

LINCOLN PUBLIC SCHOOLS
Science Inquiry Learning Expectations: Grades K-5

SCIENCE INQUIRY	<p>Big Ideas:</p> <ul style="list-style-type: none"><input type="checkbox"/> Scientific knowledge is constantly changing.<input type="checkbox"/> Scientific inquiry is a process scientists use to learn about the world around us. <hr/> <p>Key Outcomes:</p> <ul style="list-style-type: none"><input type="checkbox"/> Students will understand how to conduct a scientific investigation by following a process of using inquiry skills to construct knowledge from the evidence collected. <hr/> <p>Essential Knowledge and Skills:</p> <p>In grades K–2, students will be able to:</p> <ul style="list-style-type: none"><input type="checkbox"/> Plan a simple investigation.<input type="checkbox"/> Use simple tools and equipment to gather data.<input type="checkbox"/> Use data to construct reasonable explanations.<input type="checkbox"/> Communicate their findings and give explanations. <p>In grades 3–5, students will be able to:</p> <ul style="list-style-type: none"><input type="checkbox"/> Ask questions and form a hypothesis that can be answered by a scientific investigation.<input type="checkbox"/> Plan and carry out scientific investigations.<input type="checkbox"/> Use appropriate tools and techniques to gather, analyze and interpret data.<input type="checkbox"/> Develop descriptions, explanations, predictions and models based on evidence.<input type="checkbox"/> Think critically and logically to discover the relationship between evidence and their explanation.
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Massachusetts Frameworks:

Engaging students in inquiry-based instruction is one way of developing conceptual understanding, content knowledge, and scientific skills. Scientific inquiry as a means to understand the natural and human-made worlds requires the application of content knowledge through the use of scientific skills.