Physics Power Standards

(revised 2017)

- 1. The student will be able to state and apply the scientific method to the content areas of Physics.
- 2. The student will be able to cite specific examples of events and physicists pertinent to the development and current application of classical and modern physics in the scientific community.
- 3. The student will be able to record, evaluate and mathematically apply measurements in scientific investigations.
- 4. The student will be able to model, experimentally determine and mathematically analyze motion using a variety of techniques.
- 5. The student will be able to use vectors qualitatively and quantitatively to express vector quantities used in Physics
- 6. The student will be able to state and mathematically apply Newton's Laws in identifying, analyzing and measuring forces for objects in linear or circular motion.
- 7. The student will be able to state and mathematically apply the conservation laws of momentum and energy in mechanical and electrical systems
- 8. The student will be able to state and mathematically apply principles of charge, field, voltage, current, energy and power in systems involving electricity and magnetism.
- 9. The student will be able to analyze and apply principles of fluid motion and pressure.
- 10. The student will be able to define and apply wave concepts in the transmission of light and sound.