



Grade 3

3.3.3.A Earth and Space Sciences: Earth's Systems

Students who demonstrate understanding can *represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.*

Clarifying Statement: Examples of data could include average temperature, precipitation, and wind direction.

Assessment Boundary: Assessment of graphical displays is limited to pictographs and bar graphs. Assessment does not include climate change.

| Science and Engineering Practices (SEP) | Disciplinary Core Ideas (DCI) | Crosscutting Concepts (CCC) |
|---|---|---|
| Analyzing and Interpreting Data Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used. <ul style="list-style-type: none"> Represent data in graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships. | Weather and Climate <ul style="list-style-type: none"> Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. | Patterns <ul style="list-style-type: none"> Patterns of change can be used to make predictions. |

Pennsylvania Context: N/A

PA Career Ready Skills: Identify different ways of expressing a feeling.

Connections to Other Standards Content and Practices

| Standard Source | Possible Connections to Other Standard(s) or Practice(s) |
|---|---|
| Agriculture (AFNR) | CS.02.01.01.a: Research and describe different types of geographic data used in AFNR systems. |
| Science, Environmental Literacy and Sustainability (NAAEE) | K-4 Strand 1.E. Organizing and analyzing information: Learners describe data and organize information to search for relationships and patterns concerning the environment and environmental topics. K-4 Strand 1.G. Drawing conclusions and developing explanations: Learners develop explanations that address their questions about the environment. |
| PA Core Standards: ELA | CC.1.4.3.V: Conduct short research projects that build knowledge about a topic. CC.1.4.3.W: Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. CC.1.5.3.A: Engage effectively in a range of collaborative discussions on grade-level topics and texts, building on others' ideas and expressing their own clearly. |



| Standard Source | Possible Connections to Other Standard(s) or Practice(s) |
|---------------------------------------|--|
| PA Core Standards and Practices: Math | MP.2: Reason abstractly and quantitatively. MP.7: Look for and make use of structure. CC.2.4.3.A.4: Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs. |
| PA Standards: Social Studies | 8.1.3.A: Understand chronological thinking and distinguish between past, present and future time. |
| Educational Technology (ISTE) | 1.6. Creative Communicator: Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. |
| Technology and Engineering (ITEEA) | STEL-3D: Explain how various relationships can exist between technology and engineering and other content areas. |