

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>Strategies for Multiplication</b>
<b>Common Core State Standards:</b> 4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
<b>Essential Vocabulary:</b> <ul style="list-style-type: none"><li>● multiplication/multiply</li><li>● division/divide</li><li>● area</li><li>● array</li><li>● factor</li><li>● square unit</li><li>● product</li><li>● area model</li><li>● expanded notation</li><li>● algebraic notation</li></ul>
<b>Unit Overview:</b> <p>In this unit, students will apply their understanding of place value to help them explore multiple groups or multiplication. 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 3<sup>rd</sup> grade with multiplication factors to help them solve larger multi-digit problems. Students will solve multi-digit multiplication problems with the use of various strategies listed below. <i>Students will not be required to use the standard algorithm until 5<sup>th</sup> grade.</i></p>
<b>Strategies/Skills:</b> <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/Arrays</li><li>● Area Models</li><li>● Base Ten blocks</li><li>● Expanded notation</li><li>● Algebraic notation</li></ul>

**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.

- <http://tinyurl.com/WCPSSAcademicsYouTube>
  - ES 4 Math Whole Number Multiplication w/ Expanded Notation  
<https://www.youtube.com/watch?v=-8PK7vsIF2Q&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfq8Gz&index=32>
  - ES 4 Math Whole Number Multiplication w/ Area Model  
<https://www.youtube.com/watch?v=3TJ9KdEhUbU&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfq8Gz&index=6>
  - ES 4 Math Whole Number Multiplication w/ Base Ten Blocks  
<https://www.youtube.com/watch?v=c6MRuNTwZi8&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfq8Gz&index=5>

### **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>