Mini-Map for M.EE.4.OA.3

Subject: Mathematics
Operations and Algebraic Thinking (OA)
Grade: 4

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.4.OA.3 Solve one-step real-world problems using addition or subtraction within 100.	**M.4.OA.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

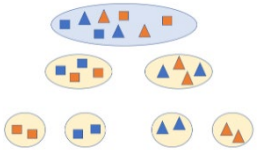
Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Combine two or more sets of objects to form a new set. Divide a set of 10 or fewer objects into two or more distinct subsets (e.g., dividing a set containing 10 objects into two subsets containing 4 and 6 objects).	Demonstrate understanding of addition by combining the objects of two or more sets, and demonstrate understanding of subtraction by removing some objects from a larger set.	Find the unknown sum (e.g., 5 + 8 = ?) or the missing addend (e.g., 6 + ? = 10) in an addition equation. Find the unknown difference in a subtraction equation (e.g., 12 - 7 = ?).	Solve word problems with numbers up to 100 using addition (e.g., Johnny has 25 suckers and buys 15 more; how many does he have now?) or subtraction (e.g., Johnny has 90 suckers and gives 20 away; how many does he have left?).	Solve two-step addition or subtraction word problems using an addition or subtraction strategy (e.g., Johnny has 25 suckers and buys 15 more, then he gives 10 to his brother; how many does he have now?).

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

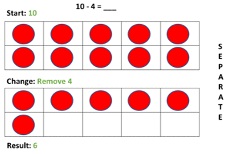
How is the Initial Precursor related to the Target?

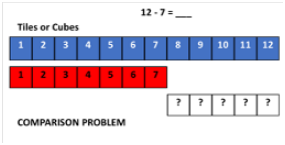
The knowledge needed to solve addition and subtraction real-world problems links back to an understanding of how to create sets, but it also requires learning to manipulate sets (i.e., combining and separating or partitioning). Provide students many opportunities to take a set of objects (e.g., tiles, linking cubes, buttons) and separate them based on a given characteristic (e.g., shape, color, size) into two distinct sets, then separate them again based on another characteristic. Guide students to notice how the set size changes each time the educator combines or partitions the sets.

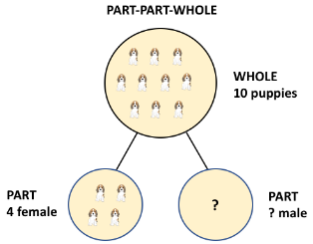


How is the Distal Precursor related to the Target?

As students gain an understanding of how to group and manipulate items into sets, educators will begin to help students connect their knowledge of sets and counting to addition and subtraction. Educators will provide multiple experiences using the various addition and subtraction problem types (e.g., joining, separating, part-part-whole, and comparison problems).





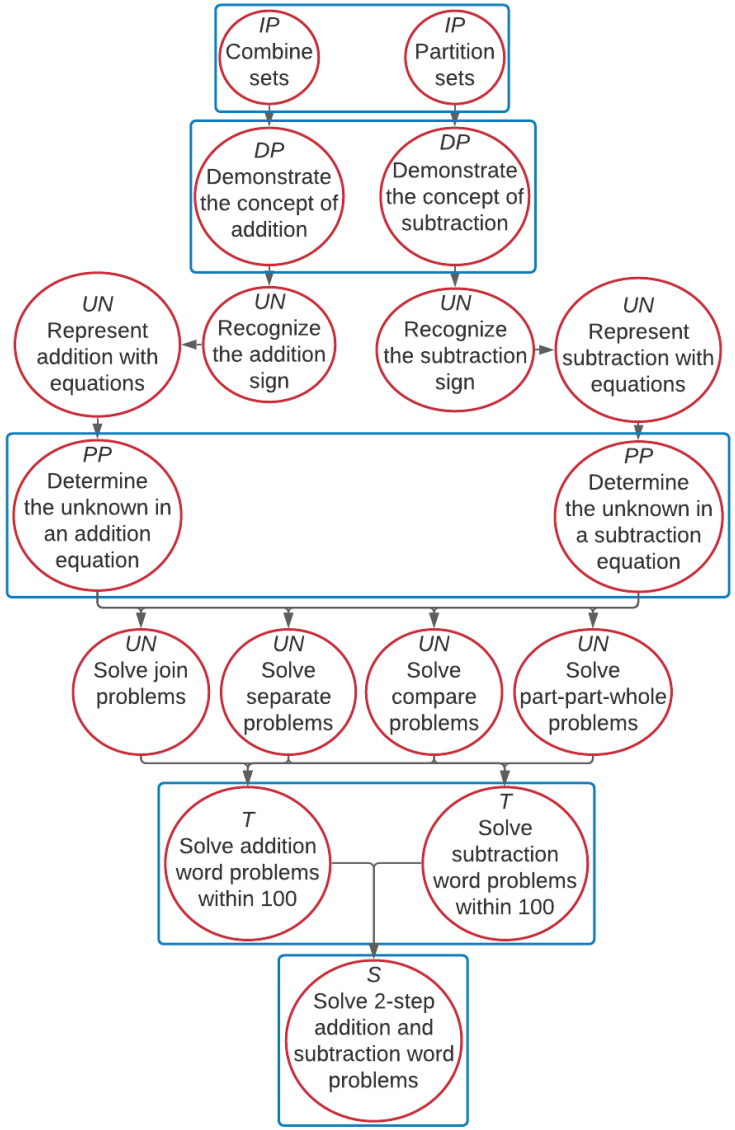


Instructional Resources

Released Testlets
See the Guide to Practice Activities and Released Testlets.
Using Untested (UN) Nodes
See the document Using Mini-Maps to Plan Instruction.

Link to Text-Only Map

M.EE.4.OA.3 Solve one-step real-world problems using addition or subtraction within 100.



Map Key	
IP	Initial Precursor
DP	Distal Precursor
PP	Proximal Precursor
T	Target
S	Successor
UN	Untested

Boxes indicate tested nodes