Mini-Map for M.EE.8.NS.2.b

Subject: Mathematics
The Number System (NS)
Grade: 8

Learning Outcome

| DLM Essential Element	Grade-Level Standard
M.EE.8.NS.2.b Compare quantities represented as decimals in real-world examples to hundredths.	**M.8.NS.2** Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2).

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Recognize separateness as objects that are not joined together.	Recognize a set model that represents one-tenth or multiple tenths, such as two-tenths, five-tenths, or eight-tenths.	Represent a decimal to tenths (e.g., 5.2) or hundredths (e.g., 7.68) as a fraction (i.e., 52/10 and 768/100, respectively).	Compare two decimals to the hundredths place using symbols (i.e., =, <, >) to show that one is greater than, less than, or equal to the other.	Compare two decimals to the thousandths (e.g., 1.050 and 1.762) using symbols (i.e., =, <, >) to show that one is greater than, less than, or equal to the other (e.g., 1.050 < 1.762).

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

Representing fractions as decimals requires a student to be able to recognize that two or more sets or groups of items exist. Work on this skill using a variety of sets. Help students recognize when items are grouped together into a set or separated out. As educators present a set, they label it (e.g., two balls, one marker, three CDs), count the items, label it again, and encourage students to use numerals to label and count the separate sets. Use tools like the ten-frame to point out whole and parts (e.g., a row of 5 dots and a row of 4 dots are parts or subsets of 9).
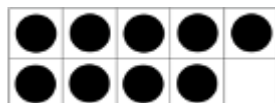
### How is the Distal Precursor related to the Target?

As students begin to understand labeling, counting small sets, and recognizing wholes and parts of objects and sets, use set models to provide a wide variety of sets of 10 to model tenths (e.g., for individual shapes to match the fraction, say, "I have 10 cubes in my bag, 1/10 of them are blue.").

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.8.NS.2.b Compare quantities represented as decimals in real-world examples to hundredths.
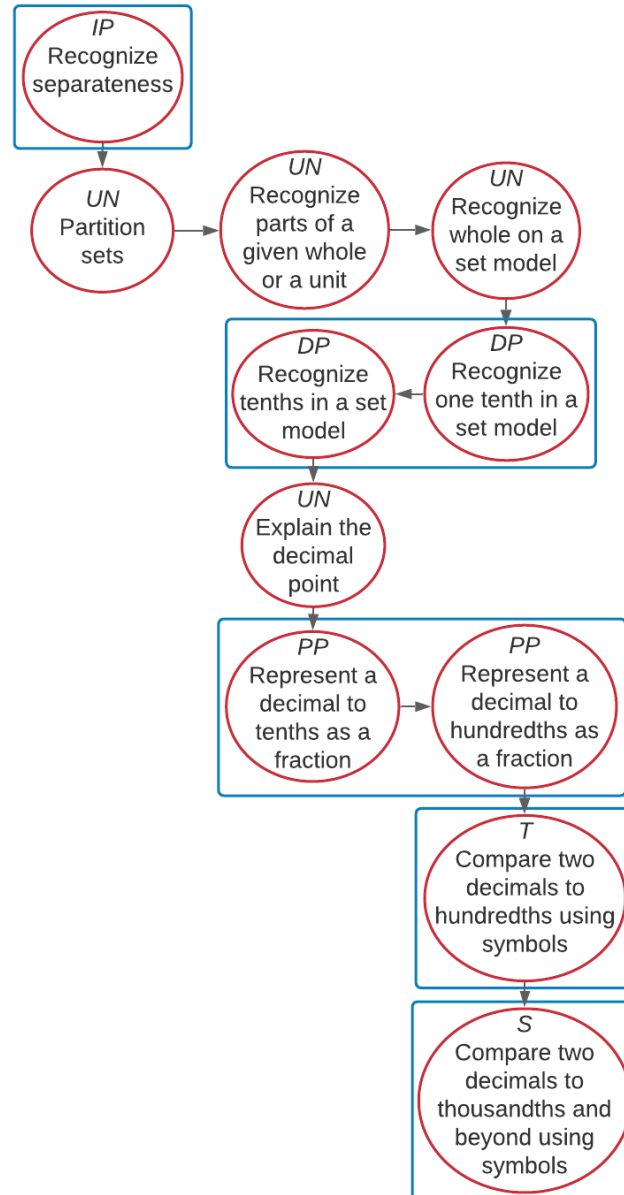
	Map Key
IP	Initial Precursor
DP	Distal Precursor
PP	Proximal Precursor
T	Target
S	Successor
UN	Untested
Boxes indicate tested nodes	