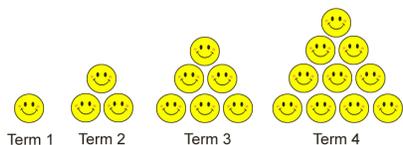


# Activity 3 Assessment

## Representing Arithmetic Sequences

### Investigating Increasing and Decreasing Sequences

Recognizes increasing and decreasing sequences in multiple representations.



“That is an increasing sequence because the number of happy faces increases with each term.”

Creates and explains increasing and decreasing sequences, including numerical sequences.

“The happy faces form equilateral triangles. We start with 1 happy face, add 2 happy faces, then increase the number added by 1 each time.”

Expresses a concrete or pictorial sequence as a number sequence.

“The number sequence is:  
1, 3, 6, 10, ...”

Recognizes and describes increasing and decreasing arithmetic sequences.

1, 3, 5, 7, ...

“This is an increasing arithmetic sequence as 2 is added each time.  
Initial term: 1.  
Constant change: Add 2.”

### Observations/Documentation

# Activity 3 Assessment

## Representing Arithmetic Sequences

Investigating Increasing and Decreasing Sequences (cont'd)			
<p>Writes the first 5 terms of an arithmetic sequence given the initial term and constant change.</p> <p>“Initial term: 30. Constant change: Subtract 3. 30, 27, 24, 21, 18, ...”</p>	<p>Recognizes and describes increasing and decreasing geometric sequences.</p> <p>2, 4, 8, 16, 32, ...</p> <p>“This is an increasing geometric sequence as a term is multiplied by 2 to get the next term. Initial term: 2. Constant change: Multiply by 2.”</p>	<p>Writes the first 5 terms of a geometric sequence given the initial term and constant change.</p> <p>“Initial term: 2. Constant change: Multiply by 3. 2, 6, 18, 54, 162, ...”</p>	<p>Fluently recognizes and describes different increasing and decreasing sequences and uses them to solve problems.</p> <p>It takes Sami 40 min to make 1 bracelet. How many bracelets can Sami make in 4 h?</p> <p>“This is an increasing arithmetic sequence. Initial term: 40. Constant change: + 40. 40, 80, 120, 160, 200, 240 4 h = 240 min Sami can make 6 bracelets. “</p>
Observations/Documentation			