

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

<b>Unit Name:</b> <b>Problem Solving with Operations</b>
<p><b>Common Core State Standards:</b></p> <p><b>4.NBT.6</b> 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.</p> <p><b>4.OA.3</b> Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>
<p><b>Essential Vocabulary:</b></p> <ul style="list-style-type: none"><li>● multiplicative comparisons</li><li>● multiplication/multiply</li><li>● division/divide</li><li>● equation</li><li>● unknown</li><li>● remainders</li><li>● reasonableness</li><li>● situation equation</li><li>● solution equation</li></ul>
<p><b>Unit Overview:</b></p> <p>In this unit, students will apply their understanding of place value to help them explore multiple groups or multiplication and division. Students will utilize their knowledge of base ten and groups of numbers within another number to help them solve for multi-digit multiplication. Students will use their knowledge from previous units with multiplication and division to help them solve larger multi-step problems. Students will need to use various properties of operations to help them solve problems.</p>
<p><b>Strategies/Skills:</b></p> <p>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.</p> <ul style="list-style-type: none"><li>● Rectangular Section</li><li>● Area models</li><li>● Situation Equation</li><li>● Solution Equation</li><li>● Subtotals Method</li><li>● Base Ten Blocks</li><li>● Expanded Notation</li></ul>

**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 The WCPSS Academics YouTube Channel.

- <http://tinyurl.com/WCPSSAcademicsYouTube>
  - ES 4 Math Add and Subtract with Show Subtotals Method  
<https://www.youtube.com/watch?v=sWXsaia-Nd4&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=2>
  - ES 4 Math Whole Number Multiplication w/ Base Ten  
<https://www.youtube.com/watch?v=c6MRuNTwZi8&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=5>
  - ES 4 Math Whole Number Multiplication w/ Area Models  
<https://www.youtube.com/watch?v=3TJ9KdEhUbU&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=6>
  - ES 4 Math Whole Number Multiplication w/ Expanded Notation  
<https://www.youtube.com/watch?v=-8PK7vsIF2Q&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=32>
  - ES 4 Math Division with Base Ten Blocks  
<https://www.youtube.com/watch?v=iSqYnWqSDPo&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=3>
  - ES 4 Math Division with Area Model  
[https://www.youtube.com/watch?v=uF1KOA\\_Aifs&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=1](https://www.youtube.com/watch?v=uF1KOA_Aifs&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=1)
  - ES 4 Math Division with Area Models Video 2  
<https://www.youtube.com/watch?v=4y8Dpw9SubU&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=31>
  - ES 4 Math Division with Expanded Notation  
[https://www.youtube.com/watch?v=6F83P\\_20dU8&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=4](https://www.youtube.com/watch?v=6F83P_20dU8&list=PLNDkuWRw1gGRpuFSgmHjf07KamFjq8Gz&index=4)

### **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>