**JMS Lesson Plan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Teacher:** | Shelly Vincent | | **Subject:** | | Science | |
| **Date:** | **Beginning:** 8/21/2017**Ending:**  8/25/2017 | | **Grades:** | | 8th | |
| **Learning**  **Targets:** | I can describe physical and chemical properties.  I can describe how properties can help you identify substances.  I can explain how properties of substances can be used to separate substances.  I can design an experiment to separate a mixture. | | **Connects with:** | | **Math – Equations with missing variables** | |
| **Standard(s):** | S8P1a. Develop and use a model to compare and contrast pure substances (elements and compounds) and mixtures.  S8P1c. Plan and carry out investigations to compare and contrast chemical and physical properties of matter. | | | | | |
| **DOK Level** | **Activities / Assignments / Questions** | | | **Assessment** | | |
| **­­**  **Remediation** | Changes of State are physical changes. | | | Formative | | Selected Response -  Constructed Response -  Verbal  Rubric  Other –  Other – |
| **2** | Frayer models –evaporation, condensation, melting, freezing, sublimation  Anchor Activities – USA Test Prep Chemical and Physical Properties  ISN foldable – Physical Properties vs. Chemical Properties  Lab – Density cubes  Calculating Density worksheet  Mystery Object | | | Formative  Summative | | Selected Response -  Constructed Response –  Verbal  Rubric  Other –  Other – |
| **3** | Analyzing Experiments pg. 67 (1-5)  Anchor Activities – USA Test Prep Matter  Critical Thinking and Key Concept questions | | | Formative  Summative | | Selected Response  Constructed Response -  Verbal  Rubric  Other –  Other – |
| **4** | | **Unit Investigation – Freezing Point of Stearic Acid**  **Infer**-What happened to the energy of the molecules as the stearic acid changed from a liquid to a solid?  **Apply**-Why do you think stearic acid is used in bar soaps but not liquid soaps?  **Challenge**- What do you think would happen if you mixed in another substance with stearic acid? How would that affect the freezing point? What experiment would you perform to find the answer? | | Formative  Summative | | Selected Response  Constructed Response -  Verbal  Rubric  Other –  Other – |
| **Resources:** |  | | | | | |

**Monday** – No School

**Tuesday** – Compounds Mixtures

Worksheet - Elements, Compounds, and Mixtures Worksheet

**Wednesday** **–** Matter has observable properties pgs. 41-48

Exploration – Mystery Object

ISN notes – foldable physical properties

Questions pg. 48 (1-6) Key Concepts, Critical Thinking and Challenge

Mini Lab – Mystery Object Brown Paper Bag

**Thursday** – Lab – Density cubes

Worksheet - Calculating Density

**Friday** – Changes of State are physical changes pgs. 50-55

Lab – Freezing Point (Unit Investigation pg. 56-57)

|  |  |
| --- | --- |
| "No amount of experimentation can ever prove me right; a single experiment can prove me wrong."  Albert Einstein |  |