

Mini-Map for M.EE.5.OA.3

Subject: Mathematics Operations and Algebraic Thinking (OA) Grade: 5

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.5.OA.3 Identify and extend numerical patterns.	M.5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Group together objects	Recognize patterns (or	Recognize a repeating	Communicate the next	Predict an element in a
by attribute values such	cycles) that exist in	pattern as a pattern	term in a repeating,	repeating, growing, and
as shape or size (e.g.,	nature (e.g., seasons	that has a core unit	growing, and shrinking	shrinking pattern by
group together a	occur in a pattern, day	repeated over and over	pattern, consisting of	analyzing a given
square, a rectangle, and	and night occur in a	(e.g., 1, 1, 2, 1, 1, 2).	numerals or letters, by	pattern, determining its
a rhombus, as they all	pattern) or in everyday	Determine the core unit	recognizing the core	core unit or the pattern
have four sides).	life (e.g., music, P.E.,	in a pattern that	unit or the pattern rule	rule, and applying it
Contrast or distinguish	and art classes occur in	repeats over and over	and applying it to the	beyond just the next
objects based on	a pattern in school).	again. Recognize a	pattern (e.g., the	term (e.g., the pattern
attributes such as		growing pattern as a	pattern rule in the	rule in the pattern 3, 6,
shape, size, texture, and		pattern that increases	pattern 3, 6, 9, 12 is	9, 12 is "add 3," so the
numerical pattern.		(e.g., 3, 6, 9, 12) and a	"add 3," so the next	sixth term in the
Order objects by		shrinking pattern as a	term in the pattern is	pattern equals 18).
following a specific rule		pattern that decreases	12 + 3 equals 15).	
(e.g., arrange three		(e.g., 12, 10, 8).		
objects with different		Identify the pattern rule		
sizes from the smallest		in growing and		
to largest).		shrinking patterns by		

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
		determining how each		
		step in a pattern differs		
		from the preceding		
		step.		

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target? In order to understand and work with patterns, students begin by learning to notice what is new. The educator draws the students' attention to new objects or stimuli, labels them (e.g., "these are two red cubes and two blue cubes," "you have two fidgets; one is big and one is small but they are both fidgets") and the student observes, feels, or otherwise interacts with them. Educators encourage students to begin placing like objects together, drawing attention to the characteristics that make an item the same or different.

How is the Distal Precursor related to the Target?

As students develop their awareness of attributes and putting like objects together, educators will draw the students' attention to patterns in words, symbols, numbers, images, routines, and the environment, allowing the student to observe, feel, or otherwise interact with the patterns.

Instructional Resources



Link to Text-Only Map



M.EE.5.OA.3 Identify and extend numerical patterns.