



# MATHEMATICS

## GRADE 2

By the end of second grade, students will have had an opportunity to engage with the core concepts listed below.

- Solve one or two-step addition and subtraction word problems.
  - A “one-step” problem would be: “Lucy has 23 fewer apples than Julie. Julie has 47 apples. How many apples does Lucy have?”
- Quickly and accurately add with a sum of 20 or less (ex:  $11 + 8$ ).
- Quickly and accurately subtract from a number 20 or less (ex:  $16 - 9$ ).
- Understand what the digits mean in three-digit numbers (place value).
- Counting within 1,000 by 5s, 10s, and 100s starting at any number.
- Compare two three-digit numbers using  $>$ ,  $<$ , or  $=$ .
- Use understanding of place value to add and subtract three-digit numbers (ex:  $811 - 367 = ? \rightarrow 811 - 300 = 511 \rightarrow 511 - 60 = 451 \rightarrow 451 - 7 = 444$ )
- Solve addition and subtraction word problems involving length.
  - For example, “The pen is 2 cm longer than the pencil. If the pencil is 7 cm long, how long is the pen?”
- Build, draw, and analyze 2-D and 3-D shapes to develop foundations for area, volume, and geometry in later grades.
- Develop a foundation for multiplication by using repeated addition and array models (ex:  $4+4+4$ )
- Tell and write time from analog and digital clocks, and solve problems about time to five minutes, including a.m. and p.m.
- Identify and count money, including dollar bills, quarters, dimes, nickels, pennies.



### QUESTIONS TO ASK YOUR STUDENT

- “How much change will we have after we pay for our snacks with this \$10 bill?”
- “How many juice boxes are in three packages?”
- “Would it take more inches or more feet to measure our table? How long do you think it is?”
- “What time is it? Is it a.m. or p.m. when we eat dinner?”



### WAYS TO CHALLENGE THEIR THINKING

- Introduce two-step word problems that require more thought.
- Encourage quick adding or subtraction of numbers within 20 using mental math strategies.
- Explore place value with three-digit numbers.
- Provide real-world problems involving time and money to practice core concepts.