

## LEARNING PLAN

<p><b>Exploratory Activities</b> Guess My Rule</p>	<p><b>Concept</b> Patterns and Functions (Informally)</p>
<p><b>Concept Development Activities</b> Use the following from <i>TEXTEAMS Algebra I Institute</i>:</p> <ul style="list-style-type: none"> <li>• 1-124 Rainbow Cube Patterns A</li> <li>• 3-119 Rainbow Cube Patterns B</li> <li>• 1-118 Rainbow Cube Patterns C</li> <li>• 1-119 Rainbow Cube Patterns D</li> <li>• 3-118 Rainbow Cube Patterns</li> <li>• 3-120 Rainbow Cube Patterns</li> <li>• 3-124 Circle Pattern</li> <li>• 1-138 to 1-143 Pattern Block Patterns</li> </ul> <p>Line Graphs (reading information from graphs)</p>	<p><b>Materials and Resources</b> <i>TEXTEAMS Algebra I Institute</i> Line Graphs handout Rainbow Cubes Pattern Blocks Color Tiles Cuisenaire Rods Toothpicks Guess and Check Patterns <i>Concepts in Algebra: A Technological Approach</i> Neufeld &amp; Associates: <i>Understanding Math</i></p>
<p><b>Basic Facts and Standard Algorithms Formalized</b> Independent and dependent variables From <i>Understanding Math: Graphing</i></p> <ul style="list-style-type: none"> <li>• Generalize patterns</li> <li>• Domain &amp; range</li> <li>• Find function values</li> <li>• Representations: tabular, graphic, verbal, symbolic</li> </ul> <p><i>Algebra I Explorations and Applications</i>: p. 30 Exploration Assign problems from Sec. 2.3, 2.5, 2.6, 3.4, 2.4, 4.1, 3.6</p>	<p><b>Originality and Creativity</b> <i>Student Products</i></p> <p><b>Written</b> Write a journal article defending the use of rainbow cube patterns in the algebra class.</p> <p><b>Verbal</b> Design and conduct interviews concerning student feelings about investigating patterns.</p>
<p><b>Assessment</b> Demonstration: "Building Bridges" with Cuisenaire Rods</p> <p>Written: <i>Concepts in Algebra: A Technological Approach</i> Situation 3.2 (pp. 16-17)</p>	<p><b>Kinesthetic</b> Investigate (and share) patterns found in music. Invent patterns using rainbow cubes, color tiles, or pattern blocks.</p>
<p><b>TEKS/EOC</b> b.3.A, b.1.A, b.3.B, c.1.B, b.2.B, b.4.A, b.1.C, b.1.D, c.1.A, b.2.A, c.1.C <b>Test Items from Algebra I EOC</b> <a href="#">Spring 2000</a>: 3,4,9,21,27, 32, 35 <a href="#">Spring 2002</a>: 10</p>	<p><b>Visual</b> Design cartoons involving patterns in nature, politics, etc.</p>