

# Activity 3 Assessment

## Creating Patterns

### Generalizing and Representing Increasing and Decreasing Patterns

Recognizes that a pattern increases or decreases



"The terms are getting bigger."

Identifies how a pattern changes (describes rule)



"It grows by 2 tiles each time."

Represents patterns symbolically and writes rules using addition or subtraction

1, 3, 5, ...  
"Start at 1 and add 2 each time."  
17, 14, 11, ...  
"Start at 17 and take away 3 each time."

Extends patterns using repeated addition and subtraction

1, 3, 5, 7, 9, 11, ...  
"I added 2 over and over."  
17, 14, 11, 8, 5, 2  
"I subtracted 3 over and over."

### Observations/Documentation

Finds missing terms or errors in patterns

3, 8, 13, 18, 22, 28, ....  
"Start at 3 and add 5 each time.  
 $18 + 5 = 23$ , so 22 should be 23."

Creates patterns and explains pattern rules

"85, 75, 65, 55, ....  
I started with my house number and  
took away 10 each time."

Uses patterns to solve problems

"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."

Identifies and extends patterns involving multiplication

Input	1	2	3	4	5
Output	2	4	6	8	10

"Each input number is  
multiplied by 2."

### Observations/Documentation