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

Subject: Mathematics
Number and Operations in Base Ten (NBT)
Grade: 3

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.3.NBT.3 Count by tens using models such as objects, base ten blocks, or money.	**M.3.NBT.3** Multiply one-digit whole numbers by multiples of 10 in the range 10– 90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
In a series of events, identify an event as occurring "before" or "after" another event.	Communicate understanding that numbers occur in a pattern. For example, the numbers 20 to 29, 30 to 39, or 50 to 59 follow a pattern, where each number is expressed by naming the decade number and then the digit number [i.e., 24 is expressed as twenty (decade number) four (digit number)].	Communicate number words 1 to 30 in numerical order verbally. Start at a number, one or otherwise, and count objects to 30 by assigning a single number word to each object. While counting objects up to 30, demonstrate an understanding that (i) it does not matter where you start or in what order you count, (ii) the number of objects in a set remains the same, and (iii) the last number	Demonstrate skip counting by multiples of 10 to count objects up to 40 [(e.g., arrange objects up to 40 in groups of 10 objects, and count the total number of objects using multiples of 10 (i.e., 10, 20, 30, 40)].	Demonstrate skip counting by tens, starting at a multiple of 10 (e.g., 30, 40, 50, 60). Use this understanding of counting by tens to count dimes and 10-dollar bills, and communicate the total value of a set (e.g., 10 + 10 + 10 dollar bills equal 30 dollars). Communicate an understanding of repeated addition as adding the same numeral a given number of times (e.g., 3 + 3 + 3 + 3 means adding 3 four times).

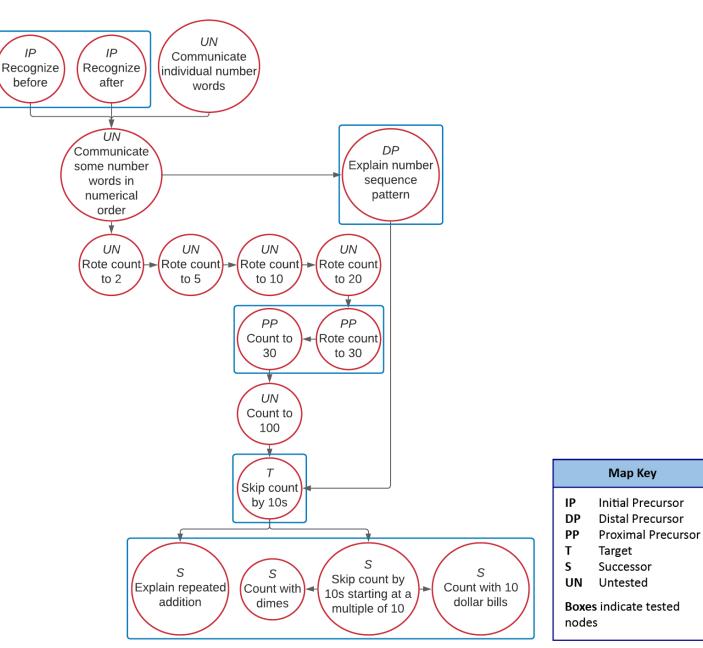| Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
		counted equals the total number of objects.		

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

In order to fully understand the number sequence and skip counting, students begin by counting objects in a one-to-one fashion. Then, students use small collections to make comparisons (e.g., 3 items is more than 2 items because you have to count further). Once students can count at least 3 items, educators begin introducing the positional words before and after. A powerful way to teach these concepts is to incorporate them into daily routines. For example, lining classmates up to go somewhere, lining up familiar items, following a schedule, and using the words "before" and "after" to describe the relative location of the people, objects, and events. During math, educators will describe the location and the characteristic of the item being discussed (e.g., the square comes before the circle; number 2 is after number 1; in this pattern, blue is before red).

How is the Distal Precursor related to the Target?

Students will continue to build their familiarity with the counting sequence enabling them to have number-before and number-after knowledge (e.g., when asked "What comes after 5?" the student is able to indicate 6 without having to count up from 1; however, they still may use the count sequence to get a running start: 4, 5, 6). Educators provide students with many opportunities to make close comparisons utilizing models (e.g., ten-frame, number line, sets) so they have a visual or tactual way to compare small collections (e.g., Which is more? 7 or 8; 3 or 4; 9 or 10). The models help students see that two is one more than one, and three is one more than two. This will help them build the concept that each number in the count sequence is one more than the previous number.

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.

M.EE.3.NBT.3 Count by tens using models such as objects, base ten blocks, or money.

Map Key

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

Boxes indicate tested nodes