

Pub.:Gr 4 My Math Unit 2: Add and Sub. whole numbers

Content Area: **Math**
Course(s):
Time Period: **October**
Length: **4-5 Weeks**
Status: **Published**

Unit Overview

this unit concentrates on place value and the number operations in base ten.

Enduring Understandings

We can use place value to round numbers.

Operations for addition and subtraction involve repeated calculations.

We solve word problems by writing an equation.

We use place value to describe extended number patterns in addition and subtraction.

Essential Questions

What strategies can I use to add and subtract?

Instructional Strategies & Learning Activities

Lesson	Objective	Material & Manipulatives	Vocabulary	Standard
Lesson 1 pp. 61-66 Addition Properties and Subtraction Rules	Use addition properties and subtraction rules to add and subtract.	• connecting cubes • index cards	• Commutative Property of Addition • Associative Property of Addition • Identity Property of Addition • unknown	4.NBT.4 Major Cluster MP 2, 3, 5, 6, 7, 8
Lesson 2 pp. 67-72 Addition and Subtraction Patterns	Use patterns to solve addition and subtraction	• base-ten blocks • place-value charts		4.NBT.4 4.OA.5

problems.

Lesson 3 *pp.* 73-78 **Add and Subtract Mentally**

Use mental math to add and subtract. • index cards

Major Cluster

MP 2, 3, 7, 8

4.NBT.4

Major Cluster

Lesson 4 *pp.* 79-84 **Estimate Sums and Differences**

Estimate sums and differences of multi-digit numbers. • number cubes • place-value chart

MP 1, 2, 3, 5, 6, 7

4.NBT.3

4.NBT.4

Major Cluster

MP 2, 3, 4, 6

Lesson 5 *pp.* 87-92 **Add Whole Numbers**

Add multi-digit whole numbers. • base ten blocks

Check My Progress

4.NBT.4
4.OA.3

Major Cluster

MP 1, 2, 3, 5, 6

Lesson 6 *pp.* 93-98 **Subtract Whole Numbers**

Subtract multi-digit whole numbers. • base-ten blocks • virtual base-ten blocks • centimeter grid paper • **minuend subtrahend**

4.NBT.4
4.OA.3

Major Cluster

MP 2, 3, 5, 6, 7, 8

Lesson 7 *pp.* 99-104 **Subtract Across Zeros**

Subtract multi-digit numbers, when some digits are zeros. • play money • base-ten blocks

4.NBT.4

Major Cluster

MP 1, 3, 5, 7, 8

Lesson 8 *pp.* 107-112 **Problem Solving Investigation: Draw a Diagram**

Solve problems by drawing a diagram.

Check My Progress

4.NBT.4

Major Cluster

MP 1, 3, 4, 5

Lesson 9 pp. 113-118
Solve Multi-Step Word Problems

Solve multi-step word problems using addition and subtraction.
• cups • counters
equation variable

4.NBT.4
4.OA.3

Major Cluster

MP 1, 2, 4, 5, 6

Fluency Practice My Chapter Review

Integration of 21st Century Themes and Career Exploration

CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.

Technology Integration

- SMARTboard technology
- Google Applications (documents, forms, spreadsheets, presentation)
- Dreambox
- Online textbook

TECH.8.1.5.A.CS1	Understand and use technology systems
TECH.8.1.5.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.5.D.3	Demonstrate an understanding of the need to practice cyber safety, cyber security, and cyber ethics when using technologies and social media.
TECH.8.1.5.A.1	Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
TECH.8.1.5.A.CS2	Select and use applications effectively and productively.

Interdisciplinary Connections

Leveled readers "Oceans into the Deep"

LA.RI.4.4	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
LA.RI.4.1	Refer to details and examples in a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.

LA.SL.4.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

Differentiation

-Reteach Master

-Hands-On Activity

-Enrich Master

Modifications & Accommodations

IEP and 504 accommodations will be utilized.

Provide an outline of material to be covered

-Individualized assignments, e.g., length, number, due date, topic

-Allow student to use technology-online textbook

-Use of graphic organizers

-Use highlighter for key information

-Read directions, passages, and word problems aloud as needed-online presentation

-Use of calculator and matrix for multiplication and division

-Provide textbook in audio format

-Demonstrate directions and procedures/give examples

Benchmark Assessments

- Diagnostic
- Aimsweb
- End of year test

Formative Assessments

Check My Progress

-My Chapter Review

-Homework Practice

-Independent Practice

Summative Assessments

Chapter 2 assessment

Instructional Materials

See materials above.

Standards

MA.4.NBT.B.4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.
MA.4.NBT.A.3	Use place value understanding to round multi-digit whole numbers to any place.
MA.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.
MA.4.OA.C.5	Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.