

How Materials Change to Create Something New: April

Unit #:	APSDO-00062880	Duration:	4.0 Week(s)	Date(s):	
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Team:
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Grades:
PK4

Subjects:
Pre School

Unit Focus

In this unit, students will increase their understanding of how materials change and how various materials can be combined to create new things. Students will have opportunities to make predictions and participate in hands-on activities and experiences, such as observing ice melting, making pancakes and butter, working with playdough and clay. Student progress will be continually monitored through observation and analysis of student work, performance and participation. Learning will take place in a variety of instructional formats and structures including center time, morning meeting, learning stations, and read aloud/second circle.

Stage 1: Desired Results - Key Understandings

Established Goals	Transfer	
<p>Connecticut Goals and Standards <i>PK4</i></p> <ul style="list-style-type: none"> Try multiple uses of same materials and observe differing results. <i>C.60.7</i> Understand an increasing variety and specificity of words for objects, actions and attributes encountered in both real and symbolic contexts. <i>L.60.1</i> Use an increasing variety and specificity of accepted words for objects, actions and attributes encountered in both real and symbolic contexts. <i>L.60.4</i> Use more complex words learned through books and personal experiences (e.g., label favorite shirt as chartreuse, or know that a paleontologist studies 	T1 (T1) Wonder about, ask questions, and explore the world around them.	
	Meaning	
	Understandings	Essential Questions
	<p>U1 (U500) One's thoughts, feelings, and experiences can be expressed using music, visual arts, drama, and dance.</p> <p>U2 (U401) Scientific inquiry is a thoughtful and coordinated attempt to search out, describe, explain, and predict natural phenomena.</p> <p>U3 (U402) Conclusions can only be as strong as the quality and quantity of the evidence.</p> <p>U4 (U407) Materials can change when adjustments are made to its temperature.</p>	<p>Q1 (Q400)What questions do I wonder about?</p> <p>Q2 (Q402)How do I/we come up with a plan to test it out? What did I/we find? What should I/we do next?</p> <p>Q3 (Q403)Based on this scenario...What conclusion can I make? How can I describe it?</p> <p>Q4 (Q401)Based on this scenario....What just happened here? How do I show it?</p> <p>Q5 (Q408)What happens when I heat or cool this ___?</p>

<p>dinosaurs). <i>L.60.5</i></p> <ul style="list-style-type: none"> • Use language to share ideas and gain information. <i>L.60.10</i> • Use early developmental spelling. May use one letter for the initial or final sound to represent whole word. <i>L.60.26</i> • Use a variety of tools and materials to represent ideas through the visual arts. <i>CA.60.5</i> • Assume elaborate roles in dramatic play (e.g., may play multiple roles or may stay in character for extended periods of time). <i>CA.60.6</i> • Use materials and props in unique ways and are creative in finding and using materials as props desired for dramatic play. <i>CA.60.7</i> • Define a problem to be solved, including details and limitations to be considered (e.g., "We need to figure out how to reach that shelf, but we aren't allowed to stand on the chairs"). <i>S.60.1</i> • Engage in collaborative investigations to describe phenomena or to explore cause and affect relationships. <i>S.60.2</i> • Gather data by drawing, counting or otherwise documenting observations. <i>S.60.3</i> • Give evidence from observations or investigations. <i>S.60.4</i> • Evaluate the appropriateness of a material for a given purpose based upon its properties. <i>S.60.12</i> • Observe how heating and cooling cause changes to properties of materials (e.g., Ice melts when we bring it inside. Plastic becomes brittle when it is left outside in the cold). <i>S.60.13</i> 	Acquisition of Knowledge and Skill	
	Knowledge	Skills
		<p>S1</p> <p>I can ask a question that I want an answer to.</p> <p>S2</p> <p>I can work with others to create something new.</p> <p>S3</p> <p>I can work with others to describe and record what happened.</p> <p>S4</p> <p>I can explain what happened using my pictures and words.</p> <p>S5</p> <p>I can label my picture using the word (spoken or symbolic).</p> <p>S6</p> <p>I can use details to make my description more clear.</p> <p>S7</p> <p>I can use a variety of tools and materials to create something.</p> <p>S8</p> <p>I can find out what happens when something is heated or cooled.</p>