



Topic C

Place Value and Rounding Decimal Fractions

5.NBT.4

Focus Standard:	5.NBT.4	Use place value understanding to round decimals to any place.
Instructional Days:	2	
Coherence -Links from:	G4–M1	Place Value, Rounding, and Algorithms for Addition and Subtraction
-Links to:	G6–M2	Arithmetic Operations Including Dividing by a Fraction

In Topic C, students generalize their knowledge of rounding whole numbers to round decimal numbers to any place. In Grades 3 and 4, vertical number lines provided a platform for students to round whole numbers to any place. In Grade 5, vertical number lines again provide support for students to make use of patterns in the base ten system, allowing knowledge of whole-number rounding (**4.NBT.3**) to be easily applied to rounding decimal values (**5.NBT.4**). The vertical number line is used initially to find more than or less than halfway between multiples of decimal units. In these lessons, students are encouraged to reason more abstractly as they use place value understanding to approximate by using nearest multiples.

Naming those nearest multiples is an application of flexibly naming decimals using like place value units. To round 3.85 to the nearest tenth, students find the nearest multiples, 3.80 (38 tenths 0 hundredths) and 3.9 (39 tenths 0 hundredths), and then decide that 3.85 (38 tenths 5 hundredths) is exactly halfway between and, therefore, must be rounded up to 3.9.

A Teaching Sequence Toward Mastery of Place Value and Rounding Decimal Fractions

Objective 1: Round a given decimal to any place using place value understanding and the vertical number line.
(Lessons 7–8)