**The Chemistry of Solutions**

***Essential Standard 6.P.2: Understand the structure, classifications and physical properties of matter.***

***Clarifying Objective 6.P.2.3: Compare the physical properties of pure substances that are independent of the amount of matter present including density, melting point, boiling point and solubility to properties that are dependent on the amount of matter present to include volume, mass and weight.***

***Learning Goal: By able to identify the solvent and solute in a solution and determine what factors affect solubility.***

**Directions** : Follow the link provided to aid in the creation of a main idea graphic organizer. Be sure to include key terms! Use these resources to answer the questions below.

**Links**

Eduquest Middle School Science <http://www.edquest.ca/component/content/article/169>

Bonding in Solutions: <http://water.me.vccs.edu/courses/env211/lesson8.htm>

Solubility and Saturation: <http://water.me.vccs.edu/courses/env211/lesson8_2.htm>

|  |  |
| --- | --- |
| 1) When thinking about matter, explain the difference between a pure substance and a mixture. | 2) What must happen for someone to create a solution? |
| 3) What phases of matter can be combined to create a solution? | 4) What does “like dissolves like” mean, when referred to solution and solubility?  |
| 5) What is a “universal solvent” and why is water considered to be one? Are there others? | 6) What’s the difference between a saturated solution and a dilute solution? |
| 7) Explain infinitely soluble. | 8) Explain saturation. |