Topic C
Decimal Multi-Digit Multiplication

5.NBT.7, 5.OA.1, 5.OA.2, 5.NBT.1

Focus Standard:	5.NBT.7	Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
Instructional Days:	3	
Coherence -Links from:	G5–M1	Place Value and Decimal Fractions
-Links to:	G5–M4	Multiplication and Division of Fractions and Decimal Fractions
	G6–M2	Arithmetic Operations Including Division of Fractions

Throughout Topic C, students make connections between what they know of whole number multiplication to its parallel role in multiplication with decimals by using place value to reason and make estimations about products (**5.NBT.7**). Knowledge of multiplicative patterns from Grade 4 experiences, as well as those provided in G5–Module 1, provide support for converting decimal multiplication to whole number multiplication. Students reason about how products of such converted cases must be adjusted through division, giving rise to explanations about how the decimal must be placed.

A Teaching Sequence Towards Mastery of Decimal Multi-Digit Multiplication
Objective 1: Multiply decimal fractions with tenths by multi-digit whole numbers using place value understanding to record partial products. **(Lesson 10)**
Objective 2: Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal. **(Lesson 11)**
Objective 3: Reason about the product of a whole number and a decimal with hundredths using place value understanding and estimation. **(Lesson 12)**