

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>Multiplying and Dividing Whole Numbers</b>
<b>Common Core State Standards:</b> <b>5.NBT.5</b> Fluently multiply multi-digit whole numbers using the standard algorithm. <b>5.NBT.6</b> Find whole-number quotients of whole numbers with up to four-digit dividends and two-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.
<b>Essential Vocabulary:</b> <ul style="list-style-type: none"><li>• partial products</li><li>• rectangle sections (area model)</li><li>• expanded notation</li><li>• rectangle rows method</li><li>• short cut method (standard algorithm)</li><li>• dividend</li><li>• divisor</li><li>• quotient</li><li>• remainder</li><li>• estimate</li><li>• expression</li></ul>
<b>Unit Overview:</b> <p>Students are expected to fluently solve multiplication problems using the standard algorithm. Fifth graders continue their fourth grade work on division, extending it to computation of whole number quotients with dividends of up to four digits and two-digit divisors. Division strategies involve breaking the dividend apart into like base-ten units and applying the distributive property to find the quotient place by place, starting from the highest place. The algorithm is not required of 5<sup>th</sup> graders. Division can also be viewed as finding an unknown factor: the dividend is the product, the divisor is the known factor, and the quotient is the unknown factor. Estimation becomes relevant when extending to two-digit divisors.</p>
<b>Strategies/Skills:</b> <p>Students will use a variety of methods to solve multiplication and division problems.</p> <ul style="list-style-type: none"><li>• Partial products</li><li>• Rectangle sections (area model)</li><li>• Expanded notation</li><li>• Rectangle rows</li><li>• Short cut (standard algorithm)</li><li>• Number lines</li><li>• Relationship between multiplication and division</li><li>• Other drawings/pictures</li></ul>
<b>Video Support:</b> <p>Video support can be found on The WCPSS Academics YouTube Channel.</p> <ul style="list-style-type: none"><li>• <a href="http://tinyurl.com/WCPSSAcademicsYouTube">http://tinyurl.com/WCPSSAcademicsYouTube</a></li></ul>

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

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

- ES 5 Math Whole Number Multiplication with Area Model:  
<http://www.youtube.com/watch?v=3TJ9KdEhUbU&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfq8Gz&index=7>
- ES 5 Math Whole Number Division with Rectangle & Expanded Notation:  
[http://www.youtube.com/watch?v=Itb\\_ZI5YpKc&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfq8Gz&index=24](http://www.youtube.com/watch?v=Itb_ZI5YpKc&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfq8Gz&index=24)
- ES 5 Math Whole Number Division with Base Ten Blocks:  
<http://www.youtube.com/watch?v=e8UNkMdIIVA&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfq8Gz&index=22>

**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: [5<sup>th</sup> Grade Unpacking Document](#)