K Math Unit 03: Numbers to Ten

Content Area: Course(s):

Mathematics

Time Period:

Marking Period 1

Length: **18 days** Status: **Published**

Unit Overview

Counting, Comparing, and Writing Numbers

The focus of this unit is:

- to develop early quantitative reasoning skills as students count and compare numbers to 10
- to write numbers through 10
- to learn the number of objects does not change when the arragment changes
- to learn the last number said when counting a group tell how many are in the group
- to apply more, less, great than, less than, same and equal when comparing two groups

What Students Are Learning

- Students count objects in various arrangements
- Students determine which numeral represents a group
- Students understand that each number in the counting sequence represents a quantity one greater than preceding number
- Students match, count and compare the numbers of objects in two groups
- Students compare two quantities presented as numerals
- Students write a numeral to reprsent a group

Number Routines

- Counting Things
- What Did You See?
- Find the Pattern, Make a Pattern
- Notice and Wonder
- Notice and Wonder: How are they the same? How are they different?

Standards

MATH.K.CC.A.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).
MATH.K.CC.B.4.a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
MATH.K.CC.B.4.b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
MATH.K.CC.C.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
MATH.K.CC.C.7	Compare two numbers between 1 and 10 presented as written numerals.
MATH.K.M.B.3	Understand that certain objects are coins and dollar bills, and that coins and dollar bills represent money. Identify the values of all U.S. coins and the one-dollar bill.

Materials

Core Materials:

Reveal Math

- 3.1 Count 6 and 7
- 3.2 Represent 6 and 7
- 3.3 Count 8 and 9
- 3.4 Represent 8 and 9
- 3.5 Count 10
- 3.6 Represent 10
- 3.7 Numbers to 10
- 3.8 Compare Objects in Groups
- 3.9 Compare Numbers

Supplemental Materials:

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

Technology

CS.K-2.8.1.2.AP.1 Model daily processes by creating and following algorithms to complete tasks.

CS.K-2.8.1.2.AP.2 Model the way programs store and manipulate data by using numbers or other symbols to

represent information.

CS.K-2.8.1.2.AP.4	Break down a task into a sequence of steps.
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.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.

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				
 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 	 Extra response time Have students verbalize steps Repeat, clarify, or reword directions Mini-breaks between tasks Provide a warning for transitions Reading partners 	 Precise step-by-step directions Short manageable tasks Brief and concrete directions Provide immediate feedback 	 Teachermade checklist Use visual graphic organizers Reference resources to promote independence Visual and verbal 	

		 Small group instruction Emphasize multi-sensory learning 	reminders • Graphic organizers
Assistive Technology	 Tests/Quizzes/Grading Extended time Study guides Focused/chunked tests Read directions aloud 	• Consistent daily structured routine • Simple and clear classroom rules • Frequent feedback	 Organization Individual 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

At-risk of Failure

- Additional support 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

Gifted & Talented

- Independent projects
- Open middle
- Websketch explorations
- Stem projects
- Enrichment pages
- Online games
- Leveled Homework
- Extension Activities

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.

Career Readiness, Life Literacies & Key Skills

Creativity and Innovation: Brainstorming can create new, innovative ideas.

• 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).

Example: Students will share ideas of multiple strategies and draw models to illustrate the solution path they utilize to solve the word problem.

Critical Thinking and Problem-Solving: Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the

problem.

• 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).

Example: Students will work in small groups and collaborate to identify possible solutions paths to word problems, utilizing the strategies they have learned to solve addition and subtraction operations, such as place value charts, number lines, hundred charts, ten frames, etc. that could best illustrate the solution to the problem.

Digital Citizenship: Individuals should practice safe behaviors when using the Internet.

• 9.4.2.DC.3: Explain how to be safe online and follow safe practices when using the Internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).

Example: Students will model appropriate use of all digital platforms and share examples of their work that exhibit proper use of various platforms.

Interaction of Technology and Humans: Technology has changed the way people love and work. Various tools can improve daily tasks and quality of life.

• 8.2.2.ITH.3: Identify how technology impacts or improves life.

Example: Students will track their progress using Imagine Math or other math programs often utilized in class. Students will discuss the pros and cons of using the program with the teacher.

Career Ready Practices

STEM Career: Statistician-Students compare numbers

Students compare runs scored in baseball

- 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.