**Connecting to the *Next Generation Science Standards* (NGSS Lead States 2013)**

**K-2 What Will the Weather Be?**

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| **K-ESS2 Earth’s Systems**<https://www.nextgenscience.org/pe/k-ess2-1-earths-systems>*The chart below makes one set of connections between the instruction outlined in this article and the NGSS. Other valid connections are likely; however, space restrictions prevent us from listing all possibilities. The materials, lessons, and activities outlined in the article are just one step toward reaching the performance expectations listed below*.  |
| Performance ExpectationK-ESS2-1 Use and share observations of local weather conditions to describe patterns over time. |
| Science and Engineering Practices |
| [Analyzing and Interpreting Data](http://www.nap.edu/openbook.php?record_id=13165&page=61)* Record information (observations, thoughts, and ideas)
* Use observations (firsthand and from media) to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems.
 | ***Students:**** record daily information about the weather in a classroom chart.
* demonstrate an understanding of weather patterns by making predictions by making predictions about missing data.
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| Disciplinary Core Idea |
| [ESS2.D: Weather and Climate](http://www.nap.edu/openbook.php?record_id=13165&page=186)* [Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time.](http://www.nap.edu/openbook.php?record_id=13165&page=186)
 | * discuss weather in their local area.
* identify types of weather in a local area, record the weather and discuss weather patterns.
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| Crosscutting Concepts |
| [Patterns](http://www.nap.edu/openbook.php?record_id=13165&page=85)* Patterns in the natural and human designed world can be observed, used to phenomena, and used as evidence.
 | * develop a presentation about the different weather patterns new students at their school might observe.
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**3-5 Considering Climates**

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| **3-ESS2 Earth’s Systems**<https://www.nextgenscience.org/pe/3-ess2-2-earths-systems>*The chart below makes one set of connections between the instruction outlined in this article and the NGSS. Other valid connections are likely; however, space restrictions prevent us from listing all possibilities. The materials, lessons, and activities outlined in the article are just one step toward reaching the performance expectations listed below*.  |
| Performance Expectation3-ESS2-2 Obtain and combine information to describe climates in different regions of the world. |
| Science and Engineering Practices |
| [Obtaining, Evaluating, and Communicating Information](http://www.nap.edu/openbook.php?record_id=13165&page=74)* Combine information in written text with that contained in corresponding tables, diagrams, and/or charts to support the engagement in other scientific and/or engineering practices.
 | ***Students:***develop a flyer about a particular climate zone to convey information to others. |
| Disciplinary Core Idea |
| [ESS2.D: Weather and Climate](http://www.nap.edu/openbook.php?record_id=13165&page=186)* [Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years.](http://www.nap.edu/openbook.php?record_id=13165&page=186)
 | * combine information from different media sources to explain characteristics of the different climate zones of the world.
 |
| Crosscutting Concepts |
| [Patterns](http://www.nap.edu/openbook.php?record_id=13165&page=85)* Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence
 | * consider how weather in a certain region impacts the type of clothing someone wears.
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**Connecting to the *Common Core Standards* (NAGC and CCSSO 2010)**

This section provides the Common Core for English Language Arts and/or Mathematics standards addressed in this column to allow for cross-curricular planning and integration. The Standards state that students should be able to do the following at grade level.

**English/Language Arts**

Reading Standards for Informational Texts K-5 – Key Ideas and Details

* Grade 1 standard askes students to “ask and answer questions about key details in a text. “
* Grade 4 standard asks students to “refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.”

Language Standards

Writing Standards Research to Build and Present Knowledge

* Grade K standard asks students to “with guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.”
* Grade 4 students will “recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.”

Writing Standards K-5- Text Types and Purposes

* Grade K students will “use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.”
* Grade 4 students will “write informative/explanatory texts to examine a topic and convey ideas and information clearly.”

Vocabulary Acquisition and Use is one of the standards for language. This particular standard is across grade levels. “Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade [appropriate] reading and content.”

Speaking and Listening – Comprehension and Collaboration

* Grade 1 students should “participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.”

Speaking and Listening Standards K–5—Presentation of Knowledge and Ideas

•Kindergarten students should “add drawings or other visual displays to descriptions as desired to provide additional details.”

• Grade 1 students will “add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.”

* Grade 3 students will “report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace. “

Furthermore, the Common Core for ELA provide a standard related to the Range of Text Types for K–5 where it indicates that students in K–5 should apply the Reading standards to a wide range of texts to include informational science books