

## **SAU 16: Kindergarten through Grade Two Guiding Principles**

*Adapted from Massachusetts Science and Technology Framework 2006*

In **grades PreK–2**, students are naturally interested in everything around them. This curiosity leads them to observe, collect, and record information about the earth and about objects visible in the sky. Teachers should encourage their students' observations without feeling compelled to offer precise scientific reasons for these phenomena. Young children bring these experiences to school and learn to extend and focus their explorations. In the process, they learn to work with tools like magnifiers and simple measuring devices.

**In grades PreK–2**, scientific investigations can center on student questions, observations, and communication about what they observe. For example, students might plant a bean seed following simple directions written on a chart. Then they can write down what happens over time in their own words.

### ***Benchmarks for student achievement:***

#### ***Students should be able to...***

Ask questions about objects, organisms, and events in the environment.

Tell about *why and what would happen if?*

Make predictions based on observed patterns.

Name and use simple equipment and tools (e.g., rulers, meter sticks, thermometers, hand lenses, and balances) to gather data and extend the senses.

Record observations and data with pictures, numbers, or written statements.

Discuss observations with others.

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