

At the end of the school year, students will be able to...

P R E - K I N D E R G A R T E N

## GOAL 6 Numbers Sense and Computation

*Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, division), patterns, ratios and proportions.*

### STANDARD A

**Demonstrate knowledge and use of numbers and their representations in a broad range of theoretical and practical settings.**

- \_\_\_ Use concepts that include number recognition, counting and one-to-one correspondence.
- \_\_\_ Count with understanding and recognize "how many" in sets of objects

### STANDARD B

**Investigate, represent and solve problems using number facts, operations (addition, subtraction, multiplication and division) and their properties, algorithms, and relationships.**

- \_\_\_ Solve simple mathematical problems.

### STANDARD C

**Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.**

- \_\_\_ Explore quantity and number.
- \_\_\_ Connect numbers to quantities they represent using physical models and representations.

### STANDARD D

**Solve problems using comparisons of quantities, ratios, proportions and percents.**

- \_\_\_ Make comparisons of quantities..

## GOAL 7 Measurement

*Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.*

### STANDARD A

**Measure and compare quantities using appropriate units, instruments, and methods.**

- \_\_\_ Demonstrate a beginning understanding of measurement using non-standard units and measurement words.
- \_\_\_ Construct a sense of time through participation in daily activities.

### STANDARD B

**Estimate measurements and determine acceptable levels of accuracy.**

- \_\_\_ Show understanding of and use comparative words.

### STANDARD C

**Select and use appropriate technology, instruments and formulas to solve problems, interpret results and communicate findings.**

- \_\_\_ Incorporate estimating and measuring activities into play.

## GOAL 8 Algebra

*Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.*

### STANDARD A

**Describe numerical relationships using variables and patterns.**

- \_\_\_ Sort and classify objects by a variety of properties.

### STANDARD B

**Interpret and describe numerical relationships using tables, graphs and symbols.**

- \_\_\_ Recognize, duplicate and extend simple patterns, such as sequences of sounds, shapes and colors.
- \_\_\_ Begin to order objects in series or rows.

**STANDARD C****Solve problems using systems of numbers and their properties.**

\_\_\_\_\_ Participate in situations that involve addition and subtraction using manipulatives.

**STANDARD D****Use algebraic concepts and procedures to represent and solve problems.**

\_\_\_\_\_ Describe qualitative change, such as measuring to see who is growing taller.

**GOAL 9 Geometry*****Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.*****STANDARD A****Demonstrate and apply geometric concepts involving points, lines, planes and space.**

\_\_\_\_\_ Recognize geometric shapes and structures in the environment.

**STANDARD B****Identify, describe, classify and compare relationships using points, lines, planes and solids.**

\_\_\_\_\_ Find and name locations with simple words, such as "near."

**STANDARD C****Construct convincing arguments and proofs to solve problems.****GOAL 10 Data Collection and Statistical Analysis*****Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.*****STANDARD A****Organize, describe, and make predictions from existing data.**

\_\_\_\_\_ Represent data using concrete objects, picture and graphs.

\_\_\_\_\_ Make predictions about what will happen next.

**STANDARD B****Formulate questions, design data collection methods, gather and analyze data and communicate findings.**

\_\_\_\_\_ Gather data about themselves and their surroundings.

**STANDARD C****Determine, describe and apply the probabilities of events.**