

# MATH OUTCOMES

## FIRST GRADE

1. **Read, write and compare numbers to 120.**
  - A. Count orally to 120.
  - B. Write numbers to 120 in order.
  - C. Identify and write non-sequential numbers to 120.
  - D. Order 2-digit numbers.
  - E. Compare numbers as to whether they are greater than, less than, or equal.
  
2. **Understand counting by 1s, 2s, 5s, and 10s to 120.**
  - A. Recognize the pattern of numbers.
  - B. Write, count forward and count backward by 2s to 120.
  - C. Write, count forward and count backward by 5s to 120.
  - D. Write, count forward and count backward by 10s to 120.
  - E. Count by 10s from any given number to 120. (25, 35, 45, 55...)
  
3. **Understand place value of tens and ones.**
  - A. Group objects by tens and ones.
  - B. Identify the tens place and ones place with a two-digit number.
  
4. **Know addition and subtraction process.**
  - A. Know meaning of symbols (+, -, =).
  - B. Use manipulatives and pictures to demonstrate the concepts of addition and subtraction.
  - C. Add or subtract to 15, using numerals vertically and horizontally.
  - D. Find missing numbers in addition and subtraction equations ( $5 = \square + 3$ )
  - E. Add and subtract two-digit numbers using a number grid or base-10 blocks.
  
5. **Understand measurement**
  - A. Solve problems which require measurement (standard and non-standard measure).
  - B. Measure and draw line segments in inches and centimeters using a ruler.
  
6. **Tell time to the hour and half-hour, relating it to daily living.**
  - A. Name parts of a clock: hour hand, minute hand, second hand, face and number markings.
  - B. Know the order of numbers on the clock (1 – 12).
  - C. Tell time to the hour and half hour, using analog and digital clocks.
  - D. Recognize the difference between the length of a day, week, month, and a year.

- 7. Recognizes and counts money.**
- A. Identify a penny, nickel, dime and quarter and know its value.
  - B. Be able to count a group of pennies, nickels, dimes and quarters to \$1.00, applying knowledge of counting by ones, fives, tens and twenty-fives.
- 8. Estimate, sort, pattern, classify, graph and measure for problem solving.**
- A. Estimate the answer before solving.
  - B. Solve problems which require sorting.
  - C. Recognize and solve problems which involve patterns.
  - D. Solve problems which require classifying.
  - E. Make simple graphs (picto, bar) in the problem solving process.
  - F. Solve problems which require measurements (standard and non-standard measure).
- 9. Verbally communicate how to get an answer.**
- A. Use verbal language to explain strategies used to solve problems.
  - B. Name key words involved in a problem.
  - C. State which process to use (addition or subtraction).
  - D. Solve real world situations corresponding to number sentences.
- 10. Understand the concepts of size, quantity, and special relationships.**
- A. Know the concepts of large/small, big/little.
  - B. Know the concepts of heavy/light, thick/thin.
  - C. Know the concepts of right/left/middle.
  - D. Know the concepts of ordinal positions – first, second, third, etc.
- 11. Understand basic geometry concepts.**
- A. Identify 2-dimensional shapes including circle, square, triangle, trapezoid, rhombus, and hexagon.
  - B. Identify 3-dimensional shapes including spheres, cylinders, cones, pyramids, cubes and rectangular prisms.
  - C. Sort 2-dimensional and 3-dimensional shapes according to attributes.
  - D. Understand and create symmetrical designs.
- 12. Develop an awareness of fractions and their meaning.**
- A. State the fraction as part of a whole.
  - B. Demonstrate the fractions  $\frac{1}{2}$ ,  $\frac{1}{3}$ , and  $\frac{1}{4}$  by folding a piece of paper.
  - C. Explain the relationship between equivalent fractions.
  - D. Recognize the correct fraction in a divided shape.