



Science Curriculum Time Line

Physical Science

Grading Period One		
<p><u>Matter</u></p> <ul style="list-style-type: none">• Heterogeneous vs. homogeneous• Properties of matter• States of matter and its changes• Models of the atom (components)		<p><u>Chemistry Part 1</u></p> <ul style="list-style-type: none">• Ions• Isotopes• Periodic trends• Periodic law• Representative groups• Ionic• Covalent• Nomenclature
Grading Period Two		
<p><u>Chemistry Part 2</u></p> <ul style="list-style-type: none">• Chemical Reactions• Basics of Balancing equations• Nuclear Reactions		<p><u>Energy</u></p> <ul style="list-style-type: none">• Quantifying kinetic energy• Quantifying gravitational/potential energy• Energy is relative• Transfer/transformation of energy (including work)• Conduction• Convection• Radiation• Thermal conductivity• Thermal equilibrium
Grading Period Three		
<p><u>Forces</u></p> <ul style="list-style-type: none">• Force diagrams• Types of forces (gravity, friction, normal, tension)• Field model for forces at a distance		<p><u>Motion</u></p> <ul style="list-style-type: none">• Introduction to one-dimensional vectors• Displacement, velocity (constant, average and instantaneous) and acceleration• Interpreting position vs. time and velocity vs. time graphs• Objects at rest• Objects moving with constant speed• Accelerating objects
Grading Period Four		
<p><u>Waves</u></p> <ul style="list-style-type: none">• Refraction, reflection, diffraction, absorption, superposition• Radiant energy and the electromagnetic spectrum• Doppler Shift	<p><u>Electricity</u></p> <ul style="list-style-type: none">• Movement of electrons• Current• Electric potential (voltage)• Resistors and transfer of energy	<p><u>The Universe</u></p> <ul style="list-style-type: none">• History of the universe• Galaxy formation• Star stages of evolution• Fusion in stars