is more dense - water or hexane.
10. What is the surface area of a cube that is four meters on an edge? How many cubes one meter on an edge fit into this large cube? What would be the total surface area for all of these cubes? Is this more than the original value for the large cube? What can you say about particle size and surface area now?