

K-2 Science Continuum

Standards & Evidences	Emerging (Can do with much teacher guidance and prompting).	Developing (Some guidance is needed but can do independently as well).	Using (Can do consistently and independently. May need occasional prompting).	Applying (Can apply skills and/or concepts to new and/or different situations with little guidance).
Asks Questions about the World Around Them (7.1a)	<p>When prompted by the teacher “what do you wonder about?” the student will respond. Student will ask a question about an observation with guidance.</p> <p>Expresses curiosity about their world and seeks information by asking “why” questions. “How” and “what” questions may be generated with guidance.</p> <p>Questions may not always relate to what’s being observed or investigated.</p>	<p>Students need occasional prompting to ask questions about observations and investigations. Questions are more directly related to observations and investigations.</p> <p>Students continue to express curiosity about their world and ask “how” and “what” questions more independently.</p> <p>With prompting and modeling students may begin to ask “what if” questions.</p>	<p>Students can independently ask questions about observations and investigations. Questioning is more spontaneous and consistent.</p> <p>Students begin to express curiosity beyond what is directly observable. Student can ask “what if” questions with less prompting.</p> <p>Occasionally questions posed may extend observations and investigations.</p>	<p>Questions continue to be spontaneous and driven by curiosity about their world.</p> <p>Students independently ask “what if” questions during and after observations and investigations.</p> <p>Student questions often extend observations and investigations to new levels.</p> <p>Students may ask ideas about how ideas and events are connected.</p>
Uses Senses to Observe (7.1b)	<p>Students can use the sense of sight to observe objects and events and sort these accordingly by properties and non-properties (i.e.: smooth, not smooth). With prompting students can observe using other senses and sort by more than one property.</p> <p>Students are able to describe 1 or 2 simple observations and with guidance provide detail about their observations.</p>	<p>Students continue to use the sense of sight to observe and can use other senses with some prompting. Students can sort by more than one property with less guidance.</p> <p>Students can compare and contrast objects and events according to a stated rule. With prompting can classify objects into groups.</p> <p>Students are able to describe several observations and use some detail in their descriptions.</p>	<p>Students use more than one sense to observe with little guidance. Students can independently sort by more than one property and classify objects into groups.</p> <p>Students can often identify the rule for classifying.</p> <p>Students are able to make more complex observations and consistently use detail in describing these.</p>	<p>Students consistently use more than one sense to observe objects and events. Students can sort by more complex properties and independently identify and/or explain the rule.</p> <p>Students may begin to make connections among multiple groups of objects and compare and contrast these.</p> <p>Students are able to make numerous observations and describe these using careful detail.</p>

K-Z Science Continuum (cont.)

Standards & Evidences	Emerging (Can do with much teacher guidance and prompting).	Developing (Some guidance is needed but can do independently as well).	Using (Can do consistently and independently. May need occasional prompting).	Applying (Can apply skills and/or concepts to new and/or different situations with little guidance).
Investigates Objects, Materials and Phenomena (7.1c, 7.2a)	<p>Students can begin to make predictions or guesses with guidance.</p> <p>Students are able to follow simple procedures to investigate ideas but need guidance with more complex steps.</p> <p>With teacher prompting (“what could you do to find out?”) students may investigate ideas they have during observations and explorations.</p> <p>With guidance and structure students can begin to collect simple data or information.</p>	<p>Students begin to make predictions that are based upon prior knowledge and experience.</p> <p>Students are able to follow simple and complex procedures with less guidance.</p> <p>Students begin to investigate their own ideas during observations and explorations by trying different things.</p> <p>With continued guidance students are able to collect data and information during investigations.</p>	<p>Students can independently make predictions that are based upon prior knowledge and experience.</p> <p>Students are able to follow complex procedures more independently.</p> <p>Students frequently investigate their own ideas during observations and explorations.</p> <p>Students are able to collect data and information during investigations more consistently and with less structure provided by the teacher.</p>	<p>Students make predictions based upon prior knowledge, experience, and investigation. Students may begin to hypothesize with teacher guidance (“I think this... because...”)</p> <p>Students are able to follow complex procedures and/or develop their own procedures for investigating. Students may begin to recognize the idea of fair testing.</p> <p>Students consistently investigate their own ideas and questions and can begin to design structures for collecting data and information during investigations.</p>
Proposes Ideas and Explanations About Concepts being Learned (7.1d, 7.1e)	<p>Students can frequently restate what they observed.</p> <p>Students are able to attempt explanations of observations with teacher prompting and questioning.</p> <p>With extensive prompting students are able to draw some conclusions based upon investigations and information gathered.</p> <p>Students may have a number of misconceptions about what was learned.</p>	<p>Students are able to move beyond restating what they directly observed by posing concrete ideas and explanations.</p> <p>Students may still need prompting and questioning to draw relevant conclusions about investigations.</p> <p>Students continue to have misconceptions but may begin to recognize and understand alternative ideas when prompted.</p>	<p>Students are able to propose more abstract ideas and explanations about what they observed.</p> <p>Students need less prompting and questioning to draw relevant conclusions based upon data and information gathered.</p> <p>Students may alter misconceptions and conclusions when confronted with new evidence or ideas.</p>	<p>Students propose abstract ideas and explanations about what they observed and investigated.</p> <p>Students can independently draw relevant conclusions based upon data and information gathered.</p> <p>Students can more independently revise misconceptions.</p> <p>Students begin to extend their ideas and explanations by posing “what if?” questions and can connect their learning to real life events and phenomena.</p>

K-2 Science Continuum (cont.)

Standards & Evidences	Emerging (Can do with much teacher guidance and prompting).	Developing (Some guidance is needed but can do independently as well).	Using (Can do consistently and independently. May need occasional prompting).	Applying (Can apply skills and/or concepts to new and/or different situations with little guidance).
Communicates and Presents Learning (1.17a, b)	<p>Students are able to orally communicate what they observed and what they learned with prompting and questioning.</p> <p>Little or no scientific language is used to describe observations.</p> <p>Students can represent their learning with simple pictorial representations.</p>	<p>Students are able to orally communicate what they observed and what they learned with less prompting and questioning.</p> <p>Students begin to use more scientific language to describe observations.</p> <p>Pictorial representations include more detail.</p>	<p>Students are able to orally communicate what they observed and what they learned more independently.</p> <p>Students use scientific language more consistently to describe observations and investigations.</p> <p>Pictorial representations include detail and may include labeling.</p>	<p>Students are able to orally communicate what they did, what they observed and what they learned independently.</p> <p>Scientific language and vocabulary is used consistently.</p> <p>Pictorial representations are detailed and include appropriate labeling. Students are able to represent numerous ideas and information.</p>