**Science 8 Learning Goals**

**Mrs. Fulton**

**Unit I – Chemical Interactions**

* Intro to Matter
  + States of Matter (solid, liquid, gas)
    - Phase Changes
  + Types of Matter - Elements, Compounds and Mixtures
  + Solubility and concentrations
* Particles of Matter
  + Periodic Table
  + Atomic Structure
* Acids, Bases and Solutions
  + pH Scale & Indicators

**Unit II – Physical Interactions**

* Motion & Acceleration
* Force
* Laws of Motion
* Work and Machines
  + Mechanical Advantage/Efficiency
  + Simple Machines

**Unit III – Energy & Heat**

* Nature of Energy
  + Potential & Kinetic Energy
  + Forms of Energy
  + Electricity & Magnetism
  + Renewable and Nonrenewable Resources
* Nature of Heat
  + Conduction, Convection & Radiation
  + Conductor vs. Insulator

**Unit IV - Weather & Climate**

* Atmosphere & Weather
* Wind & Water
* Weather Patterns & Climate

**Unit V - Earth’s Changing Surface**

* Mapping Earth’s Surface
* Map Types
* Plate Tectonics
* Earthquakes & Volcanoes
* Rocks & Minerals

**Unit VI –Astronomy**

* Earth, Sun & Moon
* The Solar System
* The Universe