3.2.2.C Physical Science: Matter and Its Interactions

Students who demonstrate understanding can make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.

Clarifying Statement: Examples of pieces could include blocks, building bricks, or other assorted small objects.

Assessment Boundary: N/A

**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 construct an evidence-based account for natural phenomena.

**PS1.A: Structure and Properties of Matter**
- Different properties are suited to different purposes.
- A great variety of objects can be built up from a small set of pieces.

**Energy and Matter**
- Objects may break into smaller pieces and be put together into larger pieces, or change shapes.

**Pennsylvania Context:** N/A

**PA Career Ready Skills:** Identify one's own strengths, needs, and preferences.

**Connections to Other Standards Content and Practices**

<table>
<thead>
<tr>
<th>Standard Source</th>
<th>Possible Connections to Other Standard(s) or Practice(s)</th>
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<tbody>
<tr>
<td>Agriculture (AFNR)</td>
<td>CS.06.01.01.a: Research and explain the foundational cycles in AFNR (e.g., water cycle, nutrient cycle, carbon cycle, etc.).</td>
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| Science, Environmental Literacy and Sustainability (NAAEE) | K-4 Strand 1.C. Collecting information: Learners locate and collect information about 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.1.4.2.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.  
CC.1.5.2.A: Participate in collaborative conversations with peers and adults in small and larger groups. |
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| PA Core Standards and Practices: Math   | MP.2: Reason abstractly and quantitatively.  
|                                         | MP.7: Look for and make use of structure.  
|                                         | CC.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs.                                                                                             |
| PA Standards: Social Studies            | 5.2.2.B: Identify a problem and a probable solution.                                                                                                                                 |
| 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-2A: Illustrate how systems have parts or components that work together to accomplish a goal.                                                                                         |