Topic: Energy/ Electromagnetism	
Included Standards: SC.912.P.10.18, SC.912.P.10.21	
Grade: Physical Science	
Score 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.** ○ Investigate how other science disciplines use electromagnetic spectrum data.
Score 3.0	**The student will understand the different parts of the electromagnetic spectrum and be able to relate them to various applications.** **Performs complex skills:** ○ Distinguish between electromagnetic waves: their behaviors and uses. ○ Using Doppler Effect, conclude whether a wave source is moving away or toward a stationary receiver. **The student exhibits no major errors or omissions regarding the score 3.0 content.**
Score 2.0	**The student:** **Recognizes or recalls specific terminology:** electromagnetic spectrum, frequency (Hz), speed of light (c), wavelength (m), shift, receiver, Hertz, Doppler effect, radio, television, microwave, radar, infrared, visible light, ultraviolet, gamma rays, x-ray **Recognizes or recalls non-specific terminology:** energy, motion, qualitative, quantitative, wave **Performs basic skills:** ○ Using multiplication, solve for wave speed ○ Using division, solve for wave frequency (Hz), wavelength (m), and wave speed (m/s) ○ Recognize appropriate units for wave frequency (Hz), wavelength (m), and wave speed (m/s) ○ Identify examples of different types of electromagnetic waves (radio, television, microwave, radar, infrared, visible light, ultraviolet, x-ray, gamma rays) ○ Recognize that different frequencies and/or wavelengths are represented on the electromagnetic spectrum ○ Describe the Doppler Effect **No major errors or omissions regarding the score 2.0 content.**
Score 1.0	With help, I know some of 2.0 and 3.0.
Score 0.0	Even with help, I am unable to understand.

Topic: Energy- Electricity	
Included Standards: SC.912.P.10.15 SC.912.P.10.14	
Subject: Physical Science	
Score 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.** ○ Design real world scenarios using appropriate circuitry.
Score 3.0	**The student will understand the key concepts of electricity and be able to conduct investigations using Ohm's Law.** **Performs complex skills:** ○ Distinguish between series and parallel circuits by conducting investigations on circuits. ○ Classify materials as conductors, semiconductors and insulators. **The student exhibits no major errors or omissions regarding the score 3.0 content.**
Score 2.0	**The student:** **Recognizes or recalls specific terminology:** Conductors, semiconductors, insulators, current (I), voltage, resistance (R), power, work, qualitative, quantitative, Ohms' Law, mechanical energy, circuit,amps, ohms, volts (V), series, parallel **Recognizes or recalls additional non-specific terminology:** conservation, energy (kinetic, potential), reciprocal **Recognizes or recalls specific affixes:** -age, an, cir, in, kin, mech, pot, re, semi **Performs basic skills:** ○ Using multiplication to solve for voltage. ○ Using division to solve for current. ○ Recognize the appropriate units for work and power. ○ Recognize that current and power are reciprocal. ○ Identify examples of conductors, semiconductors, and insulators. ○ Demonstrate series and parallel circuits. **No major errors or omissions regarding the score 2.0 content.**
Score 1.0	With help, I know some of 2.0 and 3.0.
Score 0.0	Even with help, I am unable to understand.

Topic: Energy- Work	
Included Standards: SC.912.P.10.3	
Subject: Physical Science	
Score 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.** ○ Develop a strategy for work and power and be able to apply it to a real world situation.
Score 3.0	**The student will understand work and power and be able to qualitatively and quantitatively assess each.** **Performs complex skills:** ○ Solve for any variable in the formulas for power and/or work using the appropriate units. **The student exhibits no major errors or omissions regarding the score 3.0 content.**
Score 2.0	**The student:** **Recognizes or recalls specific terminology:** power, work, qualitatively, quantitatively, joules (N x m), watt (J/s), horsepower (hp), meter (m), newton (N) **Recognizes or recalls additional non-specific terminology:** proportional, force, energy, potential energy (gravitational energy, elastic energy), kinetic energy (Work/Energy Principle), motion, power **Recognizes Affixes:** kin, qual, quant, pro **Performs basic skills:** ○ Using multiplication to solve for work. ○ Using division to solve for power. ○ Recognize the appropriate units for work and power. **No major errors or omissions regarding the score 2.0 content.**
Score 1.0	With help, I know some of 2.0 and 3.0.
Score 0.0	Even with help, I am unable to understand.