

Name: _____

Section: _____

Data and Calculations for Experiment 13

A. Relative Solubility of a Solute in Two Solvents

1. a) Which liquid is denser, decane or water? _____
b) How did you decide which layer was water? _____

2. What is the color of iodine in water? _____
What is the color of iodine in decane? _____

3. Which solvent dissolves more iodine? How did you decide this? _____

B. Miscibility of Liquids

1. Which liquids were miscible with each other?

2. Which liquids were immiscible with each other?

C. Ionic Reactions in Solution

1. Write the formulas for the following substances. Include states of matter (e.g. (aq) or (s)) based on the results of your experiment:

barium sulfate _____
barium chloride _____
sodium sulfate _____
sodium chloride _____

2. Write the equation that shows the reaction of barium chloride and sodium sulfate. Use state indicators (e.g. (aq) or (s)) for all compounds.

3. Which compound is the white precipitate? How do you know this?