

LINCOLN PUBLIC SCHOOLS
Science Learning Expectations: Grade 6

Strand:

Scientific Inquiry

Students will learn that scientific inquiry, design, and experimentation involve skills necessary to investigate the natural and human-made world.

Big Ideas

- ❑ Scientists need consistent and accurate ways to describe and measure the physical world.

Key Outcomes

- ❑ Students will demonstrate an understanding that **scientific inquiry depends on standardized methods and measurements** by using the scientific method to conduct a multi-step experiment.

Essential Knowledge and Skills

Students will be able to:

- ❑ Formulate a testable hypothesis.
- ❑ Design and conduct an experiment specifying variables to be changed, controlled, and measured.
- ❑ Select appropriate tools and technology (e.g., calculators, computers, thermometers, meter sticks, balances, graduated cylinders, and microscopes), and make quantitative observations.
- ❑ Present and explain data and findings using multiple representations, including tables, graphs, mathematical and physical models, and demonstrations.
- ❑ Draw conclusions based on data or evidence presented in tables or graphs, and make inferences based on patterns or trends in the data.
- ❑ Communicate procedures and results using appropriate scientific and technological terminology.