|  |
| --- |
| **Unit Name:**  **Adding and Subtracting Whole Numbers** |
| **Common Core State Standards:**  **4.NBT.3** Use place value understanding to round multi-digit whole numbers to any place.  **4.NBT.4** Fluently add and subtract multi-digit whole numbers using the standard algorithm.  **4.OA.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. |
| **Essential Vocabulary:**   * place value vocabulary from previous unit * multiplication/multiply * division/ divide * addition/add * subtraction/subtract * equations * unknown * reasonableness * mental computation * estimation |
| **Unit Overview:**  In this unit, students will apply their understanding of place value to help solve for multi-step word problems with addition and subtraction. Students will utilize estimation as part of the problem solving process. One example is students rounding to the nearest leading digit. This will help students to check their solution or answer after solving to see if it is reasonable. In addition, students will need to be fluent with numbers in order to break them apart or reconstruct them by place value. |
| **Strategies/Skills:**  Students will build on their understanding of addition and subtraction by using place value strategies to make sense of the standard algorithms. They are expected to use a variety of models to support their reasoning about numbers.   * Number lines * Base Ten blocks * Show Subtotals Method * Relationship between multiplication & division |
| **Video Support:**  Video Support can be found on The WCPSS Academics YouTube Channel.   * <http://tinyurl.com/WCPSSAcademicsYouTube>   + ES 4 Math Add & Subtract with Show Subtotals Method   <http://www.youtube.com/watch?v=sWXsaia-Nd4&index=3&list=PLNDkuWRw1gGRpuFSgmHjf07KamFfjq8Gz>  Video support can be found on LearnZillion.   * <http://learnzillion.com> * Solve multi-step word problems by rounding on a number line.   <https://learnzillion.com/student/lessons/1719-solve-multistep-word-problems-by-rounding-on-a-number-line>   * Solve multi-step word problems using front-end estimation   <https://learnzillion.com/student/lessons/1720-solve-multistep-word-problems-using-frontend-estimation> |
| **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: <http://www.ncpublicschools.org/docs/acre/standards/common-core-tools/unpacking/math/4th.pdf> |