

Springfield Public Schools  
**FIRST GRADE**

The intent of the Springfield R-12 Elementary mathematics Program is to explore, investigate, and understand the importance of mathematics through real-world experiences. In mathematics, students will acquire knowledge and skills to solve problems, communicate, reason, create models, and make connections.

The student will:

1. Understand concepts of **Numbers and Operation** including:
  - a. Recognize and write how many in a set of objects. (MA1 1.6, 1.10)
  - b. Recognize one whole,  $\frac{1}{2}$ ,  $\frac{1}{3}$ , and  $\frac{1}{4}$  of a shape. (MA1 1.10)
  - c. Compose or decompose numbers using known facts, doubles and close to doubles. (MA1 3.2, 3.3)
  - d. Skip count by 2, 5, and 10 to 100. (MA1 1.10)
  - e. Identify one digit numbers as odd or even. (MA1 1.10)
  - f. Identify the ordinal position of an object. (MA1 1.10)
  - g. Represents a given situation involving addition or subtraction. (MA5 1.6, 1.10)
  - h. Recognize and write addition and subtraction sentences of a fact family. (MA1 1.6, 1.10)
  - i. Describe or represent the mental strategy used to compute an addition problem. (MA1 3.4, 4.1)
  - j. Develop fluency with basic number relationships of addition and subtraction for sums to 20. (MA1 1.6)
  - k. Apply and describe the strategy used to compute 1-digit addition or subtraction problem. (MA5 1.6, 1.10)
  
2. Understand and use the concepts of **Algebraic Relationships** including:
  - a. Extend patterns of sound, shape, motion or a simple numeric pattern. (MA4 1.6)
  - b. Create and describe how simple repeating patterns are generated. (MA4 1.6, 3.5)
  - c. Classify objects by size, number, or other attributes. (MA2 1.8)
  - d. Identify and state the sorting rule. (MA2 1.8)
  - e. Represent a mathematical situation as an expression or number sentence. (MA4 1.6, 3.1)
  - f. Model situations that involve the addition of whole numbers, using pictures, objects, or symbols. (MA1, 4 1.6, 3.6)
  - g. Describe qualitative change, such as students growing taller. (MA4 4.1)

3. Describe, analyze and apply the concepts of **Geometric and Spatial Relationships** including:

- a. Recognize and name 2- and 3-dimensional shapes using physical models (circle, triangle, trapezoid, rectangle, rhombus, sphere, rectangular prism, cylinder, pyramid). (MA2 1.6, 1.10)
- b. Describe, name and interpret relative positions in space (left, right). (MA2 3.3, 4.1)
- c. Use manipulatives to model slides and turns. (MA2 1.4) Recognize geometric shapes and structures in the student's environment and specify the shape's location. (MA2 3.3)

4. Understand and apply the concepts of **Measurement** including:

- a. Select the appropriate tool for the attribute being measured. (MA2 1.4, 3.7)
- b. Tell time to the nearest hour and half-hour. (MA2 3.3)
- c. Recite days of the week. (MA2 3.3)
- d. Count and record money to fifty cents, including quarters and half dollars.
- e. Use repetition of a single unit to measure something larger than the unit. (MA2 3.3)

5. Recognize and understands the concept of **Data and Probability** including:

- a. Pose questions and gather data about themselves and their surroundings. (MA3 1.2)
- b. Sort and classify items according to their attributes. (MA2 1.8)
- c. Represent data using pictures and bar graphs. (MA3 1.8)