Unit 4: Fractions and Decimals Guide

STANDARDS FOR MATHEMATICAL CONTENT

MGSE4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.

MGSE4.NF.6 Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

MGSE4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of the comparisons with the symbols >, =, or <, and justify the conclusions, e.g. by using a visual model.

EVIDENCE OF LEARNING

By the conclusion of this unit, students should be able to demonstrate the following competencies:

- express fractions with denominators of 10 and 100 as decimals
- understand the relationship between decimals and the base ten system
- understand decimal notation for fractions
- use fractions with denominators of 10 and 100 interchangeably with decimals
- express a fraction with a denominator 10 as an equivalent fraction with a denominator 100
- add fractions with denominators of 10 and 100 (including adding tenths and hundredths)
- compare decimals to hundredths by reasoning their size
- understand that comparison of decimals is only valid when the two decimals refer to the same whole
- justify decimals comparisons using visual models

Please check Ms. Loomis' website (http://loomisk.weebly.com) for IXL and other helpful study links.