|  |
| --- |
| **Unit Name:**  **Multiplying Decimals** |
| **Common Core State Standards:**  **5.NBT.7** Add, subtract, **multiply,** and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. |
| **Essential Vocabulary:**   * area model * number line * base ten blocks * grids * regroup |
| **Unit Overview:**  Multiplication methods used with whole numbers will also be used with decimals. Students will focus on concrete models and pictorial representations, rather than relying solely on the algorithm. Students will multiply tenths with tenths and tenths with hundredths, but they need not multiply hundredths with hundredths. Students should be able to explain the placement of the decimal point in products. Students will be expected to explain that “the number of decimal places in the product is the sum of the number of decimal places in each factor.” |
| **Strategies/Skills:**  Students will use grids, area models, number lines, and base ten blocks to multiply decimals by whole numbers as well as decimals by decimals. Students will use these models to explain their reasoning and correctly place the decimal point in the product.   * Grids * Area models * Number lines * Base ten blocks |
| **Video Support:**  Video support can be found on The WCPSS Academics YouTube Channel.   * <http://tinyurl.com/WCPSSAcademicsYouTube>   + [ES 5 Math Decimal X Whole Number w/Grids](http://www.youtube.com/watch?v=QedWOp_zFLw&index=16&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz)   + [ES 5 Math Decimal X Whole Number w/Grids Video 2](http://www.youtube.com/watch?v=ol8JHVFHHE8&index=17&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz)   + [ES 5 Math Decimal X Whole with Number Lines](http://www.youtube.com/watch?v=xmZ19ezyBnk&index=18&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz)   + [ES 5 Math Decimal X Whole with Number Lines Video 2](file:///C:\Users\lblake2\Downloads\o%09http:\www.youtube.com\watch%3fv=qbfpjZu9BNU&index=19&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz)   + [ES 5 Math Decimal X Decimal w/ Area Model](file:///C:\Users\lblake2\Downloads\o%09http:\www.youtube.com\watch%3fv=ARejlZex4Os&index=14&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz)   + [ES 5 Math Decimal X Decimal w/ Base Ten Blocks](file:///C:\Users\lblake2\Downloads\o%09http:\www.youtube.com\watch%3fv=0Kx8zr-qV_g&index=15&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz)   + [ES 5 Math Decimal X Decimal w/ Number Lines](http://www.youtube.com/watch?v=icWBC_zzM3s&index=34&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz) |
| **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: [5th Grade Unpacking Document](http://maccss.ncdpi.wikispaces.net/file/view/Unpacking%205%20July%202013.pdf/443030336/Unpacking%205%20July%202013.pdf) |