

Mini-Map for M.EE.6.EE.3

Subject: Mathematics Expressions and Equations (EE) Grade: 6

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.6.EE.3 Apply the properties of addition to identify	M.6.EE.3 Apply the properties of operations to generate
equivalent numerical expressions.	equivalent expressions.

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Combine two or more	Represent addition or	Apply commutative	Create equivalent	Recognize or generate
sets of objects to form a	subtraction word	(e.g., 3 + 4 = 4 + 3) and	expressions by applying	an equivalent
new set. Compare two	problems or models	associative [e.g., 2 + (3	commutative and	expression involving
or more sets containing	with equations (e.g., 8	+ 5) = (2 + 3) + 5]	associative properties	addition or subtraction
objects to communicate	marbles + 3 marbles =	properties of addition	of addition (e.g., the	operations using
whether a set has the	11 marbles). Recognize	to add two or more	expression 5 + 8 is equal	commutative and
same, different, or an	that the unknown	numbers. Evaluate an	to 8 + 5 due to the	associative properties
equal number of	quantity in an equation	equation to be true or	commutative property	of addition and
objects than the other	is represented using a	false by determining	of addition).	multiplication [e.g.,
set.	symbol or letter (e.g., 5	whether the numerical		recognize that the
	+ <i>b</i> = 8).	value on both sides of		expression (8 + 6) x 5 is
		an equation is the same		equivalent to 5 x (6 +
		or different (e.g.,		8)].
		analyze whether 5 + 7 =		
		8 + 4).		

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target? Understanding how to evaluate equations and using the properties of addition to create equivalent expressions requires a student to be able to recognize that two or more sets or groups of items exist. Work on this skill using a variety of sets. Help students recognize when items are grouped together into a set or separated out. The educator presents a set, labels it (e.g., two balls, one marker, three CDs), counts the items, labels it again, and encourages students to use numbers to label and count the separate sets. Then, combine the sets, give it a new label, and count the set.

NOTE: Educators can work on the Initial Precursor level using the sets of numbers that students working at the Target level are adding and subtracting. How is the Distal Precursor related to the Target? As students begin to understand labeling and counting small sets, they begin to use the number sequence and become more adept at tracking individual objects. Work on this skill using a variety of sets, labeling and counting the sets, and moving items in and out of the sets, labeling and counting the set again. Additionally, the educators will pair those sets with the symbolic representations for addition and subtraction (e.g., 3 + 2 = ?, 3 - 2 = ?).

NOTE: Educators can work on the Distal Precursor level using the sets of numbers that students working at the Target level are adding and subtracting.

Instructional Resources

Released Testlets		
See the <u>Guide to Practice Activities and Released Testlets</u> .		
Using Untested (UN) Nodes		
Using Untested (UN) Nodes		



M.EE.6.EE.3 Apply the properties of addition to identify equivalent numerical expressions.