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: Strategies for Division

### **Common Core State Standards:**

**4.NBT.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

# **Essential Vocabulary:**

- division/divide
- divisor
- dividend
- quotient
- area
- array
- inverse operation
- area model
- expanded notation
- algebraic notation

#### **Unit Overview:**

In this unit, students will apply their understanding of place value to help them explore multiple groups or division. Students will utilize their knowledge of base ten and groups of numbers within another number to help them solve for multi-digit division. This will be the students' first exposure to remainders. Students will be asked to reason with remainders and make connections to prime and composite numbers. Students will solve multi-digit division problems with the use of various strategies listed below. *Students will not be required to use the standard algorithm until* 5<sup>th</sup> grade.

# Strategies/Skills:

Students will build on their understanding of addition and subtraction by using place value strategies to make sense of the standard algorithms. They are expected to use a variety of models to support their reasoning about numbers.

- Rectangular Section/Arrays
- Base Ten blocks
- Expanded notation
- Algebraic notation

#### Wake County Public Schools, Unit Overview for Parents

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

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## **Video Support:**

Video support can be found on The WCPSS Academics YouTube Channel.

- <u>http://tinyurl.com/WCPSSAcademicsYouTube</u>
  - ES 4 Math Division with Area Model <u>https://www.youtube.com/watch?v=uF1KOA\_AIfs&list=PLNDkuWRw1gGRpuFSgmH</u> jf07KamFfjq8Gz&index=1
  - ES 4 Math Division with Area Model 2 <u>https://www.youtube.com/watch?v=4y8Dpw9SUbU&list=PLNDkuWRw1gGRpuFSgm</u> <u>Hjf07KamFfjq8Gz&index=31</u>
  - ES 4 Math Division with Expanded Notation <u>https://www.youtube.com/watch?v=6F83P\_20dU8&list=PLNDkuWRw1gGRpuFSgmHj</u> <u>f07KamFfjq8Gz&index=4</u>
  - ES 4 Math Division with Base Ten <u>https://www.youtube.com/watch?v=iSqYnWqSDPo&list=PLNDkuWRw1gGRpuFSgm</u> <u>Hjf07KamFfjq8Gz&index=3</u>

Video support can be found on LearnZillion.

- <u>https://learnzillion.com/</u>
  - Solve Division Problems: using array https://learnzillion.com/student/lessons/26-solve-division-problems-using-array

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