Kindergarten

3.3.K.D Earth and Space Sciences: Earth and Human Activity

Students who demonstrate understanding can *ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.*

Clarifying Statement: Emphasis is on local forms of severe weather.

Assessment Boundary: N/A

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Crosscutting Concepts (CCC)
Asking Questions and Defining Problems Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions that can be tested. • Ask questions based on observations to find more information about the natural and/or designed world(s). **Obtaining, Evaluating, and Communicating Information** Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information. • Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world.	**Natural Hazards** • Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events. **Defining and Delimiting an Engineering Problem** • Asking questions, making observations, and gathering information are helpful in thinking about problems.	**Cause and Effect** • Events have causes that generate observable patterns. ***Connections to Engineering, Technology, and Applications of Science*** **Interdependence of Science, Engineering, and Technology** • People encounter questions about the natural world every day. **Influence of Engineering, Technology, and Science on Society and the Natural World** • People depend on various technologies in their lives; human life would be very different without technology.

Pennsylvania Context: Examples of Pennsylvania context include identifying severe weather in your area (e.g., tornadoes, forest fires, flooding, blizzards) and how forecasting helps one prepare to ensure safety.

PA Career Ready Skills: Engage in reciprocal communication with peers and adults.

Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
Agriculture (AFNR)	CS.01.02.02.c: Evaluate the importance of technology use and how it impacts AFNR systems.

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
Science, Environmental Literacy and Sustainability (NAAEE)	K-4 Strand 1.A. Questioning: Learners develop questions that help them conduct simple investigations and learn about the environment.
PA Core Standards: ELA	CC.1.5.K.A: Participate in collaborative conversations with peers and adults in small and larger groups. CC.1.5.K.C: Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
PA Core Standards and Practices: Math	MP.2: Reason abstractly and quantitatively. MP.4: Model with mathematics. CC.2.1.K.A.1: Know number names and write and recite the count sequence.
PA Standards: Social Studies	7.3.K.A: Describe how weather affects daily life.
Educational Technology (ISTE)	1.1. Empowered Learner: Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
Technology and Engineering (ITEEA)	STEL-1B: Explain the tools and techniques that people use to help them do things.