2 Math Unit 04: Meanings of Addition and Subtraction

Content Area: **Mathematics**
Course(s):
Time Period: **Marking Period 2**
Length: **16 days**
Status: **Published**

Unit Overview

Recognizing Number Patters

The unit begins by reviewing counting by 1s. Number charts are used to allow students to explore each hundred set between 100 and 1,000. Then the students will identify patterns when skip counting by 5s, 10s, and 100s. These patterns are used to solve problems when counting on by 5s, 10s, or 100s. Finally, students explore the idea of even and odd numbers.

What Students Are Learning

- Students describe and use patterns when counting by 1s and skip counting by 5s, 10s, and 100s within 1,000.
- Students determine whether a number is even or odd.
- Students write an equation to express an even number as a sum of two equal addends.
- Students use arrays to find the sum of equal addends.

Number Routines

- Mystery Number
- Let's Count
- Which Benchmark Is It Closest To?
- Where Does It Go?
- Notice & Wonder
- Which Doesn't Belong?
- Numberless Word Problem

Standards

MATH.2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Materials

Core Materials:

Reveal Math

4.1 Represent and Solve Add To Problems

4.2 Represent and Solve Take From Problems

4.3 Solve Two-Step Add To and Take From Problems

4.4 Represent and Solve Put Together Problems

4.5 Represent and Solve Take Apart Problems

4.6 Solve Two-Step Put Together and Take Apart Problems

4.7 Represent and Solve Compare Problems

4.8 Represent and Solve More Compare Problems

4.9 Solve Two-Step Problems with Comparison

4.10 Solve Two-Step Problems Using Addition and Subtraction

Supplemental Materials:

- ST Math
- Happy Numbers
- 3 Act Lessons
- Building Fact Fluency Kit
- Brainingcamp Manipulatives
- Nearpod Lessons
- Brainpop Resources
- Online Resources

Technology

CS.K-2.8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
CS.K-2.8.1.2.DA.3	Identify and describe patterns in data visualizations.
CS.K-2.8.1.2.DA.4	Make predictions based on data using charts or graphs.
CS.K-2.8.2.2.ED.2	Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
CS.K-2.8.2.2.ED.3	Select and use appropriate tools and materials to build a product using the design process.
CS.K-2.DA	Data & Analysis

Assessment

Formative Assessment

- Unit Readiness Diagnostics
- Lesson Checks
- Exit Tickets
- Teacher Observation

Summative Assessment

- Unit Assessment Performance Task
- Benchmark Tests
- Alternative Assessments: Performance Tasks & Projects

Accommodations & Modifications

Special Education

Differentiated Instruction			
Accommodate Based on Students' Individual Needs: Strategies			
Time/General • Extra time for assigned tasks • Adjust length of assignment • Timeline with due dates for reports and projects • Communication system between home and school • Provide lecture notes/outline	**Processing** • Extra response time • Have students verbalize steps • Repeat, clarify, or reword directions • Mini-breaks between tasks • Provide a warning for transitions • Reading partners	**Comprehension** • Precise step-by-step directions • Short manageable tasks • Brief and concrete directions • Provide immediate feedback • Small group instruction • Emphasize multi-sensory learning	**Recall** • Teacher-made checklist • Use visual graphic organizers • Reference resources to promote independence • Visual and verbal reminders • Graphic organizers
Assistive Technology • Computer/whiteboard	**Tests/Quizzes/Grading** • Extended time	**Behavior/Attention** • Consistent	**Organization** • Individual

• Tape recorder • Spell-checker • Audio-taped books	• Study guides • Focused/chunked tests • Read directions aloud	daily structured routine • Simple and clear classroom rules • Frequent feedback	daily planner • Display a written agenda • Note-taking assistance • Color code materials

504

- In class/pull out support with special ed teacher Additional time during intervention time
- Preferred seating
- Questions read aloud
- Extended time for completing tasks Graphic organizers
- Vocabulary support Mnemonic devices
- Songs/videos to reinforce concepts Limit number of questions
- Scribe Manipulatives Calculators Reteach pages Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System Another look homework video
- Practice buddy

ELL

- Translation device/dictionary
- In class/pull out support with ESL teacher
- Preferred seating
- Questions read aloud
- Extended time for completing tasks
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives
- Math Diagnosis & Intervention System

At-risk of Failure

- Additional time during intervention time
- Questions read aloud
- Graphic organizers
- Vocabulary support
- Mnemonic devices
- Songs/videos to reinforce concepts
- Manipulatives

- Calculators
- Reteach pages
- Leveled homework
- Lesson intervention activities
- Math Diagnosis & Intervention System
- Another look homework video
- Practice buddy

Gifted & Talented

- Independent projects
- Enrichment pages
- Online games
- Leveled Homework
- Extension Activities
- Today's Challenge

Interdisciplinary Connections

ELA:

RI.2.10. Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.

Science:

K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Climate Change:

- Climate Change Example: Students may solve two-step word problems involving a climate change related issue in their school, such as food waste, recycling, reusing and/or reducing the consumption of goods. They may add and subtract within 100 while using drawing or equations to represent the climate change related issue.
- Climate Change Example: Students may add and subtract within 100 to solve word problems about a climate change issue that involves length. To solve these problems, they may use drawings or equations to represent a climate change related issue in their school, such as food waste, recycling, reusing and/or reducing the consumption of goods.

Career Readiness, Life Literacies & Key Skills

PFL.9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
PFL.9.1.2. FI.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).
WRK.9.1.2.CAP.1	Make a list of different types of jobs and describe the skills associated with each job.
WRK.9.1.2.CAP.2	Explain why employers are willing to pay individuals to work.
TECH.9.4.2.CT	Critical Thinking and Problem-solving

Career Ready Practices

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    - **Stem in Action : Stem Career: Sound Engineer**
    - **Deven talks about his aspirations to become a sound engineer.**
    - **Deven uses addition and subtraction to count the number of speakers in a shipment.**

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