



<p><b>Lesson:</b> TinyTys™ “Reuse and Repurpose”</p>	<p><b>Teacher:</b></p>
<p><b>CCSS/Aligned STEM:</b></p> <p><b><u>E.L.A. Writing-</u></b>  <b>CCSS.ELA-LITERACY.W.K. 2</b>          Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.</p> <p><b>CCSS.ELA-LITERACY.W.K.3</b>          Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.</p> <p><b>CCSS.ELA-LITERACY.W.K.8</b>          With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p><b><u>NGSS:</u></b>  <b><u>Science Engineering Design-</u></b>  <b>K-2-ETS1-1 &amp; 1-2</b>          Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.</p> <p><b>K-2-ETS1-2</b>          Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.</p> <p><b><u>SCIENCE Structures &amp; Properties-</u></b>  <b>2-PS1-1</b>          Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.</p> <p><b><u>ISTE:</u></b>  <b><u>Creativity and Innovation</u></b>  <b><u>Critical Thinking, Problem Solving, and</u></b>  <b><u>Decision-Making</u></b></p> <p><b><u>DOK:</u></b> Depth of Knowledge Levels 3 &amp; 4  <b>Construction/Design and Extended Thinking</b></p>	<p><b>Lesson Objectives</b></p> <ol style="list-style-type: none"> <li>1. TLW create something using TinyTys™</li> <li>2. TLW repurpose an item from an original model.</li> <li>3. TLW recognize the personal and societal benefit of repurposing materials.</li> <li>4. TLW recognize individual impact on the environment.</li> </ol> <p><b>Materials</b></p> <ol style="list-style-type: none"> <li>1. TinyTys™ Jewelry Kit(s)</li> <li>2. Paper, pencil, markers</li> <li>3. <a href="#">Reuse and Repurpose Plan Handout</a> (teacher should add necklace sketch in “Original” Box before copying)</li> <li>4. Optional: <a href="#">Student-friendly Parts</a></li> <li>5. Optional TinyTys™ animation <a href="http://tinytys.com/">http://tinytys.com/</a></li> </ol>
<p><b>Content</b></p>	<p><b>Teacher/Anecdotal/Reflection Notes</b></p>
<p><b>Anticipatory Set</b>          Teacher asks students if they ever heard the slogan “REDUCE, REUSE, RECYCLE?”</p>	



<p>Optional Show “Reduce, Reuse, Recycle” Song <a href="https://www.youtube.com/watch?v=AOvcW8l3RzE">https://www.youtube.com/watch?v=AOvcW8l3RzE</a> Remind students that Bangle and Tiny are made from repurposed material. If needed show the second half of animation to remind them. Teacher talks about how he/she repurposed something old into something new for a different purpose. After the story, teacher asks students: “Why would making something old into something new make me happy?” “Can you think of a time when you had to reuse something for a different purpose?” “What are some other items that we reused?”</p>	
<p><b>Input</b> <b>Task Analysis</b></p> <ol style="list-style-type: none"><li>1. Teacher introduces use of TinyTys™ to explore an example of reusing and repurposing.</li><li>2. Give each student two each of these TinyTys™ parts: Charm; Pendant; Tiny Ty; Bangle Ty.</li><li>3. Teacher hands out the Reuse and Repurpose Plan Handout.</li><li>4. Instruct them to create a necklace; they may recreate the model or make their own (Possible scenario: They are making a gift for someone)..</li><li>5. When the class is done creating the necklace, the teacher explains that their creation needs to be repurposed for more than one person (Possible scenario: They remember that they need a gift for an additional person).</li><li>6. In the “Repurpose” Box, students make a quick sketch of how they might repurpose the necklace, labeling the new items.</li><li>7. Students create the new items.</li><li>8. Discussion Questions: How would it have been different if we had just thrown the first necklace away and started over with brand new parts? How would it affect you? How would it affect the world? Why is it important to reuse and repurpose</li></ol>	



<p>items in your own home? In the world? Do you think other people in society feel the same way? Why or Why not?</p> <p>9. Teacher prompts student to think of ways they will reuse and repurpose in the future.</p> <p>10. In the Personal Action Plan box, Students draw a picture of themselves reusing/repurposing in their home or neighborhood.</p>	
<p><b>Check for Understanding (Periodically)</b>          What are you creating? How will it be used? How does repurposing your necklace help you? How does it help society? Should people throw things away and start over if they don't like what they have? Why?</p>	
<p><b>Guided Practice</b>          Students are prompted to work on their items, teacher asks students to explain why they made their selections and how they decided the new purpose.</p>	
<p><b>Independent Practice</b>          Students finish recording their new purpose for their item. Students may disassemble their product and reassemble it, using other students as a model. Encourage discussion and idea sharing during this stage. Make individual step changes as needed.</p>	
<p><b>Extension</b>          Students disassemble their product and have another student reassemble it and describe its new purpose.          Students write a sentence describing their action plan illustrated in the “Personal Action Plan.”</p>	