**JMS Lesson Plan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Teacher:** | Shelly Vincent | | **Subject:** | | Science | |
| **Date:** | **Beginning:** 11/27/2017**Ending:**  12/1/2017 | | **Grades:** | | 8th | |
| **Learning**  **Targets:** | I can obtain, evaluate, and communicate information about the law of conservation of energy to develop arguments that energy can transform from one form to another within the system. | | **Connects with:** | | **ELA – Short Constructed Response CSET** | |
| **Standard(s):** | S8P2 a. Analyze and interpret data to create graphical displays that illustrate the relationships of  kinetic energy to mass and speed, and potential energy to mass and height of an object.  S8P2b. Plan and carry out an investigation to explain the transformation between kinetic and  potential energy within a system (e.g., roller coasters, pendulums, rubber bands, etc.).  S8P2c. Construct an argument to support a claim about the type of energy transformations within a  system [e.g., lighting a match (light to heat), turning on a light (electrical to light)].  S8P2d. Plan and carry out investigations on the effects of heat transfer on molecular motion as it  relates to the collision of atoms (conduction), through space (radiation), or in currents in a  liquid or a gas (convection). | | | | | |
| **DOK Level** | **Activities / Assignments / Questions** | | | **Assessment** | | |
| **­­**  **Key Terms** | Energy, kinetic energy, potential energy, law of conservation of energy, solar cell, temperature, degree, thermometer, heat, thermal energy, calorie, joule, specific heat, conduction, conductor, insulator, convection, radiation, kinetic theory of matter | | | Formative | | Selected Response  Constructed Response  Verbal  Rubric  Other |
|  |  | | |  | |  |
| **2** | Bell Ringer – warm ups (GoFar)  USA Test Prep – Pre Test | | | Formative  Summative | | Selected Response -  Constructed Response –  Verbal  Rubric  Other |
| **3** | USA Test Prep – practice and assignments  Go Far activities | | | Formative  Summative | | Selected Response  Constructed Response –  Verbal  Rubric- 2 point SCR  Other –  Other – |
| **4** | |  | | Formative  Summative | | Selected Response  Constructed Response -  Verbal  Rubric  Other –  Other – |
| **Resources:** | Textbook – Physical Science (McDougal Littell)  CSET  USA Test Prep activities  USA Test Prep Unit Pre Test  Go Far questions | | | | | |

**Monday-** Pretest - Law of Conservation of Energy S8P2a, b, c, d

USA Test Prep practice

**Tuesday-** Forms of Energy (6 types)

**Wednesday** – Potential vs Kinetic Energy

**Thursday** – Energy Efficiency and Technology advancements

**Friday** – USA Test Prep – practice and assignments S8P2a, b, c, d