Standards

Reading Core in Science

3.5 Reading Informational Text Students read, understand, and respond to informational text – with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.

CC.3.5.6-8.A. Cite specific textual evidence to support analysis of science and technical texts.

CC.3.5.6-8.B. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

CC.3.5.6-8.C. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

CC.3.5.6-8.I. Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

Academic Science Standards

3.2. Physical Sciences: Chemistry and Physics

3.2.6.B1. Explain how changes in motion require a force.

3.2.7.B1. Describe how unbalanced forces acting on an object change its velocity. Analyze how observations of displacement, velocity, and acceleration provide necessary and sufficient evidence for the existence of forces.

3.2.7.A6. Scientific Inquiry

• Understand how theories are developed. • Identify questions that can be answered through scientific investigations and evaluate the appropriateness of questions. • Design and conduct a scientific investigation and understand that current scientific knowledge guides scientific investigations. • Use appropriate tools and technologies to gather, analyze, and interpret data and understand that it enhances accuracy and allows scientists to analyze and quantify results of investigations. • Develop descriptions, explanations, and models using evidence and understand that these emphasize evidence, have logically consistent arguments, and are based on scientific principles, models, and theories. • Analyze alternative explanations and understanding that science advances through legitimate skepticism. • Use mathematics in all aspects of scientific inquiry. • Understand that scientific investigations may result in new ideas for study, new methods, or procedures for an investigation or new technologies to improve data collection.