

## Grade 2

## 3.3.2.A Earth and Space Sciences: Earth's Place in the Universe

Students who demonstrate understanding can use information from several sources to provide evidence that Earth events can occur quickly or slowly.

Clarifying Statement: Examples of events and timescales could include volcanic explosions and earthquakes, which happen quickly and erosion of rocks, which occurs slowly.

Assessment Boundary: Assessment does not include quantitative measurements of timescales.

| Science and Engineering Practices (SEP)   | Disciplinary Core Ideas (DCI)  | Crosscutting Concepts (CCC)  |
|---|--|--|
| Constructing Explanations and Designing Solutions  Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.  • Make observations (firsthand or from media) to | <ul> <li>The History of Planet Earth</li> <li>Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe.</li> </ul> | <ul> <li>Stability and Change</li> <li>Things may change slowly or rapidly.</li> </ul> |
| construct an evidence-based account for natural phenomena.  |  |  |

Pennsylvania Context: Examples of Pennsylvania context include local examples of weathering and erosion.

PA Career Ready Skills: Distinguish among and set short-term, mid-range, and long-term goals.

## **Connections to Other Standards Content and Practices**

| Standard Source  | Possible Connections to Other Standard(s) or Practice(s)  |
|--|---|
| Agriculture<br>(AFNR)  | CS.06.01.01.a: Research and explain the foundational cycles in AFNR (e.g., water cycle, nutrient cycle, carbon cycle, etc.).  |
| Science, Environmental<br>Literacy and Sustainability<br>(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.   |
| PA Core Standards: ELA   | CC.1.2.2.B: Ask and answer questions such as who, what, where, when, why, and how to demonstrate understanding of key details in a text. CC.1.2.2.C: Describe the connection between a series of events, concepts, or steps in a procedure within a text. |

## Science, Technology & Engineering, and Environment Literacy & Sustainability (STEELS)



| Standard Source                       | Possible Connections to Other Standard(s) or Practice(s)  |
|---------------------------------------|---|
| PA Core Standards and Practices: Math | MP.2: Reason abstractly and quantitatively. MP.4: Model with mathematics. MP.5: Use appropriate tools strategically. CC.2.1.2.B.1: Use place value concepts to represent amounts of tens and ones and to compare three digit numbers. |
| PA Standards: Social Studies          | 8.1.2.C: Apply sources of historical information.   |
| Educational Technology (ISTE)         | 1.3. Knowledge Constructor: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.              |
| Technology and Engineering (ITEEA)    | STEL-3A: Apply concepts and skills from technology and engineering activities that reinforce concepts and skills across multiple content areas.   |