Unit 3 - Addition and Subtraction

Content Area: **Math**
Course(s):
Time Period: **Full Year**
Length: **Full Year**
Status: **Published**

Unit Overview

Enduring Understandings

Understand how to represent take from situations with equations when either the whole or the change number, or the difference is unknown.

Understand how to represent take apart situations with equations when either the whole, or one of the parts is unknown.
Understand how to use mental math to find 10 more than a number
Understand how to use base ten clocks, number lines and place – value concepts to add 2-digit numbers.
Understand how to add 2-digit numbers.
Understand how to represent and solve comparison situations with the difference unknown, with the greater number unknown , and with the lesser number unknown.

Essential Questions

How can I solve subtraction problems?
How do I use strategies to add 2- digit numbers?
How can I compare using addition and subtraction?

Learning Objectives

Students represent a take from situation with an equation when the difference is unknown.
Students represent a take from situation with an equation when either change or the total is unknown.
Students represent a take apart situation with an equation when the total is unknown.
Students represent a take apart situation with an equation when both parts are unknown.
Students represent a take apart situation with an equation when one part is unknown.
Students represent and solve various subtraction problems.
Students represent and solve various subtraction and addition problems.
Students use mental math to find 10 more of a given 2-digit number and explain their reasoning.
Students use place value to add 2-digit numbers and a multiple of 10.
Students use place value and counting on to add 2-digit and 1-digit numbers, without regrouping.
Students use decomposition and place value to add 2-digit and 2-digit numbers.
Students use an open number line to add 2-digit and 2-digit numbers, without regrouping.
Students use an open number line to add 2-digit and 1-digit numbers, with regrouping
Students use regrouping to add 2-digit and 1-digit numbers.

Students use regrouping to add 2-digit and 2-digit numbers.
Students represent and solve a compare situation when the difference is unknown.
Students represent and solve a compare situation when the greater quantity is unknown.
Students represent and solve a compare situation when the lesser quantity is unknown.
Students represent and solve various compare problems.

Standards: Content

1.OA	Operations and Algebraic Thinking
1.OA.A	Represent and solve problems involving addition and subtraction
1.OA.A.1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
1.NBT	Number and Operation in Base Ten
1.NBT.C	Use place value understanding and properties of operations to add and subtract
1.NBT.C.4	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
1.NBT.C.5	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

Standards: Interdisciplinary

9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
9.1.2.CAP.1	Make a list of different types of jobs and describe the skills associated with each job.
8.1.2.NI.2	Describe how the Internet enables individuals to connect with others worldwide.
9.1.2.PB.1	Determine various ways to save and places in the local community that help people save and accumulate money over time.
9.1.2.PB.2	Explain why an individual would choose to save money.
8.1.2.DA.4	Make predictions based on data using charts or graphs.
8.1.2.AP.2	Model the way programs store and manipulate data by using numbers or other symbols to represent information.
9.4.2.TL.1	Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1).
9.4.2.TL.7	Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).

Assessment Evidence

Formative	Collaborative Activities, Homework, Daily Classwork, Discussion, Independent Class Assignment, Informal Observations of Students, Games, Exit Slips, Questioning, Teacher Made Pages, Learning Centers, Problem of the Day, Reveal Workbooks, Fluency Checks, Curious, Activity Based Exploration, Guided Exploration, On My Own.
Summative	Tests, Mid-Chapter Checkpoint assessments, teacher generated assessments
Alternative & Benchmark	Alternative – Reteaching, One on One Conferencing, Learning Centers, student portfolio of assignments, Homework, Higher Order Thinking Problems, Additional leveled practice, orally administered assessments. Benchmark - LinkIt Benchmark Assessments, Totowa TPA
Assessment Evidence Resource	

Instructional Resources

Smartboard, Computers, websites and digital interactives/models, Multi-media presentations, video streaming, Brain Pop, Microsoft 365, Primary and Secondary Source Documents, Reveal, Resources, manipulatives, post-it notes, markers, number lines, chart & graph paper, construction paper, glue, scissors, paperclips, crayons, envelopes, dot ink & cards, geo blocks, number cubes/dice.

Instructional Resource List

Curricular Mandates

Below are the curricular requirements as defined in NJ Administrative Code and Statute

	Amistad		Diversity, Equity, and Inclusion
	Holocaust		LGBT and Disabilities (Grades 6-12)
	Climate Change		Asian American & Pacific Islander

Social Emotional Learning (SEL) Competencies

NJ Social and Emotional Learning Competencies & Sub-Competencies

X	Self-Awareness	X	Relationship Skills
X	Responsible Decision-Making	X	Social Awareness
X	Self-Management		

21st Century Skills & Themes

	Global and Cultural Awareness	X	Technology Literacy		Planning and Budgeting
X	Creativity and Innovation		Financial Institutions		Risk Management and Insurance
	Information and Media Literacy		Digital Citizenship		Economic and Government Influences
X	Critical Thinking and Problem Solving		Credit Profile		Career Awareness and Planning
	Civic Financial Responsibility		Financial Psychology		