

Observation Sheet~ Non-linear Tile Exploration

Task	Conditions	Observations
<p>Task 1</p> <p>Dave has been working with tile patterns and came up with the following tile pattern.</p> <p>How is this pattern growing?</p> <p>What would the figure before figure 1 look like?</p> <p>What could we call it?</p>	<p>Record student thought about growth.</p> <p>Record students' discussion about figure 0.</p>	
<p>Task 2</p> <p>You have 30 seconds to study the pattern and then share with your group how you see the pattern is growing.</p> <p>Now, create figure 0 and figure 4 on your paper or with the tiles.</p> <p>Record the number of tiles in figures 0-4 and compare with your group.</p> <p>How many tiles are in figure 100? Show your results by sketching figure 100 and show support for your findings.</p>	<p>Record student thought about growth. Tally each time each student contributes to discussion.</p> <p>Record student dialogue and methods to create the shapes.</p> <p>List student comments or record body language indicating students are becoming less motivated.</p> <p>Record mathematical vocabulary. Tally each time each student contributes to discussion.</p>	
<p>Task 3</p> <p>Write an expression for the number of tiles in figure n: n being any figure number</p> <p>Verify that your expression works for figure 3.</p>	<p>Record student vocal observations referring to non-linear characteristics</p> <p>Tally each time each student contributes to discussion.</p> <p>List student comments or record body language indicating students are becoming less motivated.</p>	
<p>Task 4</p> <p>It's time to share our findings. Everyone please come up when your team presents. (Choose groups to present their 100 figure and then different groups to present their expressions).</p>	<p>Record that each student participates in justifying their findings.</p> <p>Record various representations of rules.</p> <p>Record student's vocal observations referring to non-linear characteristics</p>	
<p>Closure</p> <p>Describe how your pattern differs from the pattern shown at the beginning?</p>	<p>Collect students' resource pages.</p> <p>Record any references to non-linear characteristics</p>	