**8th Grade Physical Science Syllabus**

A. Unit One – Matter I

    1.  Solids

       a. Crystalline Solids

       b. Amorphous Solids

    2. Liquids

      a. Viscosity

      b. Cohesion

      c. Adhesion

      d. Density and Archimedes Principle

B. Unit Two - Matter II

      1. Gas Laws – Boyle’s Law, Charles’s Law

      2.  Pascal’s Law

      3. Air Pressure

      4. Bernoulli's Principle

C. Unit Three - Simple Machines

    1. Friction

    2. Work, Power, and Horsepower

    3. Six Simple Machines

    4. Mechanical Advantage

    5. Compound Machines

D. Unit Four - The Atom

    1. Atomic Structure

    2. Subatomic Particles

    3. Isotopes and Radioactivity

    4. Elements, Compounds, Mixtures, and Solutions

E. Unit Five - Mendeleev’s Periodic Table

    1. Families of Elements

    2. Groups of Elements

    3. Periodic Law

F. Unit Six - Energy

    1. Energy Consumption

    2. Alternative sources of Energy

    3. Environmental Impact

F. Electricity

    1. Static Electricity

    2. Current Electricity (AC and DC)

    3. Series and Parallel Circuits