



## Mini-Map for M.EE.7.EE.2

Subject: Mathematics

Expressions and Equations (EE)

Grade: 7

### Learning Outcome

DLM Essential Element	Grade-Level Standard
<b>M.EE.7.EE.2</b> Identify an arithmetic sequence of whole numbers with a whole number common difference.	<b>M.7.EE.2</b> Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.

### Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Arrange objects in a specific order by following a specific rule (e.g., arrange objects from the largest to the smallest size). Group like items by attributes such as size, shape, and color. Contrast or distinguish objects based on attributes such as shape, size, texture, and numerical pattern.	Recognize patterns (i.e., repeating, growing, shrinking) involving numbers or letters (e.g., a, b, b, a, b, b...; 2, 5, 8, 11...). Identify a sequence as an ordered list of numbers that adheres to a common rule between corresponding numbers (e.g., 2, 4, 6, 8...).	Recognize a growing pattern as a pattern that increases (e.g., 3, 6, 9, 12...), and a shrinking pattern as a pattern that decreases (e.g., 12, 10, 8...).	Recognize arithmetic sequences as sequences where the difference between two consecutive terms is constant (e.g., 1, 4, 7, 10...).	Recognize the recursive rule in arithmetic sequences by determining how each term in the sequence differs from the preceding term (e.g., the recursive rule in the sequence 2, 4, 6, 8... is "add 2").

## Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

### *How is the Initial Precursor related to the Target?*

In order to identify arithmetic sequences, students begin by learning to recognize what is the same and different between familiar items, such as color, shape, quantity, size, texture, and pattern. Educators should take care to use attribute words (e.g., circle/square, more/less/same, rough/smooth, red, green, red, green) while defining and demonstrating their meaning. While students do not need to say these words, they do need to learn the meanings. Educators will also provide activities in which students work on grouping two or more items in the same set based on an attribute and ordering the items by size or shape.

### *How is the Distal Precursor related to the Target?*

As students develop their understanding of attributes and work toward arithmetic sequences, educators provide interactive lessons around patterns using attributes like shape, size, and color. At this level, students are also expected to recognize symbolic (letter and number) patterns. This also requires that students recognize numerals in order. (i.e., 1, 2, 3...). Educators should take care to use number names while defining and demonstrating symbolic sequences. While students do not need to say these words, they do need to learn the meanings and the sequence.

## Instructional Resources

Released Testlets
See the <a href="#">Guide to Practice Activities and Released Testlets</a> .
Using Untested (UN) Nodes
See the document <a href="#">Using Mini-Maps to Plan Instruction</a> .

[Link to Text-Only Map](#)

**M.EE.7.EE.2** Identify an arithmetic sequence of whole numbers with a whole number common difference.

