Unit 4b-Use Strategies And Properties To Add And Subtract

Content Area: **Mathematics**
Course(s): **Math 3**
Time Period: **Marking Period 4**
Length: **MP4 Topic 8 8-1 to 8-9**
Status: **Published**

Essential Questions

- How can sums and differences be estimated and found mentally?

Big Ideas

- **Place Value Concepts-** Students learn to use place value in rounding and estimating.
- **Properties of Operations-** Students apply properties of addition.
- **Addition Properties-** Students identify patterns in the addition table.

CSDT Technology Connection

8.1.5.AP.4: Break down problems into smaller, manageable sub-problems to facilitate program development.

Enduring Understandings

Operations and Algebraic Thinking

3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table),and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.

3.OA.C.7 Fluently multiply and divide within 100 using strategies such as the relationship between multiplication and division (knowing that 8 x 4 = 40, one knows 40 divided by 5 = 8) for properties of operation.

3.OA.D.8 Solve two -step word problems using the four operations. 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

Number and Operations in Base Ten

3.NBT.A [M] Use place value understanding and properties of operations to perform multi-digit arithmetic

3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100.

3.NBT.A.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction

Mathematical Practices Focus

4. Model with mathematics.