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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
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| 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.
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| 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?
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| 5.3  | **4.OA.3****4.NBT.3****4.MD.2** | * When is it appropriate or useful to estimate?
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| 5.4 | **4.NBT.3****4.NBT.5****4.MD.2** | * How can an exact answer help you check your estimate?
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| 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?
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| 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?
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| 5.9 | **4.NBT.1****4.NBT.2**4.G.14.G.2 | * What do the patterns tell you about the value of each place?
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| 5.10 | **4.NBT.3** | * How do tables help you interpret the data?
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| 5.11 | 4.OA.34.NBT.2**4.MD.2** |  |  |  |
| Assessment: Progress Check Unit 5 |