Mini-Map for M.EE.5.NBT.6-7
Subject: Mathematics
Number and Operations in Base Ten (NBT)
Grade: 5

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.5.NBT.6-7 Illustrate the concept of division using fair and equal shares.	**M.5.NBT.6** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. **M.5.NBT.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

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	Recognize two sets that contain the same number of objects, and name those sets as "equal" sets. Communicate understanding that "same amount" means "equal." Create a set that contains the same number of objects as the given set.	Divide a set of 12 or fewer objects into two or more distinct subsets. (These subsets may or may not contain an equal number of objects.)	Divide a set containing 10 or fewer objects into equal subsets (e.g., divide a set consisting of 10 counters into two subsets with 5 counters each).	Communicate understanding of division as total number of objects (i.e., dividend) divided by number of groups (i.e., divisor) equals number of objects in each group (i.e., quotient) (e.g., 20/5 = 4). Understand that division is similar to repeated subtraction,

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subset as a set or group of objects within a larger set that share an attribute.				where a single number (i.e., divisor) is subtracted repeatedly from a given number (i.e., dividend) and the quotient equals the number of times the number is subtracted (e.g., 20/5 = 20 - 5 - 5 - 5 - 5 = 0; thus, the quotient = 4).

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

In order to understand division, students must learn to organize items into groups/sets based on a common characteristic such as size, color, shape, or texture. 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, 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 "concentration" where the cards highlight one characteristic in a group of similar items [e.g., color] by which the items are grouped; incorporating creating sets into everyday activities [e.g., during independent reading, the teacher gives a student a pile of books and asks them to create two sets, helping the student determine the criteria they want to use to sort them, such as books I want to read/books I don't want to read; bugs/dogs; sports/gaming]).

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 (see below for examples). Educators also need to introduce the concept of equal sets using the students' background knowledge of same and different.
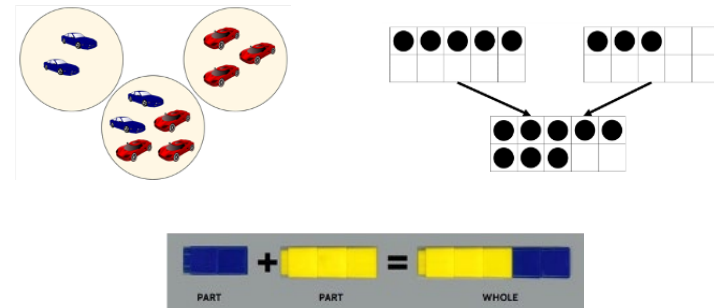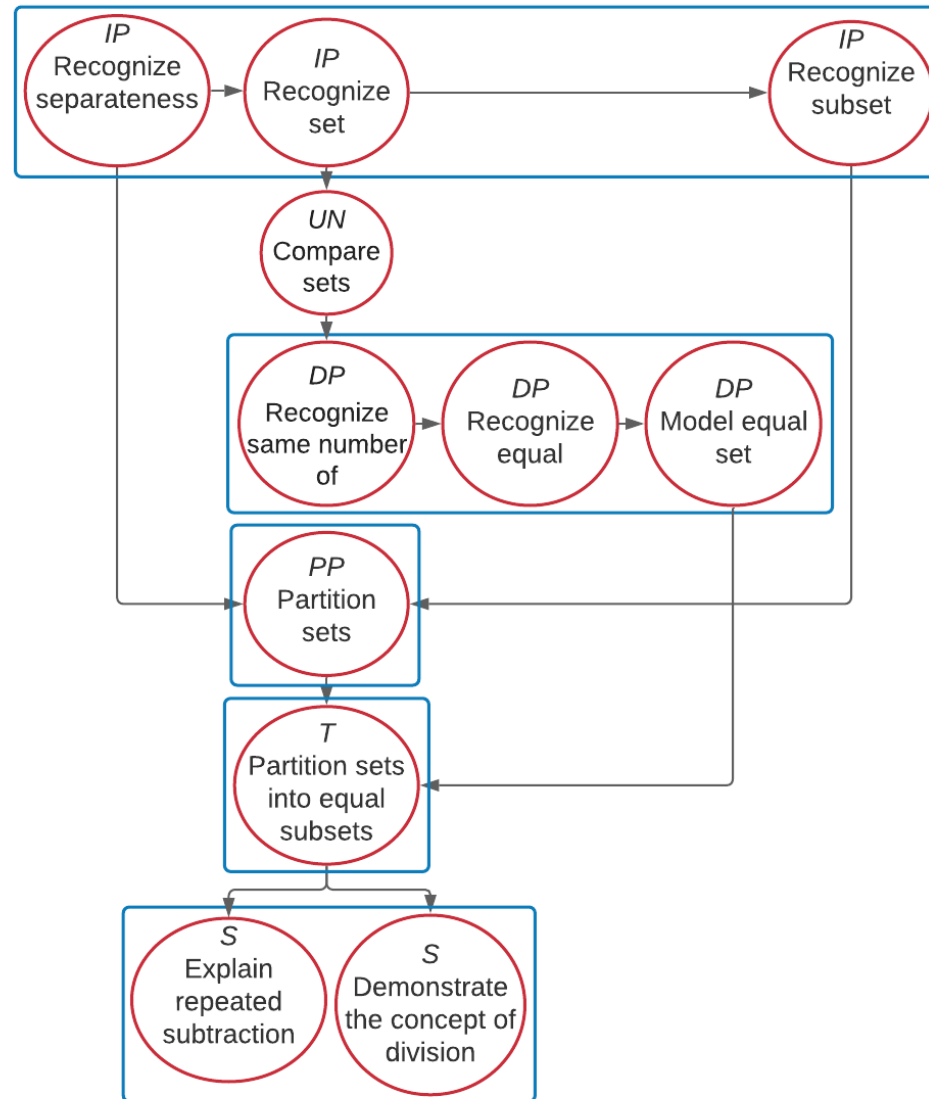
Instructional Resources

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.5.NBT.6-7 Illustrate the concept of division using fair and equal shares.

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