

# USD 312

## Kindergarten Mathematics

### **Standard 1: Students will use number sense in a variety of situations.**

#### **Indicators of Performance**

Students will -

1. represent whole numbers from 1 through 20 with manipulatives
2. identify whole numbers from 1 through 20 (out of order)
3. count to 100 by ones, fives and tens
4. count backwards from 10
5. write symbols for whole numbers from 1 through 100
6. know whole numbers (1 through 20) that come before or after a certain number
7. construct a set of a specified size up to 20 objects
8. identify and construct a set equal in number to a given set (with 10 objects or less)
9. recognize small groups, without counting, up to 6
10. identify and tell value of pennies, nickels, dimes, and quarters
11. identify the ordinal positions of first through tenth and what is last
12. recognizes a whole, half, and parts of a whole using concrete objects
13. represent whole numbers from 0-20 using place value models: example, 10 frames, straw bundled in 10's

### **Standard 2: Students will use computation in a variety of situations.**

#### **Indicators of Performance:**

Students will -

1. use manipulatives to solve simple problems involving addition and subtraction facts up to the sum of 10 and using the zero property of addition.
2. form and solve real-world problems, reason and communicate about mathematics using the previous indicator of performance for computation in combination with indicators from other standards

### **Standard 3: Students will use algebraic concepts in a variety of situations.**

#### **Indicators of Performance:**

Students will -

1. identify, state or continue patterns (number patterns, picture patterns, oral patterns or kinesthetic patterns)
2. build patterns (such as AB, AAB, ABC)
3. recognize the same general pattern presented in different ways
4. generalize a pattern using an oral description

Consider the following patterns:

- a) geometric patterns that have only one change
- b) daily life patterns such as grass is green, sky is blue. . .

# USD 312

## Kindergarten Mathematics

5. sort and classify objects by color, shape, size and use
6. use manipulatives or pictures to describe a mathematical problem in more than one way
7. form and solve real-world problems, reason and communicate about mathematics using the previous indicators of performance for algebraic concepts in combination with indicators from other standards

### **Standard 4: Students will use geometry in a variety of situations.**

#### **Indicators of Performance:**

Students will -

1. identify, describe, and place an object in a specific location (ex. above, below, next to, top, bottom, on, off, under, over)
2. identify left hand, right foot, . . .
3. identify a square, rectangle, triangle, circle and oval (ellipse)
4. choose the longest and shortest object from a group
5. compare and order objects by size
6. compare and order lengths with manipulatives
7. tell time on the hour using digital and analog clocks
8. identify daytime and nighttime from pictorial representations
9. locate and plot whole numbers from 0-20 on a horizontal number line

### **Standard 5: Students will use statistics in a variety of situations.**

#### **Indicators of Performance:**

Students will -

1. list the possible outcomes for an experiment with only two outcomes
2. conduct an experiment that has only two outcomes (like dropping a two-colored counter or coin) and record the results
3. use tally marks to represent symbolically the number of objects in a group
4. shade in squares on graph paper to represent given data as a frequency chart
5. make a bar graph with manipulatives
6. identify the least and greatest values in a set of data
7. form and solve real-world problems, reason and communicate about mathematics using the previous indicators of performance for statistics in combination with indicators from other standards

# USD 312

## Kindergarten Mathematics

### **Skills to be introduced:**

- a) concept of more, less, and same
- b) greater than  $>$  and less than  $<$
- c) fraction models using fraction strips or pattern blocks
- d) geometric shapes (solids) cube, rectangular prism, cone, sphere, and cylinder
- e) use of geoboards and dot paper
- f) use of graphs, pictographs, tally marks, and bar graphs
- g) number line to locate, add, and subtract
- h) use of the terms impossible, possible, or more than one outcome
- i) measurement terms: length, height, weight, and temperature