Grade 2

3.2.2.B Physical Science: Matter and its Interactions

Students who demonstrate understanding can *analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.*

Clarifying Statement: Examples of properties could include, strength, flexibility, hardness, texture, and absorbency.

Assessment Boundary: Assessment of quantitative measurements is limited to length.

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Crosscutting Concepts (CCC)
Analyzing and Interpreting Data Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations. • Analyze data from tests of an object or tool to determine if it works as intended.	**Structure and Properties of Matter** • Different properties are suited to different purposes.	**Cause and Effect** • Simple tests can be designed to gather evidence to support or refute student ideas about causes. ***Connections to Engineering, Technology, and Applications of Science*** **Influence of Engineering, Technology, and Science, on Society and the Natural World** • Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world.

Pennsylvania Context: N/A

PA Career Ready Skills: Identify multiple ways to solve conflicts and practice solving problems.

Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
Agriculture (AFNR)	C3.06.04.02.c: Evaluate and select appropriate tools and equipment to complete AFNR tasks.
Science, Environmental Literacy and Sustainability (NAAEE)	K-4 Strand 2.1.A. Earth's physical systems: Learners describe characteristics of Earth's physical systems, including air, water, and land. They explain how these systems interact with one another and identify changes in the physical environment over time. They provide examples of how physical systems affect living organisms, including humans.
PA Core Standards: ELA	CC.1.4.2.V: Participate in individual or shared research and writing projects. CC.1.4.2.W: Recall information from experiences or gather information from provided sources to answer a question.

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.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs.
PA Standards: Social Studies	6.1.2.C: Explain how choice has consequences.
Educational Technology (ISTE)	1.5. Computational Thinker: Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.
Technology and Engineering (ITEEA)	STEL-2C: Explain that materials are selected for use because they possess desirable properties and characteristics.