Unit 1b-Fluently Add and Subtract Multi-Digit Whole Numbers

Content Area: **Math**
Course(s): **Math 4**
Time Period: **Marking Period 1**
Length: **MP1 Topic 2 2-1 to 2-8**
Status: **Published**

Essential Questions

- How can sums and differences of whole numbers be estimated?
- What are standard procedures for adding and subtracting whole numbers?

Big Ideas

- **Addition Properties:** Students will employ the following addition properties: the Associative Property, the Commutative Property, and the Identity Property. Students will use these properties throughout the topic as they use mental math, estimation, and the standard algorithms to find sums and differences and to check their answers.
- **Mental Math and Estimation:** Students will use mental math and estimation to find sums and differences. They will draw on these procedures to check the reasonableness of their answers.
- **The Relationship Between Addition and Subtraction:** Students will use the standard algorithm to check their answers to subtraction problems.
- **Problem Solving:** Students will apply their proficiency with addition and subtraction to solve real-world problems.

Diversity Integration

Objective: Students will be able to find the difference between various country populations.

Description of Activity: Students will be given four sets of two countries. They will need to find the difference between the countries. Then, students will describe which country has a larger population and by how.

STEM/STEAM

PROJECT-BASED LEARNING: Using a store circular, students will create a budget and plan a Fall party for 10 guests

CSDT Technology Integration

8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.

Activity:

Students will work independently in the IXL program to answer questions about addition and subtraction. The specific skills in IXL related to this standard are B1 - B11 and C1 - C9. The program will track students' progress and mastery of these skills.

Enduring Understandings

Operations and Algebraic Thinking

4.OA.A.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. Students may obtain data and information to describe that energy and fuels are derived from natural resources and their uses affect the climate and solve multistep word problems based on the data collected

Number and Operations in Base Ten

4.NBT.B.4 [M] With accuracy and efficiency add and subtract multi-digit whole numbers using the standard algorithm.

Mathematical Practices Focus

2. Reason abstractly and quantitatively.