



<p>Lesson: TinyTys™ Shapes and Counting</p>	<p>Teacher:</p>
<p>CCSS/Aligned STEM:</p> <p><u>MATHEMATICS Counting and Cardinality-</u> CCSS.MATH.CONTENT.K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>CCSS.MATH.CONTENT.K.CC.B.4.A When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.</p> <p>CCSS.MATH.CONTENT.K.CC.B.4.B Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>CCSS.MATH.CONTENT.K.CC.B.4.C Understand that each successive number name refers to a quantity that is one larger.</p> <p>CCSS.MATH.CONTENT.K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.</p> <p><u>MATHEMATICS Measurement and Data -</u> CCSS.MATH.CONTENT.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.</p> <p><u>MATHEMATICS Geometry-</u> CCSS.MATH.CONTENT.K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</p> <p>CCSS.MATH.CONTENT.K.G.A.2 Correctly name shapes regardless of their orientations or overall size.</p> <p><u>SCIENCE Physical-Properties and Change-</u> K.P.2.1 Classify objects by observable physical properties (including size, color, shape, texture, weight and flexibility).</p> <p>ISTE: <u>Creativity and Innovation</u> <u>Communication and Collaboration</u> <u>Critical Thinking, Problem Solving, and Decision-Making</u></p> <p><u>DOK:</u> Depth of Knowledge Levels 1, 2 & 3 Recall, Skill/Concept & Construction/Design</p>	<p>Lesson Objectives</p> <ol style="list-style-type: none"> 1. TLW identify various shapes of TinyTys™ pieces. 2. TLW sort TinyTys™ pieces based on shape. 3. TLW count TinyTys™ pieces. 4. TLW estimate the number of pieces needed to build an individual trinket. <p>Materials</p> <ol style="list-style-type: none"> 1. TinyTys™ Jewelry Kit(s) 2. TinyTys™ Pieces separated into bins based on shape (Labeled with word bank words). 3. "Shapes and Counting" Directions Sheet handouts. Example and blank to differentiate for groups as needed.
<p>Content</p>	<p>Teacher/Anecdotal Notes</p>
<p>Anticipatory Set</p>	



<p>Choral Response questions: Can you count to 20 out loud? (Referring to various shapes) Do you know what this shape is?</p>	
<p>Input Task Analysis</p> <ol style="list-style-type: none">1. Give each small group a “Shapes and Counting” Direction sheet appropriate to skill level.2. Instruct small groups to gather the collect number/shape of TinyTys™ pieces listed on the direction sheet (the bins will be organized and labeled based on shape by the teacher prior to the lesson).3. Instruct the groups to return to their tables and to sort the pieces based on shape.4. Instruct students to count how many of each shape they have and report to the class when prompted by the teacher (ie: “Group 1, how many (stars) do you have?” “Group 2, how many (hearts) do you have?”)5. Celebrate the counting of shapes and transition by saying, “Now your group can count up all the pieces to see how many pieces you have in all.”6. Refer small groups back to the “Shapes and Counting” Directions sheet. Instruct them to write the answer to the question at the bottom of the page. Teacher should read the question aloud: “How many pieces in all?”7. Instruct the group to write the answer on the sheet.8. Instruct small groups to split up the pieces so each person in the group can make one trinket (challenge them to use every piece).9. After time needed for each student to complete/ and celebrate/share his/her trinket, instruct small groups to return the pieces to the correct bins.	
<p>Check for Understanding</p>	



<p>(Throughout Lesson) How many shapes does your group need to gather; in which container will your group find that shape? Tell me about the sorting piles your group made. Tell me about what you are making; which shapes/how many (shape) are you using? In which bin should you return this shape.</p>	
<p>Guided Practice Students are prompted to make sorting piles based on shape.</p>	
<p>Independent Practice Students count how many pieces they have in all. Groups will distribute pieces among group members so each student can make his/her own trinket. Students return pieces to proper bins based on shape.</p>	
<p>Extension Students are challenged to compare the number of pieces each group member used to make his/her individual trinket. Group should arrange the trinkets in order of least to most pieces used.</p>	