**JMS Lesson Plan**

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| **Teacher:** | Shelly Vincent | **Subject:** | Science |
| **Date:** | **Beginning:** 1/29/2018**Ending:**  2/2/2018 | **Grades:** | 8th |
| **Learning****Targets:** | I can obtain, evaluate, and communicate information about cause and effect relationships between force, mass and the motion of objectsI can obtain, evaluate, and communicate information to support the claim that EM (light) waves behave differently than mechanical (sound) waves. | **Connects with:** | **ELA – Short Constructed Response CSET****Math – literal equations and inverse operations**  |
| **Standard(s):** | S8P3a. Analyze and interpret data to identify patterns in the relationships between speed and distance, and velocity and acceleration.S8P3b. Construct an explanation using Newton’s Laws of Motion to describe the effects of balanced and unbalanced forces on the motion of an object.S8P3c. Construct and argument from evidence to support the claim that the amount of force needed to accelerate an object is proportional to its mass (inertia)S8P4a. Ask questions to develop explanations about the similarities and differences between electromagnetic and mechanical waves.S8P4b. Construct an explanation using data to illustrate the relationship between the EM spectrum and energy. |
| **DOK Level** | **Activities / Assignments / Questions** | **Assessment** |
| **­­****Key Terms** | Position, reference point, motion, speed, velocity, vector, acceleration  | [ ]  Formative | [ ] Selected Response [ ] Constructed Response [ ] Verbal[ ] Rubric[ ] Other  |
|  | **Anchor Activities** – USA Test Prep (review, reinforce and/or enhance) |  |  |
| **2** | **Bell Ringer** – warm ups (GoFar)**USA Test Prep** – pretest and quiz/assessment  | [x]  Formative[x]  Summative | [x] Selected Response - [ ] Constructed Response – [x] Verbal[ ] Rubric[ ] Other  |
| **3** | Illustrating the EM spectrum and its relationship to energyReview forces and motion | [x]  Formative[ ]  Summative | [x] Selected Response[ ] Constructed Response –[x] Verbal[ ] Rubric- [x] Other –poster illustration from data[ ] Other –  |
| **4** | **Claim, Evidence and Reading** inferencing from a data set (this is equivalent to the CSET used in ELA class) | [x]  Formative[x]  Summative | [ ] Selected Response[x] Constructed Response -[ ] Verbal[x] Rubric – 2 point[ ] Other – [ ] Other – |
| **Resources:** | Textbook – Physical Science (McDougal Littell)CSETUSA Test Prep Go Far questionsSTEMSCOPES – trial enrollment |

**Monday –** Claim, Evidence and Reading data set writing

**Tuesday –** STEMSCOPES – review forces and motion

**Wednesday –** STEMSCOPES – assessment of forces and motion

**Thursday –** Similarities and differences between electromagnetic and mechanical waves

**Friday –** Illustrate the relationship between the electromagnetic spectrum and energy