Mathematics Benchmarks for Grade 2

Mathematical Content
Strand: *Operations and Algebraic Thinking (OA)*
Represent and solve problems involving addition and subtraction.
Add and subtract numbers up to 100 to solve one-step word problems
Add and subtract numbers up to 100 to solve two-step word problems
Add and subtract within 20.
Add and subtract numbers up to 20 mentally
Memorize all sums of two one-digit numbers
Work with equal groups of objects to gain foundations for multiplication.
Determine whether a group of 20 or fewer objects has an odd or even number of members
Write an equation to express an even number as a sum of two equal addends
Add objects arranged in a rectangular array with up to 5 rows and 5 columns
Write an equation to express the total of a rectangular array with up to 5 rows and 5 columns as a sum of equal addends
Strand: *Number and Operations in Base Ten (NBT)*
Understand place value.
Represent the three digits of a three-digit number in amounts of hundreds, tens, and ones
Count numbers up to 1000 by skip-counting 5s, 10s, and 100s
Read numbers up to 1000 using base-ten numerals, number names, and expanded form
Write numbers up to 1000 using base-ten numerals, number names, and expanded form
Compare two three-digit numbers based on a breakdown into hundreds, tens, and ones
Record the results of comparisons between two three-digit numbers using the symbols >, =, and <
Use place value understanding and properties of operations to add and subtract.
Add and subtract numbers up to 100 fluently
Add up to four two-digit numbers
Add and subtract numbers up to 1000
Explain the process of adding and subtracting numbers up to 1000
Add 10 or 100 to a given number between 100 and 900 mentally
Subtract 10 or 100 from a given number between 100 and 900 mentally
Explain how using place value facilitates addition and subtraction
Explain how using the properties of operations facilitates addition and subtraction
Strand: *Measurement and Data (MD)*
Measure and estimate lengths in standard units.
Measure the length of an object by selecting and using appropriate tools
Describe how an object measured twice using different measurement units relates to the size of the unit
Estimate lengths using units of inches, feet, centimeters, and meters
Determine the difference in length of two objects measured by a standard length unit
Relate addition and subtraction to length.
Add and subtract up to 100 to solve word problems involving lengths measured using a standard length unit
Represent whole numbers up to 100 as lengths from 0 on a number line diagram with equally spaced points
Represent whole-number sums and differences of two lengths on a number line diagram with equally spaced points beginning at 0 and up to 100
Work with time and money.
Tell the time to the nearest five minutes including A.M. and P.M., using analog and digital clocks
Write the time to the nearest five minutes, including A.M. and P.M., using analog and digital clocks
Solve word problems using different denominations of cash
Represent and interpret data.
Create a line plot from repeated measures of the length of an object to the nearest whole unit
Create a line plot from measures of the lengths of several objects to the nearest whole unit

Represent data from up to four categories on a picture graph and bar chart
Solve problems using information presented in a bar graph
Strand: *Geometry (G)*
Reason with shapes and their attributes.
Recognize triangles, quadrilaterals, pentagons, hexagons, and cubes
Draw shapes having a given number of angles, faces, or lengths
Partition a rectangle into rows and columns of same-size squares
Count the number of same-size squares in a rectangle partitioned into rows and columns
Partition circles and rectangles into two, three, or four equal shares
Describe two, three and four equal shares of circles and rectangles using words and phrases
Recognize the shapes of equal shares of identical wholes

Mathematical Practices

Strand: Solve Problems (MP1)
1. Make sense of problems and persevere in solving them.
Make sense of your problem
Reflect on your thinking as you solve your problem
Keep trying when your problem is hard
Check whether your answer makes sense
Solve problems in more than one way
Compare the strategies you and others use
Strand: Reason (MP2)
2. Reason abstractly and quantitatively.
Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects
Make sense of the representations you and others use
Make connections between representations
Strand: Construct Arguments (MP3)
3. Construct viable arguments and critique the reasoning of others.
Make mathematical conjectures and arguments
Make sense of others' mathematical thinking

Strand: Model (MP4)
4. Model with mathematics.
Model real-world situations using graphs, drawings, tables, symbols, numbers, diagrams, and other representations
Use mathematical models to solve problems and answer questions
Strand: Use Tools (MP5)
5. Use appropriate tools strategically.
Choose appropriate tools
Use tools effectively and make sense of your results
Strand: Attend to Precision (MP6)
6. Attend to precision.
Explain your mathematical thinking clearly and precisely
Use an appropriate level of precision for your problem
Use clear labels, units, and mathematical language
Think about accuracy and efficiency when you count, measure, and calculate
Strand: Use Structure (MP7)
7. Look for and make use of structure.
Look for mathematical structures such as categories, patterns, and properties
Use structures to solve problems and answer questions
Strand: Express Regularity (MP8)
8. Look for and express regularity in repeated reasoning.
Create and justify rules, shortcuts, and generalizations