Science A–Z

WEATHER (K–2)

Correlation of Resources to National Science Standards

Use the chart below to discover how selected Science A–Z resources in the Weather unit support certain Next Generation Science Standards (NGSS). While a single reading resource, science activity, comprehension support, or lesson cannot satisfy an entire Performance Expectation, using these resources together can help students develop the understandings and abilities they will need in order to satisfy each standard listed below. Most standards cited align with the grade level of this Science A–Z unit. For a reverse correlation tool that connects the standards to resources, visit our NGSS correlations page: www.sciencea-z.com/main/NextGenerationScienceStandards.*

Check the Performance Expectations Key below this chart for the complete text of the standards cited for each resource.

Resource Type	Resource Title	Performance Expectations
Unit Nonfiction Book	*The Weather* (3 reading levels)	**K-PS3-1; K-ESS3-2; 1-ESS1-2; 3-ESS2-1**
Project-Based Learning Pack	*Forecasting the Weather*	**K-ESS2-1; K-ESS3-2; K-2-ETS1-1; 3-ESS2-1**
Process Activity	*Cotton Ball Clouds*	**K-ESS2-1**
Process Activity	*Measuring Wind with a Cup Anemometer*	**K-ESS2-1; K-2-ETS1-2; 3-ESS2-1**
Process Activity	*Weather Journal*	**K-PS3-1; K-ESS2-1; K-ESS3-2; 3-ESS2-1**
FOCUS Book	*Snowflakes*	**K-ESS2-1; 2-PS1-1**
FOCUS Book	*Cool Clouds*	**K-ESS2-1; K-ESS3-2**
FOCUS Book	*Forecasting the Weather*	**K-ESS2-1; 3-ESS2-1**
FOCUS Book	*Our Shining Star*	**K-PS3-1; K-PS3-2; K-2-ETS1-1; K-2-ETS1-2; K-2-ETS1-3**
FOCUS Book	*Harmful Hurricanes*	**K-ESS3-2; 2-PS1-2; K-2-ETS1-1; K-2-ETS1-2; 3-ESS3-1**
Investigation Pack	Topic: Wind I. Files: *Santa Ana Winds; Blizzards; Haboob; Hurricanes; Tornadoes; Monsoons* Mystery File: *Roller Coasters*	**K-ESS2-1; K-ESS3-2; 2-ESS1-1; 3-ESS2-1**
Debate	*A Hot and Cold Problem*	**K-PS3-1; K-ESS2-2**
Science Video	*From Space to You*	**K-ESS2-1; K-ESS3-2**
Science Video	*Hurricane Hunters*	**K-ESS3-2; K-2-ETS1-1**
Science Video	*What Are Seasons?*	**K-ESS2-1**

Continued on next page

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Resource Type	Resource Title	Performance Expectations
Career Files	*TV Weather Forecaster; Jet Pilot; Hot-Air Balloon Pilot; NOAA Weather Person*	**K-ESS2-1; K-ESS3-2**
Quick Read	*How Hailstones Grow* (3 reading levels)	**K-ESS2-1; 2-ESS1-1**
Quick Read	*Lightning* (3 reading levels)	**K-ESS2-1; K-ESS3-2**
Quick Read	*The Coldest Place on Earth* (3 reading levels)	**2-LS4-1; 2-ESS2-2; 2-ESS2-3; 3-ESS2-1; 3-ESS2-2**
Quick Read	*The Hottest Place on Earth* (3 reading levels)	**2-LS4-1; 2-ESS2-2; 3-ESS2-1; 3-ESS2-2**
Quick Read	*The Power of Wind* (3 reading levels)	**K-ESS2-1; K-ESS3-2; 2-ESS1-1**
Quick Read	*Weather Vanes* (3 reading levels)	**K-ESS2-1; K-2-ETS1-2**
Concept Books	*Temperature; Clouds; Wind; Precipitation; Storms*	**K-ESS2-1; K-ESS3-2**
Science Diagram	*Cloud Types*	**K-ESS2-1; K-ESS3-2**
Science Diagram	*Common Types of Precipitation*	**2-ESS2-3**
Science Diagram	*Earth's Seasons*	**1-ESS1-2; 3-ESS2-1**
Science Diagram	*Freezing and Boiling Points of Water*	**2-PS1-4**
Science Diagram	*How Rainbows Form*	**K-PS3-1**
Science Diagram	*The Water Cycle*	**2-ESS2-3**
Science Diagram	*Water Moves on Earth*	**2-ESS2-3**

Performance Expectations Key

K-PS3-1. Make observations to determine the effect of sunlight on Earth's surface.

K-PS3-2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.

K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.

K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

K-ESS3-2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.

2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

2-PS1-2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.

Continued on next page

2-PS1-4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

2-ESS1-1. Use information from several sources to provide evidence that Earth events can occur quickly or slowly.

2-ESS2-2. Develop a model to represent the shapes and kinds of land and bodies of water in an area.

2-ESS2-3. Obtain information to identify where water is found on Earth and that it can be solid or liquid.

K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

3-ESS2-2. Obtain and combine information to describe climates in different regions of the world.

3-ESS3-1. Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.