. Chemistry

- Learn what chemistry is, where chemistry is found, the scientific method, and learn lab safety.
- Learn about all about the periodic table. The development of the periodic table, the classification of elements, and the periodic trends.
- Learn about matter and its properties, physical and chemical. Learn about different mixtures.
- Learn about atoms. The history of atoms, structure of atoms, subatomic particles, and radioactivity of atoms.
- Learn about electrons in an atom including quantum mechanical model of atom, atomic orbitals, and electron configurations.
- Learn about ionic compounds. Formation, properties, and naming of ionic bonds.
- Learn about covalent bonds: Lewis structures, nomenclature, and molecular structures.
- Learn about chemical reactions. Learn how to write, balance, and classify chemical equations.
- Learn how to analyze data using SI units.
- Learn what a mole is and conversing factors using mole.
- Learn how to work stoichiometry.
- Learn about the state of matter, gasses, liquid, solids, the forces of attractions and phase changes.
- Learn gas laws and gas law calculations.
- Learn about mixtures and solutions: types of mixtures, solution concentration, factors that affect salvation, and properties of solution.
- Learn about energy and chemical changes including thermochemical equation and calculating enthalpy change.
- Learn about reactions rates and rate laws.
- Learn about chemical equilibrium and what factors affects chemical equilibrium.
- Learn about acids and bases, their properties, and how to calculate pH and pOH.
- Learn about redox reaction and how to balance them.
- Learn the basics behind organic chemistry…hydrocarbons.