

SCIENCE CURRICULUM SUMMARY

The purpose of the Science Curriculum Summary is to present an overview of the Introduction to Chemistry & Physics curriculum. Parents are the intended audience of the Science Curriculum.

Scientific Inquiry Process

- Measurement
- Data Analysis

Motion and Focus

- Velocity & Acceleration
- Weight
- Gravity
- Newton's Laws
- Friction
- Conservation

Atomic Structures

- Subatomic particles
- Electrons

Bonding

- Molecular Bonding
 - ionic formulas, names, structure
 - covalent names, formulas, polar, non-polar
 - metallic bonds
- Intermolecular Bonding
 - melting and boiling points
 - conductivity
 - physical v. chemical properties

Reactions

- Rate of reacting
- Kinetic Theory
- Chemical reactions
- Calorimetry
- Heat

Gases

- Molecular arrangement
- Boyle's Law
- Charle's Law
- Combined Gas Law

Work & Machines

- Work
- Simple machines
- Power

Electricity & Magnetism

- Magnets
- Magnetic Field
- Current
- Ohm's Law

Environmental Impact

- Energy transformation and distribution
- Alternate energy
- Renewable energy