

**Thoughtful Classroom  
Lesson Ideas**

**Grade 4**

Math
















Polygons with Tangrams Task Rotation

Science

Making a Complete Circuit Task Rotation

## Polygons With Tangrams

### (Task Rotation)

<u>Mastery</u>	<u>Interpersonal</u>																																																
<p>Fill in the chart with all the shapes.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Polygon</th> <th style="padding: 5px;">Number of Sides</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px; text-align: center;">triangle</td> <td style="padding: 5px; text-align: center;">3</td> </tr> <tr> <td style="height: 100px;"></td> <td></td> </tr> </tbody> </table> <p><i>*Teacher Note: You can add columns for number of angles, vertices, etc. Include triangle, square, rectangle, circle, hexagon, octagon, etc.</i></p>	Polygon	Number of Sides	triangle	3			<p>Give a partner only verbal directions to construct a combination polygon you made. (For example, "Put the trapezoid's longest side next to the triangle's shortest side." Then,....)</p>																																										
Polygon	Number of Sides																																																
triangle	3																																																
<u>Understanding</u>	<u>Self-Expressive</u>																																																
<p>Take two of the polygons and compare them.            What is similar?            What is different?</p> <p>Now do this with the rest of the shapes in pairs.</p> <p><i>*Teacher Note: You need to be familiar with tangrams to do this.</i></p>	<p>Combine two or more pieces to create another polygon.            Record in the boxes on the chart.</p> <p><i>*Teacher Note: You can start this one with the whole group.</i></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%;"></th> <th style="width: 15%;"></th> <th style="width: 15%;"></th> <th style="width: 15%;"></th> <th style="width: 15%;"></th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">1 piece</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">2 pieces</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">3 pieces</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">4 pieces</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">5 pieces</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">6 pieces</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding: 5px;">7 pieces</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							1 piece						2 pieces						3 pieces						4 pieces						5 pieces						6 pieces						7 pieces					
																																																	
1 piece																																																	
2 pieces																																																	
3 pieces																																																	
4 pieces																																																	
5 pieces																																																	
6 pieces																																																	
7 pieces																																																	

## Science – 4<sup>th</sup> Grade

### Making a Complete Circuit

(Task Rotation)

<p style="text-align: center;"><b><u>Mastery</u></b></p> <p>List the essential elements needed to make a complete circuit. Label the parts.</p>	<p style="text-align: center;"><b><u>Interpersonal</u></b></p> <p>Write a paragraph describing to a friend how your life would be different if you lived where there was no electricity.</p>
<p style="text-align: center;"><b><u>Understanding</u></b></p> <p>What would you do if your finished circuit didn't light up? Explain how you would check/fix it.</p>	<p style="text-align: center;"><b><u>Self-Expressive</u></b></p> <p>Find as many different ways as you can using a variety of materials to make a complete circuit.</p>