**JMS Lesson Plan**

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| **Teacher:** | Shelly Vincent | **Subject:** | Science |
| **Date:** | **Beginning:** 12/4/2017**Ending:**  12/8/2017 | **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 ofkinetic 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 andpotential 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 asystem [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 itrelates to the collision of atoms (conduction), through space (radiation), or in currents in aliquid 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  |
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| **2** | Bell Ringer – warm ups (GoFar)USA Test Prep – quizWhole Group – Energy Transformation | [x]  Formative[ ]  Summative | [x] Selected Response - [ ] Constructed Response – [x] Verbal[ ] Rubric[ ] Other  |
| **3** | Lab – Cinnamon Toast worksheetUSA Test Prep – practice and assignmentsGo Far activitiesUSA Test Prep – post testSmall Group – Energy scenarios | [x]  Formative[x]  Summative | [x] Selected Response[x] Constructed Response –[ ] Verbal[ ] Rubric- 2 point SCR[ ] Other – [ ] Other –  |
| **4** | CSET - student constructs an argument to support a claim about the type of energy transformation within a system (lighting a match, turning on a switch, etc.) | [x]  Formative[ ]  Summative | [ ] Selected Response[x] Constructed Response -[ ] Verbal[x] Rubric – 2 point[ ] Other – [ ] Other – |
| **Resources:** | Textbook – Physical Science (McDougal Littell)CSETUSA Test Prep Go Far questions |

**Monday-** Energy Transformations – Whole Group

 USA Test Prep – Anchor Activities

**Tuesday-** Energy Transformations – Small Group (Energy Scenarios)

 USA Test Prep – Anchor Activities

**Wednesday** – Energy Transformation Worksheets

 USA Test Prep – Anchor Activities

**Thursday** – CSET student constructs an argument to support a claim about the type of energy transformation within a system (lighting a match, turning on a switch, etc.)

**Friday** – LAB Cinnamon Toast (conduction, convection and radiation)