Mathematics Grade 3, Unit Plan

Unit 5: Place Value in Whole Numbers & Decimals	
Established Goals: Mathematics Grade Level Content Expectations	
N.ME.03.01	Read, write, interpret, and compare decimals up to two decimal places. IV.1.E.1 ***Secure***
N.ME.03.02	Identify the place value of a digit in a number, e.g., in 3,241, 2 is in the hundreds place. Recognize and use expanded notation for numbers using place value through 9,999, e.g., 2,517 is 2000+ 500+10+ 7; 4 hundreds and 2 ones is 402 IV.1.E.1, IV.1.E.2, IV.1.E.3, IV.2.E.1, V.1.E.3 ***Secure***
N.ME.03.03	Compare and order numbers up to 10,000. IV.1.E.1, IV.3.E.1 ***Secure***
N.ME.03.21	*Understand and relate decimal fractions to fractional parts of a dollar, e.g.,* **½ dollar** = *$0.50;* **¼ dollar** = *$0.25.* IV.1.E.2, V.2.E.1 ***Secure***
M.UN.03.03	Understand relationships between sizes of standard units, e.g., feet and inches, meters and centimeters. II.3.E.1 ***Secure***
D.RE.03.01	Read and interpret bar graphs in both horizontal and vertical forms. III.2.E.1 ***Developing/Secure***
N.ME.04.15	Read and interpret decimals up to two decimal places; relate to money and place value decomposition. IV.1.E.1, IV.1.E.2, IV.2.E.1 Developing
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places. IV.1.E.1, IV.1.E.2, IV.2.E.1, IV.2.E.2, IV.3.E.1 Developing

Understandings • With just 10 symbols-the numbers 0-9-it is possible to express any number. • Whole numbers and decimals are part of the same notational system. • The value of each digit in a numeral is determined by its position, or place in the numeral.	**Essential Questions** • How does a whole number differ from a decimal? • How are numbers ordered and compared? • How can whole numbers and decimals be represented using number lines and base-ten blocks?
Students will know… • Essential vocabulary terms • Place value from millions through thousandths. • How to read, write, compare, and order numbers. • The relationship between decimal notation and the metric system. • How to use manipulatives to represent numbers.	**Students will be able to…** • Read, write, and compare 6 and 7 digit whole numbers. • Read and write 3 digit decimals. • Compare and order decimals. • Identify place value in decimals.

<table>
<tr><th colspan="2">Assessment Evidence</th></tr>
<tr><td>Performance Tasks
Given a group of numbers identify the largest and smallest number.
Name shaded parts of grids as decimals.
Compare two decimals by answering, “Which is more?”
Shade 100th grids to represent decimals.
Order decimals from smallest to largest.
Write the number that matches the description.
Compare using <, >, or =.
Find products of basic multiplication facts.</td><td>Other Evidence:
Oral and written responses to the Essential Question
Exit slips
Slate Assessments
Alternative Assessment Options</td></tr>
<tr><td>Key Concepts
Addition with money
Place value millions to thousandths
Money as decimals
Subtraction with money
Number Lines and grids
Metric system
Line graphs</td><td>Instructional Resources

The University of Chicago School Mathematics Project. Everyday Mathematics-Third Grade Teacher’s Lesson Guide Volume 1 Unit 5: Place Value in Whole Numbers & Decimals. Chicago, IL; SRA/McGraw Hill, 2002

Everyday Mathematics Games
Lesson 5.2.:
Number Top-IT SRB pg. 226-7
Lesson 5.8:
Penny-Dime Exchange TE pg. 337
Oakland Schools Curriculum Unit Plan Third Grade Mathematics; July 20, 2005</td></tr>
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Accommodations

- Students may need a place value chart to write/read/compare numbers through millions on the whole number side and thousandths on the decimal side. Students will write the number(s) using the correct place value space to read the number before ordering and/or comparing the number(s). Students should keep in notes for future reference.
- Use "Adjusting the Activity"(TE pg. 294) as a guide for building/reading/comparing larger numbers.
- Review Place-Value Concepts with Base –10 Blocks (TE pg.296)
- Use Reading, Writing, and Ordering Numbers (TE pg. 302).
- Students may need extra time and/or work with peer partner to review using Base-10 Blocks or Square Grid to model decimals before reading/writing/comparing decimals.
- "Explore Several Names for a Penny and a Dime" with money available to show the connection of penny/dime to the dollar.
- Play: "Penny-Dime Exchange" (TE pg 337)
- Practice writing decimals with expanded notation.
- Create alternative place-value tools (TE pg. 355) for home use.

Books*: How Much Is a Million, If You Made a Million, A Million Fish...More of Less*