



Topic B

Unit Fractions and Their Relation to the Whole

3.NF.1, 3.NF.3c, 3.G.2

Focus Standard:	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 $1/b$.
Instructional Days:	5	
Coherence		
-Links from:	G2–M8	Time, Shapes, and Fractions as Equal Parts of Shapes
-Links to:	G4–M5	Fraction Equivalence, Ordering, and Operations

In Topic A, students divided a given whole into equal parts to create fractional units (halves, thirds, fourths, etc.). Now, they associate one of the fractional units with a number called the unit fraction ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, etc.). This sets the foundation for students eventually understanding that a fraction is a number. Like any number, it corresponds to a point on the real number line and can be written in unit form or fraction form (e.g., 1 half or $\frac{1}{2}$).

An advantage of the term *fractional unit* is that it distinguishes the nature of the equal parts generated by partitioning a whole from the whole number division students studied in Modules 1 and 3. In Topic B, to avoid confusion, the term *fractional unit* is mostly replaced by the term *equal part*. The equal part is represented by the unit fraction. Students recognize that any non-unit fraction is composed of multiple copies of a unit fraction. They use number bonds to represent this. In particular, students construct fractions greater than 1 using multiple copies of a given unit fraction.

A Teaching Sequence Toward Mastery of Unit Fractions and Their Relation to the Whole

Objective 1: Partition a whole into equal parts and define the equal parts to identify the unit fraction numerically.
(Lesson 5)

Objective 2: Build non-unit fractions less than one whole from unit fractions.
(Lesson 6)

Objective 3: Identify and represent shaded and non-shaded parts of one whole as fractions.
(Lesson 7)

Objective 4: Represent parts of one whole as fractions with number bonds.
(Lesson 8)

Objective 5: Build and write fractions greater than one whole using unit fractions.
(Lesson 9)