

## Second Grade Math Skills

- Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.
  - 100 can be thought of as a bundle of ten tens – called a “hundred”
  - The numbers 100, 200, 300, 400, 500, 600, 700, 800, and 900 refer to one, two, three, four, five, six, seven, eight, and nine hundreds
- Count within 1000: skip counts by 5s, 10s, and 100s
- Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
- Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using  $>$ ,  $=$ ,  $<$  symbols to record the results of comparisons
- Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
- Fluently add and subtract within 100
- Add up to four two-digit numbers
- Add and subtract within 1000
- Mentally add 10 or 100 to a given number 100-900
- Mentally subtract 10 or 100 from a given number 100-900
- Explain why addition and subtraction strategies work, using place value and the properties of operations.
- Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.
- Use mental 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.
- Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
- Fluently add and subtract within 100.
- Add and subtract within 1000.
- Tell and write time from an analog and digital clock to the nearest 5 minutes using A.M. and P.M.
- Solve word problems involving dollar bills, quarters, dimes, nickels and pennies using the dollar and cents symbols appropriately
- Draw a picture graph and bar graph to represent a data set with up to four categories.

- Solve simple put-together/take-apart and compare problems using information presented in the bar graph
- Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- Estimate lengths using units of inches, feet, centimeters, and meters.
- Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
- Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.
- Analyze and draw two and three dimensional shapes having specified attributes (quarters and thirds).
- Use the understanding of fractions to partition shapes into halves, thirds, quarters.
- Describe the shape as fractions.

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