



Mini-Map for M.EE.3.NF.1-3

Subject: Mathematics

Number and Operations—Fractions (NF)

Grade: 3

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.3.NF.1-3 Differentiate a fractional part from a whole.	<p>M.3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.</p> <p>M.3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <p>M.3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</p>

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Communicate generic understanding of "some" as a certain amount or a number of people or things.	Recognize separateness as objects that are not joined together. Recognize wholeness as an object that has all the parts joined together.	Demonstrate understanding of partition by dividing a circle, square, or rectangle into two or more distinct parts. These parts may or may not be equal in area.	Recognize each object as the part of a whole/unit when shown a whole/unit containing a group of objects. Demonstrate understanding of a unit fraction (e.g., $1/4$) as the quantity formed by one part when a whole is partitioned into n (e.g., 4) equal parts.	Recognize a fraction as a number expressed as a quotient of two integers in the form a/b , with b not equal to zero. Recognize the area model that represents a whole and the model that represents one half when shown different area models.

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

Understanding fractions requires students to first recognize an amount of something. Before students begin to recognize items separately, they recognize sets visually or tactually as a whole (i.e., there is something there). Provide students with meaningful experiences and descriptions of items they can touch, hear, smell, and see. Help students make sense of the items by demonstrating the symbolic word, sign, or symbol (e.g., Here are/is some cubes, some pencils, some dirt). Look for fun and interesting opportunities across the day to use the word “some” within a natural context.

How is the Distal Precursor related to the Target?

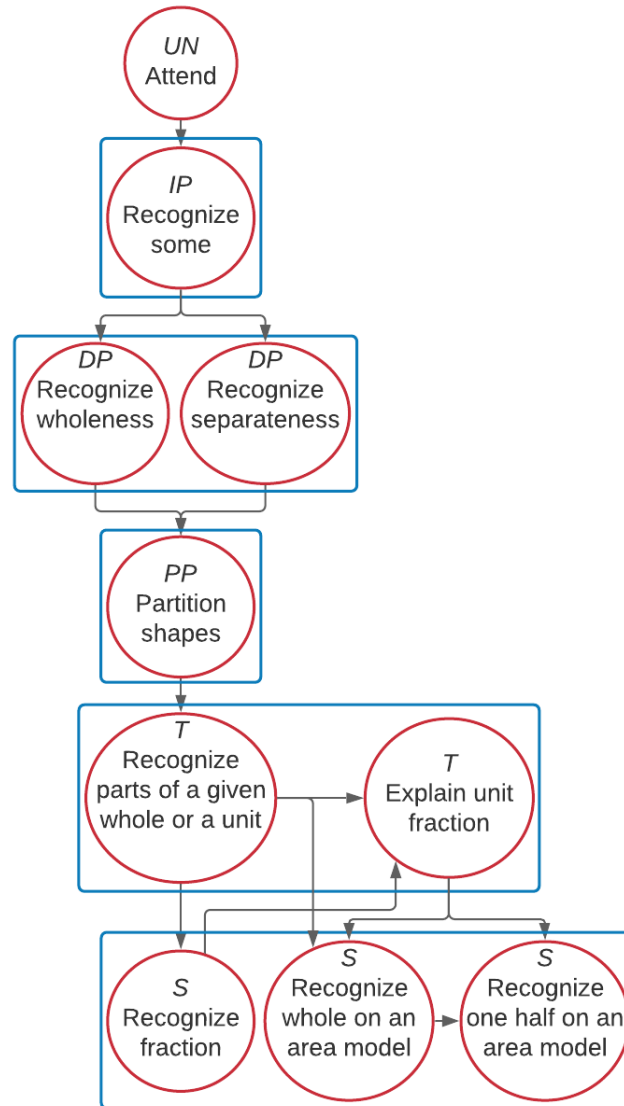
When working toward an understanding of fractions, students need exposure to a wide variety of items that can be put together and taken apart (e.g., linking cubes, magnetic tiles, puzzles). Encourage students to interact with the objects. Educators should take care to use the words “whole” and “part” to describe them. While students do not need to say these words, they do need to learn the meanings. At the same time, students will be working on counting skills. The models used to teach counting (e.g., five-frame, ten-frame, sets, number line) can be used to support the concepts of whole and part.

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](#)

M.EE.3.NF.1-3 Differentiate a fractional part from a whole.



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