

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

## 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**



### Link to Text-Only Map



