**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 objects  I 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 | | | Formative  Summative | | Selected Response -  Constructed Response –  Verbal  Rubric  Other |
| **3** | Illustrating the EM spectrum and its relationship to energy  Review forces and motion | | | Formative  Summative | | Selected Response  Constructed Response –  Verbal  Rubric-  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) | | Formative  Summative | | Selected Response  Constructed Response -  Verbal  Rubric – 2 point  Other –  Other – |
| **Resources:** | Textbook – Physical Science (McDougal Littell)  CSET  USA Test Prep  Go Far questions  STEMSCOPES – 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