Mathematics Curriculum

Topic C
Rounding Multi-Digit Whole Numbers

4.NBT.3

Focus Standard:	4.NBT.3	Use place value understanding to round multi-digit whole numbers to any place.
Instructional Days:	4	
Coherence -Links from:	G3–M2	Place Value and Problem Solving with Units of Measure
-Links to:	G5–M1	Place Value and Decimal Fractions

In Topic C, students round to any place using the vertical number line and approximation. The vertical number line allows students to line up place values of the numbers they are comparing. In Grade 3, students rounded to the nearest 10 or 100 using place value understanding. Now, they extend this understanding rounding to the nearest thousand, ten thousand, and hundred thousand. Uniformity in the base ten system easily transfers understanding from the Grade 3 (**3.NBT.1**) to Grade 4 (**4.NBT.3**) standard.

Rounding to the leftmost unit is easiest for students, but Grade 4 students learn the advantages to rounding to any place value, which increases accuracy. Students move from dependency on the number line and learn to round a number to a particular unit. To round 34,108 to the nearest thousand, students find the nearest multiple, 34,000 or 35,000, by seeing if 34,108 is more than or less than halfway between the multiples. The final lesson of Topic C presents complex and real world examples of rounding, including instances where the number requires rounding down, but the context requires rounding up.

A Teaching Sequence Toward Mastery of Rounding Multi-Digit Whole Numbers
Objective 1: Round multi-digit numbers to the thousands place using the vertical number line. (Lesson 7)
Objective 2: Round multi-digit numbers to any place using the vertical number line. (Lesson 8)
Objective 3: Use place value understanding to round multi-digit numbers to any place value. (Lesson 9)
Objective 4: Use place value understanding to round multi-digit numbers to any place value using real world applications. (Lesson 10)