



Mini-Map for M.EE.7.NS.1

Subject: Mathematics

The Number System (NS)

Grade: 7

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.7.NS.1 Add fractions with like denominators (halves, thirds, fourths, and tenths) with sums less than or equal to one.	M.7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

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 a subset by recognizing a subset as a set or group of objects within a larger set that share an attribute.	Recognize each object as the part of a whole or unit when shown a whole or unit containing a group of objects.	Communicate understanding that when fractional parts are added, it produces a larger portion of the whole, and when fractional parts are separated, it results in a smaller portion of the whole. Decompose fractions into sums of unit fractions with the same denominator (e.g., $3/7 = 1/7 + 1/7 + 1/7$).	Add two fractions with common denominators (e.g., $2/5 + 1/5 = 3/5$).	Add or subtract two fractions where one fraction has a denominator of 10 and one has a denominator of 100 (e.g., $5/10 + 1/100 = 50/100 + 1/100 = 51/100$).

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

Adding fractions 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, 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 a variety of tools (e.g., ten-frames, egg cartons, a collection of items in a category [clothes: shoes, socks, pants], your hands) to label and count the sets, and label and count the subsets.

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](#)

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