

**ADAMS COUNTY/OHIO VALLEY SCHOOL DISTRICT  
POWER STANDARDS (INDICATORS)**



**SCIENCE  
GRADE NINE**

**Standard – Physical Science**

Be able to describe structure and nature of matter, (atomic structure).

Explain motion of particles in terms of Newton's Three Laws, Changes in Motion ( $F=ma$ ).

Demonstrate conservation of energy and energy forms by the use of the formulas for kinetic and potential energy. Kinetic energy ( $KE = \frac{1}{2} mv^2$ ), Potential energy – Relationship of mass, gravity, force and acceleration ( $PE = Mgh$ ).

Describe waves and their properties and be able to show speed depends on medium, show how waves reflect, bend and are absorbed, and how they are related to the electromagnetic spectrum.

**Standard – Earth and Space Sciences**

Explain the effects of plate tectonics, volcanoes, earthquakes, and continental drift.