

Dear Parents,

We will begin our next unit of study in math soon. The information below will serve as an overview of the unit as you work to support your child at home. If you have any questions, please feel free to contact me. I appreciate your on-going support.

Sincerely,

Your Child's Teacher

Unit Name: Whole Number Place Value

Common Core State Standards:

4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.*

4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.

Essential Vocabulary:

- | | | |
|----------------|------------------------|---------------------|
| ● place value | ● digit | ● word form |
| ● greater than | ● ones | ● standard form |
| ● less than | ● tens | ● expanded form |
| ● equal to | ● hundreds | ● greatest |
| ● comparisons | ● thousands | ● least |
| ● compare | ● ten times | ● expanded notation |
| ● round | ● partial product | ● unit |
| ● base ten | ● rectangular sections | |

Unit Overview:

In this unit, students will build on their understanding of place value to the thousands place in order to expand their understanding to the millions place. This is the first time students will be exposed to the concept of the place of the digit/number to the left is 10 times larger than the place of the digit/number to the right. Students will be asked to reason about numbers using place value symbols $>$, $<$, and $=$. Students will also need to understand how to manipulate numbers into various expanded forms in order to flexibly add, subtract, multiply and divide. For example, the student should understand $285 = 200 + 80 + 5$; or $285 = 28$ tens and 5 ones; or $285 = 18$ tens and 105 ones; etc. In addition, students need to understand the role of a comma and rounding techniques beyond algorithms and procedures.

Strategies/Skills:

Students will explore place value without the use of formal algorithms. They are expected to use a variety of models to support their reasoning about numbers.

- Number lines
- Hundreds board
- Area models/Rectangular Sections
- Relationship between multiplication & division
- Expanded, word, and numerical form of numbers

Wake County Public Schools, Unit Overview for Parents

This document should not replace on-going communication between teachers & parents.

Dear Parents,

We will begin our next unit of study in math soon. The information below will serve as an overview of the unit as you work to support your child at home. If you have any questions, please feel free to contact me. I appreciate your on-going support.

Sincerely,

Your Child's Teacher

Video Support:

Video support can be found on LearnZillion.

- <https://learnzillion.com/>
 - Understand Place Value: Multiplying by a power of 10
<https://learnzillion.com/lessons/16-understand-place-value-multiplying-by-a-power-of-10>
 - Understand Place Value: Dividing by a power of 10
<https://learnzillion.com/student/lessons/19-understand-place-value-dividing-by-a-power-of-10>
 - Write numbers in expanded form
<https://learnzillion.com/student/lessons/13-write-numbers-in-expanded-form>
 - Write numbers in word form: using place value
<https://learnzillion.com/student/lessons/14-write-numbers-in-word-form-using-place-values>
 - Find place value: using pictures
<https://learnzillion.com/student/lessons/12-find-place-value-using-pictures>
 - Compare numbers: using place value
<https://learnzillion.com/student/lessons/15-compare-numbers-using-place-values>
 - Locate benchmark numbers on a number line
<https://learnzillion.com/student/lessons/523-locate-benchmark-numbers-on-a-number-line>
 - Round numbers to the leading digit using a number line
<https://learnzillion.com/student/lessons/524-round-numbers-to-the-leading-digit-using-a-number-line>
 - Round numbers to a specified place on a number line
<https://learnzillion.com/student/lessons/525-round-numbers-to-a-specified-place-on-a-number-line>
 - Round 9's using base ten blocks
<https://learnzillion.com/student/lessons/526-round-9s-using-base-ten-blocks>

Additional Resources:

If you have limited/no internet access, please contact your child's teacher for hard copies of the resources listed in this document.

- NCDPI Unpacking Document: <http://www.ncpublicschools.org/docs/acre/standards/common-core-tools/unpacking/math/4th.pdf>