Dear Parents & Guardians,

Our first unit of study in math deals with place value. 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,
Kathy Duncan

Unit 1:
Whole Number Place Value

Common Core State Standards:

KY.4.NBT.1 *- Recognize in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.*

KY.4.NBT.2 *- Represent and compare multi-digit whole numbers.*

a. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.

b. Compare two multi-digit numbers based on meanings of the digit in each place, using >, =, and < symbols to record the results of comparisons.

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

Essential Vocabulary:

*Place value	*Hundreds	*Comparisons
*Digit	*Thousands	*Compare
*Unit	*Ten Times	*Greater than
*Rod	*Base Ten	*Less than
*flat	*Word Form	*Equal to
*Ones	*Standard Form	*Greatest
*Tens	*Expanded Form	*Least
*Vertical Number line	*Expanded Notation	*Round

Unit Overview:

In this unit, students will build on their knowledge 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 to the right. Students will be asked to reason about numbers using place value symbols: >, <, =. 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 boards
- Base Ten Blocks
- Expanded, word, and numerical form of numbers
- Area models/Rectangular sections

Video Support:

- Place Value
  - https://www.youtube.com/watch?v=o7Cc1Rh4edE&list=PLGpMplljF-LCczeO6JW3tDxO67tDfP13A&index=2&t=767s
- Read & Write Numbers
  - https://www.youtube.com/watch?v=VDluYQ8XLAI&list=PLGpMplljF-LCczeO6JW3tDxO67tDfP13A&index=3&t=0s
- Comparing & Ordering Numbers and Rounding Numbers
  - https://www.youtube.com/watch?v=mYKcBwlByXU&list=PLGpMplljF-LCczeO6JW3tDxO67tDfP13A&index=4&t=1219s