

## Science and Technology

### Key Developmental Indicators

<p><b>45. Observing:</b> Children observe the materials and processes in their environment.</p>	<p>Children are curious and use all their senses to learn more about the natural and physical world. They gather information by observing what others do and discovering how tools and materials work.</p>
<p><b>46. Classifying:</b> Children classify materials, actions, people, and events.</p>	<p>Children group similar things together. They identify relationships between things and the categories they belong to. Children look for new ways to organize the knowledge they already have and for ways to fit new discoveries into familiar categories.</p>
<p><b>47. Experimenting:</b> Children experiment to test their ideas.</p>	<p>Children experiment to test whether an idea is true or a solution will work. They may encounter problems with materials that they do not have answers for. They experiment by manipulating materials, using trial and error, and then approaching the problem with possible solutions in mind.</p>
<p><b>48. Predicting:</b> Children predict what they expect will happen.</p>	<p>Children indicate through words and/or actions what they expect an outcome to be. They think about what happened in similar situations and anticipate what might happen. Children make predictions based on experimentation.</p>
<p><b>49. Drawing conclusions:</b> Children draw conclusions based on their experiences and observations.</p>	<p>Children attempt to fit their observations and reasoning into their existing knowledge and understanding. They construct knowledge in their own way as they collect data to help them form theories about how the world works (e.g., "It's night because the sun goes to bed").</p>
<p><b>50. Communicating ideas:</b> Children communicate their ideas about the characteristics of things and how they work.</p>	<p>Children share their questions, observations, investigations, predictions, and conclusions. They talk about, demonstrate, and represent what they experience and think. They express their interest in and wonder about the world.</p>
<p><b>51. Natural and physical world:</b> Children gather knowledge about the natural and physical world.</p>	<p>Children become familiar with characteristics and processes in the natural and physical world (e.g., characteristics of plants and animals, ramps and rocks; processes of growth and death, freezing and melting). They explore change, transformation, and cause and effect. They become aware of cycles that are meaningful to them.</p>
<p><b>52. Tools and technology:</b> Children explore and use tools and technology.</p>	<p>Children become familiar with tools and technology in their everyday environment (e.g., stapler, pliers, computer). They understand the functions of equipment and use it with safety and care. They use tools and technology to support their play.</p>