

Physical Science

- Learn what physical science is, the scientific method, how to use the metric system, and safety in the lab.
- Learn about matter, mass, weight, volume and density.
- Learn the physical and chemical changes of matter and also phase changes.
- Learn about mixtures, elements and compounds.
- Learn about atoms including structure of the atom and forces within the atom.
- Learn about the periodic table including: arranging the elements, design of the periodic table, chemical families, and periodic properties.
- Learning about chemical bonding (ionic, covalent, and metallic bonding).
- Learn about chemical reactions, chemical equations, types of chemical reactions, and energy of chemical reactions.
- Learn how to balance chemical equations.
- Learn about acid and bases and acid and how to calculate pH.
- Learn about carbon and its compounds.
- Learn about motion, how to measure motion, changes in velocity and momentum.
- Learn about force and Newton's Law of Motion.
- Learn about forces in fluids including: pressure, hydraulic devices, and buoyancy.
- Learn about work, power, and simple machines.
- Learn about energy (kinetic and potential) and energy conversions.
- Learn about heat and measuring heat.
- Learn about the nature of waves, the characteristics of waves, types of waves, speed of waves, and interactions of waves.
- Learn about light and electromagnetic spectrum.