|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Trimester 2 | Grade: 4 | | | | | Unit Number: 4 | | |
| Unit Overview:   * Extend the base-ten place-value system to decimals * Review and extend basic concepts, notation, and applications for decimals * Extend whole-number methods of addition and subtraction to decimals * Review relationships among metric units of length and guide students as they use them | | | | | | | |
| Essential Question: Why is important to understand place value and how they apply to decimals? | | | | | | | |
| Academic Vocabulary: Metric units, standard units, fraction, decimal, scale, unit, multiplicative comparison, additive comparison, decimal, denominator | | | | | | | |
| Lesson | Standard | Guiding Questions | Additional Resources | Differentiation | | Student Learning Goals | |
| 4.1 | **4.NBT.1**  4.G.1  4.G.2 | Why do you think our number system is called base 10? |  |  | | | I can…   * 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 recorded the equivalent measures in a two-column table (e.g., 1 feet= 12 inches, 2 feet = 24 inches, 3 feet = 36 inches).   4.MD.1   * Use the four operations to solve word problems involving measurements. * Represent measurements using diagrams such as a number line that features a measurement scale. * Convert a measurement given in a larger unit into an equivalent measurement in smaller units in order to solve a problem.   4.MD.2   * Explain the value of each digit in a multi-digit number as ten times the digit to the right.   4.NBT.1   * Solve multiplication or division problems using drawings and/or equations with symbol for unknown number to represent the problem. * Distinguish between multiplicative (as many times as) and additive (more) comparisons.   4.OA.2   * Explain the relationship between a fraction and the decimal representation. * Represent fractions with denominators of 10 and 100 as a decimal. * Identify the tenths and hundredths place of a decimal. * Show the placement of a decimal on a number line.   4.NF.6   * Compare two decimals to hundredths by reasoning about their size. * Recognize that comparisons are valid only when the two decimals refer to the same whole. * Record the results of decimal comparisons using symbols <,>, or =   4.NF.7 |
| 4.2 | **4.NF.6** | How does representing decimals in different ways help you understand the value? |  |  | | |
| 4.3 | **4.NF.7** | How might explaining other people’s mistakes help your understanding? |  |  | | |
| 4.4 | **4.NF.7 4.MD.2** | How can decimals help you be more precise? |  |  | | |
| 4.5 | 4.OA.24.MD.2 | What other ways might whole number place value help you understand decimal place value? |  |  | | |
| 4.6 | 4.MD.1 **4.MD.2** | When have you needed to add or subtract amounts in your life? |  |  | | |
| 4.7 | **4.NBT.1**  **4.NF.6**  **4.NF.7** | How could representations of decimals in the tenths and hundredths help you understand thousandths? |  |  | | |
| 4.8 | 4.NBT.1  **4.MD.1** | How could knowing the values of each unit help you convert between different metric units of length? |  |  | | |
| 4.9 | 4.NF.6  **4.MD.1** | How do tools help you find personal references for units of length? |  |  | | |
| 4.10 | **4.OA.2 4.MD.1** | How do larger measurements help you understand smaller measurement? |  |  | | |
| Assessment: Progress check Unit 4 | | | | | | | | |