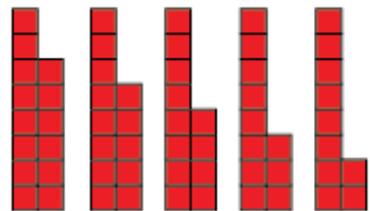


# Activity 1 Assessment

## Investigating Visual Sequences

### Investigating Arithmetic Sequences

Identifies how an arithmetic sequence increases or decreases and describes the initial term and constant change

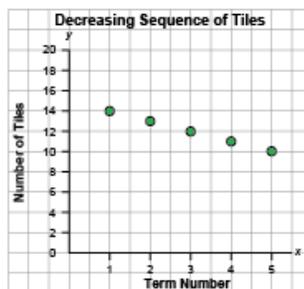


Term 1   Term 2   Term 3   Term 4   Term 5

“This is a decreasing sequence.  
Initial term: 14 red tiles;  
Constant change: take away 1 red tile.”

Represents arithmetic sequences in tables of values and on graphs

Term Number	Number of Tiles
1	14
2	13
3	12
4	11
5	10



“The table and graph show the number of tiles decreases by 1 each time. The points on the graph lie on a straight line that goes down to the right.”

Identifies a rule that relates the positions and terms of an arithmetic sequence

Term Number	Number of Tiles
1	14
2	13
3	12
4	11
5	10

“By looking at the table, I see that the number of tiles is equal to 15 minus the term number.”

### Observations/Documentation

# Activity 1 Assessment

## Investigating Visual Sequences

### Investigating Arithmetic Sequences (cont'd)

Writes an algebraic expression that relates the positions and terms of an arithmetic sequence

Term Number	Number of Tiles
1	14
2	13
3	12
4	11
5	10

“The number of tiles is equal to 15 minus the term number. I can write this rule as  $15 - n$ , where  $n$  represents the term number.”

Determines the missing term in an arithmetic sequence (using expression)

Term Number	Term Value
1	8
2	16
3	?
4	32
5	?
6	48

“Rule: Multiply the term number by 8 to get the term value. I can write this rule as:  $8n$ , where  $n$  represents the term number.  
Term 3:  $8n = 8 \times 3$ , or 24  
Term 5:  $8n = 8 \times 5$ , or 40.”

Fluently identifies, creates, and extends various arithmetic sequences to solve real-life problems

Box	Cost to Ship (\$)
1	3.50
2	7.00
3	10.50

How much would it cost to ship 9 boxes?

“To determine the shipping cost, multiply the number of boxes by \$3.50. I would use the expression  $3.5n$ , where  $n$  is the number of boxes:  
 $3.5n = 3.5 \times 9$ , or 31.5  
So, the cost to ship 9 boxes is \$31.50.”

### Observations/Documentation