

Middle School Science

Students participate in interactive discussions and hands-on experiences through lab work and demonstrations to understand physical science, life science, and earth science. Students identify problems, formulate and test hypothesis, and evaluate experimental results to better understand the scientific method. Seventh and eighth grade students participate in science fair.

5th Grade students will learn an Introduction to Science and focus on:

- Living Organisms- Comparing and Classifying
- Cell Reproduction, Inheritance, and Mutations
- Organism Adaptations
- Ecology- Cycles of Matter, Energy Transfer and Independent Relationships in Ecosystems
- Organization for Matter and Energy Flow in Organisms
- Structures and Properties of Matter
- Energy in Chemical Processes and Everyday Life
- Types of Interactions- Gravitational Force and Motion
- The Changing Earth- Earth Materials and Systems
- The Earth's Resources and Human Impacts on Earth Systems
- The Roles of Water in Earth's Surface Processes
- Climate- The Affects of Land, Water and the Sun
- Astronomy- The Earth, Solar System, Stars and the Universe
- The Human Body and Its Systems
- Living a Healthy Life
- Engineering Designs- Defining, Developing, and Optimizing

6th Grade students will learn about Earth Science and focus on:

- The History of Planet Earth
- Earth's Materials and Systems
- Plate Tectonics and Large-Scale System Interactions
- The Roles of Water in Earth's Surface Processes
- Natural Resources
- Weather and Climate
- Global Climate Change
- Natural Hazards
- Human Impacts on Earth Systems
- The Universe and Its Stars
- Earth and the Solar System
- Engineering Designs- Defining, Developing, and Optimizing

7th Grade students will learn about Life Science and focus on:

- Life's Structure and Function
- Information Processing- Responding to Stimuli
- Organization for Matter and Energy Flow in Organisms
- Interdependent Relationships in Ecosystems
- Cycle of Matter and Energy Transfer in Ecosystems
- Ecosystem Dynamics, Functioning and Resilience
- Energy in Chemical Process and Everyday Life
- Biodiversity and Humans
- Growth and Development of Organisms
- Inheritance of Traits
- Variation of Traits
- Natural Selection
- Evidence of Common Ancestry and Diversity
- Adaptation
- Engineering Designs- Defining, Developing Solutions, and Optimizing

8th Grade students will learn about Physical Science and focus on:

- Structure and Properties of Matter
- Chemical Reactions
- Forms of Energy
- Forces and Motion
- Types of Interactions- Electric, Magnetic, and Gravitational
- Conservation of Energy and Energy Transfer
- Relationship Between Energy and Forces
- Wave Properties
- Electromagnetic Radiation
- Information Technologies and Instrumentation
- Engineering Designs- Defining, Developing Solutions, and Optimizing