## Math: Grade 3

### M.EE.3.OA.1-2

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| **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 ÷ 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 | **M.EE.3.OA.1-2** Use repeated addition to find the total number of objects and determine the sum | **Initial Precursor**  
- Recognize subset  
- Recognize set  
- Recognize separateness  
**Distal Precursor**  
- Demonstrate the concept of addition  
- Combine sets  
- Combine  
**Proximal Precursor**  
- Represent repeated addition with an equation  
- Represent repeated addition with a model  
**Target**  
- Solve repeated addition problems  
**Successor**  
- Demonstrate the concept of multiplication |

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### How is the Initial Precursor related to the Target?

**Initial Precursor:** 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?

**Distal Precursor:** 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.

A diagram showing the relationship of nodes in the mini-map appears below.

**Key to map codes in upper right corner of node boxes:**

- **IP** - Initial Precursor
- **SP** - Supporting
- **DP** - Distal Precursor
- **S** - Successor
- **PP** - Proximal Precursor
- **UN** - Untested
- **T** - Target
M.EE.3.OA.1-2 Use repeated addition to find the total number of objects and determine the sum.