**Unit 5**

**Physical Science: Energy**

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| Standard 7.P.1 | Academic Vocabulary |
| 7.P.2.1Explain how kinetic and potential energy contribute to the mechanical energy of an object.7.P.2.2Explain how energy can be transformed from one form to another (specifically potential energy and kinetic energy) using a model or diagram of a moving object (roller coaster, pendulum, or cars on ramps as examples).7.P.2.3Recognize that energy can be transferred from one system to another when two objects push or pull on each other over a distance (work) and electrical circuits require a complete loop through which an electrical current can pass.7.P.2.4Explain how simple machines such as inclined planes, pulleys, levers and wheel and axles are used to create mechanical advantage and increase efficiency.-Potential/Kinetic Energy-Model Energy Transformations-Transformations/Conversions-Work and Machines | Potential Energy Kinetic EnergyMechanical EnergyEnergy TransformationDiagram of Moving object (Roller coaster, car on a ramp)WorkElectrical circuitsElectrical currentSimple Machines Inclined planePulleyLeverWheel and Axle Mechanical AdvantageMechanical Efficiency  Compound Machines (Scissors and Bicycle) Energy Transformation1. Thermally
2. Mechanically
3. Electrically
4. Electromagnetic waves
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