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| Trimester 2 | Grade: 4th Grade | | | | | Unit Number: 5 | | |
| Unit Overview:   * Extend basic multiplication facts and review the basic principles of multiplication of multi-digit numbers * Provide practice estimating and deciding when estimation is appropriate * Review and provide practice with algorithms for multi-digit multiplication * Provide practice reading, writing and comparing large numbers using patterns in the base-ten place value system | | | | | | | |
| Essential Question: How do you use estimation and multiplication in your daily life? | | | | | | | |
| Academic Vocabulary: multiplicative comparison, additive comparison, remainder, estimation, rounding, expanded form, rectangular array, area model | | | | | | | |
| Lesson | Standard | Guiding Questions | Additional Resources | Differentiation | | Student Learning Goals |
| 5.1 | **4.OA.1**  **4.OA.2**  **4.NBT.1**  **4.NBT.5**  **4.MD.1**  **4.MD.2** | * How could you use the shortcut to help you? |  |  | | I can…   * Interpret a multiplication equation (e.g. 35 = 5 x 7) as a comparison (35 = 5 x 7 as a statement) that 35 is 5 times as many as 7 and 7 times as many as 5). * Write multiplication equations representing verbal statements.   4.OA.1   * Solve multiplication or division problems using drawings and/or equations with a symbol for the unknown number to represent the problem. * Distinguish between multiplicative (as many times as) and additive (more) comparisons.   4.OA.2   * Solve multi-step word problems with whole numbers using the four operations. * Interpret remainders in word problems. * Write equations using a variable to represent the unknown quantity. * Check my answers using mental computation and estimation strategies, including rounding.   4.OA.3   * Explain that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.   4.NBT.1   * Read and write a multi-digit number in word form, base-ten numerals, and expanded form. * Compare two multi-digit numbers using place value and record the comparison using symbols <, >, or =.   4.NBT.2   * Use my understanding of place value to round multi-digit whole numbers to any place.   4.NBT.3   * Multiply a multi-digit number by a one-digit whole number using place value and the properties of operations. * Multiply two two-digit numbers using properties of operations and equations. * Explain my calculation using equations, rectangular arrays, and/or area models.   4.NBT.5   * Describe the relative size of measurement units (e.g. km, m, cm; kg, g; lb, oz; l, ml; hr, min. sec) * Represent a larger unit as a multiple of smaller units within the same system of measurement and record the equivalent measures in a two-column table (e.g. 1 foot = 12 inches, 2 feet = 24 inches, 3 feet = 36 inches).   4.MD.1   * Represent measurements using diagrams such as a number line that features a measurement scale. * Use the four operations to solve word problems involving measurements. * Convert a measurement given in a larger unit into an equivalent measurement in smaller units in order to solve a problem. |
| 5.2 | **4.NBT.2**  **4.NBT.5**  **4.MD.2** | * Why should you keep trying to solve problems if you don’t get the answer on the first try? |  |  | |
| 5.3 | **4.OA.3**  **4.NBT.3**  **4.MD.2** | * When is it appropriate or useful to estimate? |  |  | |
| 5.4 | **4.NBT.3**  **4.NBT.5**  **4.MD.2** | * How can an exact answer help you check your estimate? |  |  | |
| 5.5 | **4.OA.3**  **4.NBT.5**  **4.MD.2** |  |  |  | |
| 5.6 | **4.OA.3**  **4.NBT.3**  **4.NBT.5**  **4.MD.2** | * Why is it important to check whether your answer makes sense? |  |  | |
| 5.7 | **4.NBT.5**  4.MD.2 |  |  |  | |
| 5.8 | **4.OA.2**  **4.OA.3**  **4.NBT.1**  **4.NBT.2** | * Why is it important to read and write large numbers correctly? |  |  | |
| 5.9 | **4.NBT.1**  **4.NBT.2**  4.G.1  4.G.2 | * What do the patterns tell you about the value of each place? |  |  | |
| 5.10 | **4.NBT.3** | * How do tables help you interpret the data? |  |  | |
| 5.11 | 4.OA.3  4.NBT.2  **4.MD.2** |  |  |  | |
| Assessment: Progress Check Unit 5 | | | | | | | |