

Mini-Map for M.EE.3.OA.1-2

Subject: Mathematics

Operations and Algebraic Thinking (OA)

Grade: 3

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.3.OA.1-2 Use repeated addition to find the total number of objects and determine the sum.	M.3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7. M.3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Communicate understanding of "separateness" by recognizing objects that are not joined together. Communicate understanding of set by recognizing a group of objects sharing an attribute. Communicate understanding of a subset by recognizing a subset as a set or group of objects within a	Combine two or more sets, containing objects, to form a new set. Combine two parts (e.g., blocks, toys, or shapes) to form a new whole. Demonstrate addition by combining the objects belonging to two or more sets, and communicate that the total number of objects in the new set is called the sum.	Use models, such as mathematical equations (e.g., $5 + 5 + 5 = 15$), sets of manipulatives, or number line diagrams to represent a repeated addition problem.	Solve repeated addition problems by representing the problem using an equation and finding the sum using an addition strategy, such as skip counting.	Demonstrate multiplication by combining multiple sets containing the same number of objects. Communicate understanding that the number of sets times the number of objects in each set equals the total number of objects.

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
larger set that share an attribute.				

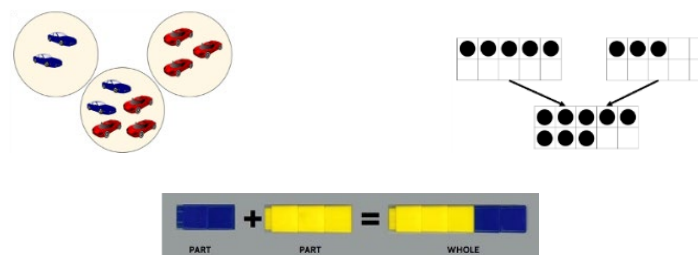
Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

In order to use repeated addition to solve problems, students must first learn to organize items into groups/sets based on a common characteristic such as size, color, shape, texture, or flavor. Students learn how to sort items by separating a group of items into two groups (e.g., vehicles and animals). As students gain comfort sorting items into sets, they are encouraged to use their language to convey their thought process by identifying and naming the characteristic that determines the set (e.g., wheels and legs). Activities that require students to engage actively with the items will foster the students' understanding of set, subsets, and separateness (e.g., the game "one of these things is not like the other"; highlighting one characteristic in a group of similar items [e.g., color] by which the items will be grouped; incorporating creating sets into everyday activities [e.g., during clean up time students place items into one of two bins based on a designated characteristic]).

How is the Distal Precursor related to the Target?

As students gain an understanding of how to group items into sets, educators will begin to help students connect their knowledge of sets with their knowledge of counting. Educators will provide multiple experiences counting sets and combining sets using multiple models. The following are examples of models.

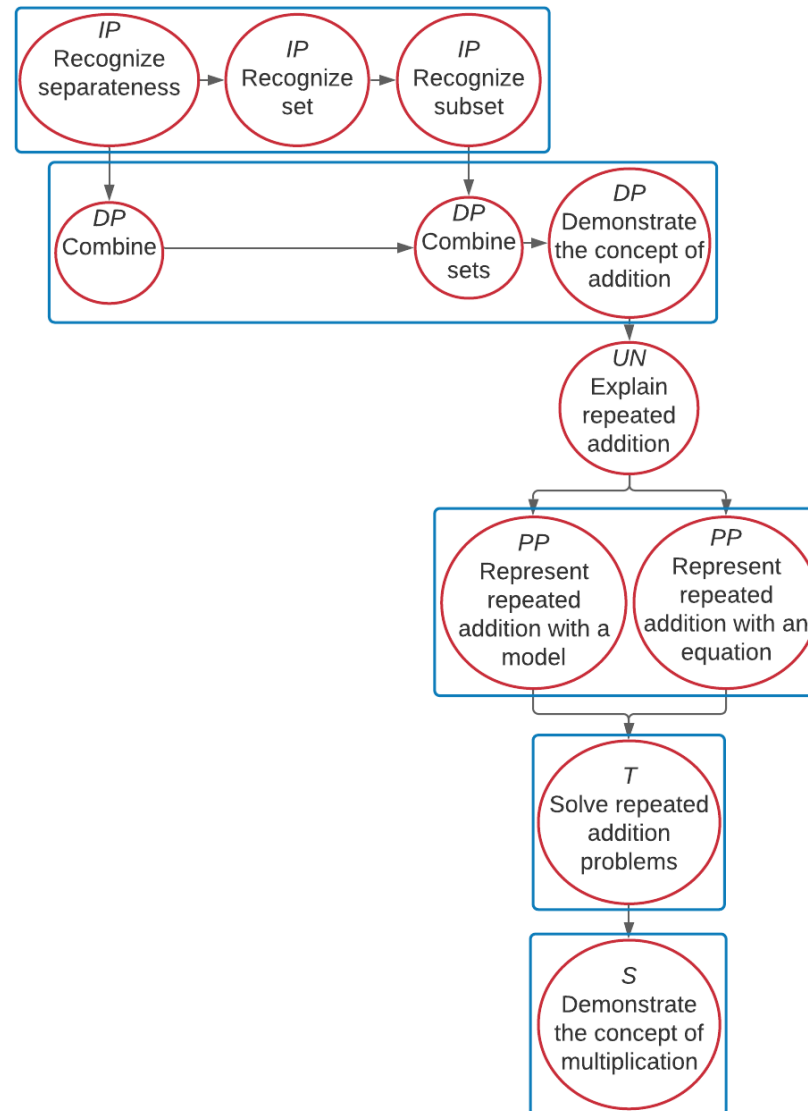


Instructional Resources

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.3.OA.1-2 Use repeated addition to find the total number of objects and determine the sum.



Map Key	
IP	Initial Precursor
DP	Distal Precursor
PP	Proximal Precursor
T	Target
S	Successor
UN	Untested
Boxes indicate tested nodes	