

Unit 1: Chapter 1 Addition and Subtraction within 100

Content Area: **Mathematics**
Course(s): **Math 3**
Time Period: **September**
Length: **4 weeks**
Status: **Published**

Unit Summary

The unit will explore the domains Operations and Algebraic Thinking, and Numbers and Operations in Base Ten. Throughout this unit students will identify and describe whole number patterns and solve problems, round 2 and 3 digit numbers to the nearest ten or hundred and use compatible numbers and rounding to estimate sums. They will also count by tens and ones using a number line, make compatible numbers and use friendly numbers to find sums mentally. The students will use both the Commutative and Associative Properties of Addition to add more than two addends. They will also use the break apart strategy and place value to add and subtract 3 digit numbers. Students will learn that they can use compatible numbers and rounding to estimate differences and they will also learn to combine place value strategies to subtract 3 digit numbers. In addition, they will explore solving addition and subtraction problems by using the strategy of *drawing a diagram*.

Standards

MA.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.
MA.3.OA.D.9	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.
MA.3.NBT.A	Use place value understanding and properties of operations to perform multi-digit arithmetic.
MA.3.NBT.A.1	Use place value understanding to round whole numbers to the nearest 10 or 100.
MA.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.
TECH.8.1.5	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Student Learning Objectives

Students will learn to:

- Identify and describe whole number patterns and solve problems.
- Round 2 and 3 digit numbers to the nearest ten or hundred.
- Use compatible numbers and rounding to estimate sums.
- Count by tens and ones, use a number line, make compatible numbers, or use friendly numbers to find sums mentally.
- Use the Commutative and Associative Properties of Addition to add more than two addends.
- Use the break apart strategy to add 3 digit numbers.
- Use place value to add 3 digit numbers.
- Use compatible numbers and rounding to estimate differences.
- Use a number line, friendly numbers, or the break apart strategy to find difference mentally.
- Use place value to subtract 3 digit numbers.
- Use the combine place values strategy to subtract 3 digit numbers.

- Solve addition and subtraction problems by using the strategy *draw a diagram*.

Essential Questions

How can you add and subtract whole numbers and decide if an answer is reasonable?

Enduring Understandings

Students will understand that they can evaluate if an answer is reasonable when they add and subtract whole numbers.

Application

Students will be able to independently use their learning to:

- know when an estimate is close to an exact answer.
- decide which strategy to use to add or subtract.
- decide when to add or subtract to solve a problem.

Skills

Students will be skilled at:

- Using properties, strategies, or place value to add or subtract to solve a problem.
- Solving multi-step addition and subtraction word problems.
- Using mental math strategies for addition and subtraction.