

Grade One
Gourmet Curriculum Press, Inc.©
Correlations with Oklahoma
Instructional Mathematical Goals and Objectives

The following concepts and skills are required by all students completing first grade. The **Major Concepts** should be taught in depth using a variety of methods and applications so that all students have accessibility to and an understanding of these concepts. **Maintenance Concepts** have been taught previously and are a necessary foundation for success in mathematics at this level.

MAJOR CONCEPTS

Patterns-Repeating, Growing
Number Sense-Quantities to 100
Operations-Add, Subtract&Facts to 10
Geometry-Congruent Shapes
Measurement-Time, Money, Calendar
Data Analysis-Concrete, Picture Graphs

MAINTENANCE CONCEPTS

Patterns-Repeating
Number Sense-Counting, Sorting
Geometry-Shapes
Measurement-Comparisons
Data Analysis-Concrete Graphs

THINK STARH

Use the image of a star with **Content** at its center and **Problem Solving, Communications, Connections, Reasoning, and Representation** at its five points to design illuminating lessons (see page 77).

KEY TO SUCCESS!

When introducing new concepts **CONNECT** from Concrete -> Pictorial -> Abstract

I. Patterns

- A. Identify and describe patterns in everyday situations (e.g., calenders, home or school routines).
- B. Identify and extend both repeating and growing patterns with concrete objects and shapes.
- C. Sort and/or order objects according to given **attributes** and student-generated **attributes** and report and record findings (e.g., sort a bag of objects by color, size, shape, function).

II. Number Sense

- A. Compare objects by size and quality (e.g., more than, less than, equal to).
- *B. Use concrete models of tens and ones to develop the concept of place value.
- C. Read and write numerals to 100.
- D. Count as many as 100 objects by ones, twos, fives, and tens.
- E. Use **ordinal** numbers first through tenth.
- *F. Investigate concepts of fractional parts (e.g., halves, thirds, fourths).
- *G. Acquire strategies for making computations (e.g., use estimation, number sense to judge reasonableness, counting on).

III. **Number Operations and Computations**

- A. Perform addition by joining sets of objects and subtraction by separating and by comparing sets of objects.
- *B. Use strategies to develop **operation** sense (e.g., fact families, **ten frames**).
- C. Develop and apply properties of addition using models and **manipulatives** (e.g., $2 + 4 = 4 + 2$, $3 + 0 = 3$).
- *D. Use models to construct addition and subtraction acts to 10 (e.g., counters, cubes, **ten frames**).
- E. Write addition and subtraction number sentences for problem situations.

IV. **Geometry and Spatial Sense**

- A. Sort and identify **congruent** (same shape/same size) shapes.
- B. Name and use geometric shapes and objects to address everyday situations.
- C. Use language to describe relationships of objects in space (e.g., above, below, behind, between).

V. **Measurement**

- A. Tell time on digital and analog clocks to the hour and half-hour.
- B. Name the value of pennies, dimes, nickels, and quarters.
- C. Use the calendar to develop concepts of days, weeks, months.
- D. Measure objects with nonstandard (e.g., paper clips, hands) and standard units (inch tiles, centimeters cubes).

IV. **Data Analysis**

- A. Formulate and solve problems that involve collecting and analyzing data common to children's lives (e.g., color of shoes, number of pets, favorites).
- B. Organize, describe, and display data using concrete objects, pictures, prepared grids, and numbers.