



What is solution chemistry?

Owning my learning: The learning intentions or goals for the unit are listed below. Completing this table can help you determine what you know and the level to which you know it. Place a check mark in the box that best describes your learning level at the beginning of the learning and after we have learned together. The columns are numbered 1 to 4 to indicate the following levels of proficiency:

- | | | | |
|----------------|-----------------------------|--------------|-------------------------|
| 1 Emerging | "I'm just getting started." | 2 Developing | "I get some of it." |
| 3 Accomplished | "I get it." | 4 Extending | "I can teach a friend." |

Be honest with yourself as you complete the checklist to filter what you know from what you don't know and remember to study efficiently and effectively, study what you don't know.

I Can Define:

| 1 | 2 | 3 | 4 | |
|-----------------------|-----------------------|-----------------------|-----------------------|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | solvation, solubility, miscibility |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | solute, solvent |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | soluble, insoluble, miscible, immiscible |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | saturated, unsaturated |

I Can
Determine:

| 1 | 2 | 3 | 4 | |
|-----------------------|-----------------------|-----------------------|-----------------------|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | if a molecule is polar or non-polar |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | how much water must be added to a stock solution to achieve the desired concentration |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | the final concentration when a known amount of water is added to the stock solution |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | the amount of stock solution required to achieve the desired concentration |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | the final concentration when the stock solution is diluted |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | the concentration of individual ions when solutions are mixed |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | the limiting ion and the amount of the ions in excess |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | if a double replacement reaction will take place |

I Can Write:

| 1 | 2 | 3 | 4 | |
|-----------------------|-----------------------|-----------------------|-----------------------|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | complete and net dissociation equations |

I Can
Design/Conduct
Experiments to:

| 1 | 2 | 3 | 4 | |
|-----------------------|-----------------------|-----------------------|-----------------------|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | determine which type of solvent dissolves a particular type of solute (ionic, polar, non-polar) |

I Can Calculate:

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

solution problems using the “something about moles, something about volume” and/or the “dilution factor” method



Chemistry 11 – Mrs. Greig