

K-2 Standard 1 Intended Learning Outcomes

The Processes of Science, Communication of Science, and the Nature of Science					
Students will be able to apply scientific processes, communicate scientific ideas effectively, and understand the nature of science					
Standard 1 The Processes, Communication, and Nature of Science	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5
Objective 1. Generating Evidence: Using the processes of scientific investigations (i.e. framing questions, designing investigations, conducting investigations, collecting data, drawing conclusions)	Framing questions: Observe using senses, create a hypothesis, and focus a question that can lead to an investigation.	Designing investigations: Consider reasons that support ideas, identify ways to gather information that could test ideas, design fair tests, share designs with peers for input and refinement.	Conducting investigations: Observe, manipulate, measure, describe.	Collecting data: Deciding what data to collect and how to organize, record, and manipulate the data.	Drawing conclusions: Analyzing data, making conclusions connected to the data or the evidence gathered, identifying limitations or conclusions, identifying future questions to investigate.
Objective 2. Communicating Science: Communicating Effectively using science language and reasoning	Developing social interaction skills with peers.	Sharing ideas with peers.	Connecting ideas with reasons (evidence).	Using multiple methods of communicating reasons/evidence (verbal, charts, graphs)	
Objective 3. Knowing in Science: Understanding the nature of science	Ideas are supported by reasons.	There are limits to ideas in science (i.e. what can be observed, measured, and verified).	Differences in conclusions are best settled through additional observations and investigations.	Communication of ideas in science is important for helping to check the reasons for ideas.	

Standard 1 is not to be taught as stand-alone content.

Standard 1 is to be integrated into the teaching of the Content Standards 2, 3, and 4