



INSPIRE • INNOVATE • ENGAGE

NORTH SHORE

SCHOOL DISTRICT 112

6th Grade Science

Science instruction in North Shore School District 112 is guided by the **Next Generation Science Standards (NGSS)** to ensure all students engage in meaningful, hands-on learning experiences. These standards promote critical thinking, problem-solving, and real-world application. Our goal is to help students not only understand scientific content but also think and act like scientists and engineers as they explore the world around them.

Scientific Skills and Practices

- Explore the scientific method and its applications in inquiry-based investigations
- Demonstrate proper lab safety procedures and effective use of laboratory tools
- Use metric system measurements accurately in scientific contexts
- Analyze and interpret data to determine similarities and differences in findings
- Develop and/or use models to predict and/or describe a phenomenon
- Evaluate predictions and use evidence to support claims
- Infer cause and effect relationships

Physical Science: Structure and Properties of Matter

- Measure physical properties such as weight, mass, volume, and density
- Determine properties of matter through scientific measurements
- Use scientific reasoning to determine the effects of thermal energy and pressure on matter
- Investigate the relationship between temperature, thermal energy, and heat
- Describe how different materials respond to heat

Earth and Space Science: Earth's Systems

- Investigate how scientists study Earth's materials and model its layers
- Classify the three basic types of rocks and how rocks form
- Investigate the materials that make up Earth, how they are continuously cycled
- Investigate evidence that supports the hypothesis of continental drift
- Explain how convection drives plate motion and reshapes Earth's surface over time
- Examine the role that volcanic activity plays in shaping Earth's surface as well as the hazards that different types of volcanoes pose

Life Science: Systems, Reproduction and Growth

- Analyze evidence that all living things are composed of cells and understand their basic needs for survival, growth, and reproduction
- Explain how cells determine the structure and function of living organisms
- Use models to compare and contrast cell structures and their functions

- Explore how cells undergo reproduction