Unit 2 - Number Comparison, Counting Data, and Understanding Addition

Content Area: **Mathematics**
Course(s): **Mathematics 1, Mathematics K**
Time Period: **November**
Length: **10 weeks**
Status: **Published**

Enduring Understandings

Compare numbers to 10

Classify and count the number of objects in each category

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from

Essential Questions

How do I compose/ addition and decompose/ subtraction numbers 0-10?

How do I compare and order numbers?

Content

Key Vocabulary

Topic 4: No new vocabulary introduced
Topic 5: category, classify, chart, tally mark
Topic 6 : in all, join, addition sentence, add, plus sign (+), equal sign (=), equation, sum

Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

Understand the relationship between numbers and quantities; connect counting to cardinality.

Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. *(benchmarked)

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.

Compare two numbers between 1 and 10 presented as written numerals.

Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. *(benchmarked)

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Demonstrate fluency for addition and subtraction within 5 (by the end of Kindergarten). *(benchmarked)

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. *(benchmarked)

Skills

Students will:

● count orally by ones up to 50 , beginning at any number

● identify the last number named as the number of objects counted
● identify the next number name in counting as one greater than the previous number

● count to tell the number of objects arranged in a line, rectangular array, circle, or scattered configuration.
● count to tell the number of objects when asked “how many?” questions.
● given a number from 1-20, count out that many object.

● compare the number of objects (up to 10) in two groups.
● identify whether the number of objects in one group is greater than, less than, or equal to to the number of objects in another group.

● compare numbers (up to 10) written as numerals.

● create subtraction and addition events with objects (up to10).
● create subtraction and addition events with drawings and sounds (up to 10).
● create subtraction and addition events by acting out situations and with verbal explanations.

● use objects and drawings to represent addition and subtraction.

● add and subtract within 10.

● add within 5 with accuracy and efficiency.

● sort objects into groups.
● sort the group by count.

Resources

EnVision Materials for Topic 4, 5, 6 including student edition worksheets, problem solving mat, interactive math story, vocabulary cards, and center ideas which are listed in each topic

https://www.illustrativemathematics.org

K.CC.A.2 Start-Stop Counting

K.CC.B.4 Counting Mat

K.CC.B.5 Finding Equal Groups

K.CC.C.6 Which number is greater? Which number is less? How do you know?

K.CC.C.7 Guess the Marbles in the Bag

K.OA.A.1 Ten Frame Addition

K.OA.A.2 Dice Addition 2

K.OA.A.2 What's missing?

K.OA.A.5 Many Ways to do Addition 1

K. MD.B.3 Sort and Count I

K. MD.B.3 Sort and Count II

Addition and Subtraction within 20 ideas and activities

Paper Plate Addition

Kindergarten Math Printabkes for Review/Centers

70 Math Games/Activities for the Classroom

Technology Connection:

Animated Glossary

Brain Pop

Brain Pop Jr

Educreations

enVisions 2.0

Google Classroom

i-Ready

ixl.xom

Kahoot

Khan Academy

Learn Zillion

Math Playground

Poppet

Scholastic Study Jams

SeeSaw

ThatQuiz

XtraMath

IPAD APPS

Flash to Pass

Animal Math

123 My Connect Dots Animal

Number Frames

Park Math

Geoboard

Pattern Shapes

Literature Connection:

Interactive Math Stories for each Topic from Pearson 2.0
Bears at the Beach: Counting 10 - 20 by Niki Yektai
Count and See by Tana Hoban
Counting is for the Birds by Frank Mazzola, jr.
Dragon Naps by Lynne Bertrand
The Handmade Counting Book by Laura Rankin
Monster Munches by Laura Numeroff
Teeth, Tails, & Tentacles: An Animal Counting Book by Christopher Wormell
Twelve Days of Christmas by Jan Brett
Twelve Days of Kindergarten by Deborah Lee Rose
Chicka 123 by Bill Martin Jr.

How Many How Many How Many by Rick Walton
The Icky Bug Counting Book by Jerry Pallotta
Let's Count It Out, Jesse Bear by Nancy White Carlstrom
Monster Math by Anne Miranda
One Guinea Pig Is Not Enough by Kate Duke
One Moose, Twenty Mice by Clare Beaton
One…Two…Three…Sassafras! by Stuart J. Murphy
One Woolly Wombat by Rod Trinca and Kerry Argent
Twenty is too Many by Kate Duke
How Do Dinosaurs Count? by Jane Yolen and Mark Teague
Count! by Denise Fleming
Counting Crocodiles by Judy Sierra
Counting Kisses by Karen Katz
How Many Kisses Good Night? by Jean Monrad Thomas
One Big Building by Michael Dahl
123 A Child's First Counting Book by Alison Jay

Pizza Counting by Christina Dobson
Ten Little Ladybugs by Melanie Gerth
How Many Snails? by Paul Giganti, Jr.
How Many? by Ron Van Der Meer
The Mitten by Jan Brett
Eye Count by Linda Bourke
The Mission of Addition By Brian P. Cleary

Standards

MA.K-12.1	Make sense of problems and persevere in solving them.
MA.K-12.2	Reason abstractly and quantitatively.
MA.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
MA.K-12.3	Construct viable arguments and critique the reasoning of others.
MA.K-12.4	Model with mathematics.
MA.K-12.5	Use appropriate tools strategically.
MA.K.CC.B.4c	Understand that each successive number name refers to a quantity that is one larger.
MA.K-12.6	Attend to precision.
MA.K.CC.B.5	Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

MA.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.
MA.K-12.7	Look for and make use of structure.
MA.K.CC.C.7	Compare two numbers between 1 and 10 presented as written numerals.
MA.K-12.8	Look for and express regularity in repeated reasoning.
MA.K.OA.A.1	Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
MA.K.OA.A.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
MA.K.OA.A.5	Demonstrate fluency for addition and subtraction within 5.
MA.K.MD.B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.