**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