

# nM/-4Mt44L

## 4O-nG4PRGM

<b>Common Core Standards:</b>	<b>Kindergarten Geometry</b> 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> .
<b>Objectives:</b>	<ol style="list-style-type: none"> <li>1. Learn and practice relative positions terms.</li> <li>2. Develop familiarity with the properties of a Rubik's Cube</li> </ol>
<b>Materials:</b>	<ol style="list-style-type: none"> <li>1. 2x2 Rubik's Cube</li> <li>2. Small math manipulatives such as dinosaur or bear counters</li> </ol>
<b>Background Knowledge:</b>	Students will benefit from some prior practice with positional terms. They teacher may also want to explain that the Rubik's Cube is a logical problem solving manipulative where the objective is to rotate the sides of the cube to get the same colored squares all on one side. Students will not be solving the Cube in this lesson.
<b>Procedure:</b>	<p><b>Before class:</b> Decide whether your students will work one-on-one or in partners with their Rubik's Cube.</p> <p><b>With students:</b></p> <ol style="list-style-type: none"> <li>1. Give each student or partner group a Cube. Allow students 2-3 minutes to become familiar with the cube. Students should practice gently twisting the faces of the Cube.</li> <li>2. Give each student or partner group a math manipulative such as a dinosaur or bear counter.</li> <li>3. Model each relative position term by saying the term and showing that position with the dinosaur or bear counter relative to the Rubik's Cube. Students should follow along with their teacher by moving their counter to the correct position: <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</li> </ol> <p>As students gain familiarity with the terms, the teacher will stop modeling the correct relative position with the counters. The teacher will say a relative position term aloud for the class and the students will demonstrate their understanding of that term by moving the counter to the correct relative position.</p>
<b>Notes to Teacher:</b>	<p>Optional Modifications:</p> <p>Give students index cards labeled with each relative position. <b>M3ML</b>  <b>M-3OMA-3EL3EMOM4ALMOMAMA44L4AMA-LGM</b>  <b>33M3OMA-3ILLM-3M-EL3pS3ML</b></p>