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)**