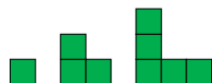# Activity 7 Assessment
Patterns in Whole Numbers

Generalizing and Representing Increasing and Decreasing Patterns

Recognizes that a pattern increases or decreases	Identifies how a pattern changes (describes rule)	Represents patterns symbolically and writes rules using addition or subtraction	Extends patterns using repeated addition and subtraction
"The terms are getting bigger."	"It grows by 2 tiles each time."	1, 3, 5, … "Start at 1 and add 2 each time." 17, 14, 11, … "Start at 17 and take away 3 each time."	$357 - 9 = 348$ $357 - 12 = 345$ $357 - 15 = 342$ $357 - 18 = 339$ "I added 3 to the number taken away and subtracted 3 from the difference."

Observations/Documentation

Finds missing terms or errors in patterns	Creates patterns and explains pattern rules	Uses patterns to solve problems	Identifies and extends patterns involving multiplication
3, 8, 13, 18, 22, 28, …. "Start at 3 and add 5 each time. $18 + 5 = 23$, so 22 should be 23." 32, 28, ★, 20, 16, 12, 8, …. "Start at 32 and subtract 4 each time. $28 - 4 = ★$, so ★ is 24."	"85, 75, 65, 55, …. I started with my house number and took away 10 each time."	"If I save 2 quarters a day, when will I have 10 quarters? 2, 4, 6, 8, 10 I will have 10 quarters after 5 days."	<table><tr><td>Input</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>Output</td><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td></tr></table> "Each input number is multiplied by 2."

Observations/Documentation