# SAUSALITO MARIN CITY SCHOOL DISTRICT
## Mathematics Standards - GRADE 1

By the end of first grade, students understand and use the concept of "ones" and "tens" in the place value number system. They add and subtract small numbers with ease. They measure with simple units and locate objects in space. They describe data and analyze and solve simple problem situations.

## NUMBER SENSE
**1. Students sort objects, and create and describe patterns involving numbers, shape, size, rhythm or color.**

+1.1. describe, extend and explain how to get to the next element in simple repeating patterns (e.g. rhythmic, numeric, color and shape patterns)

**2. Students understand and use numbers up to 100.**

+2.1. count, read and write whole numbers to 100

+2.2. compare and order whole numbers to 100 using the symbols for less than, equal to, or greater than ($<, =, >$ )

2.3. represent equivalent forms of the same number through the use of physical models, diagrams and number expressions to 20 (e.g., 8 can be represented as 4 + 4, 5 + 3, 2 + 2 + 2 + 2, 10 - 2, 11 - 3)

2.4. count and group objects into ones and tens (e.g., 3 groups of ten and 4 more is 34 or 30 + 4)

2.5. identify and know the value of coins and show different combinations of coins that equal the same value

**3. Students demonstrate the meaning of addition and subtraction and use these operations to solve problems.**

+3.1. know the addition facts (sums to 20) and the corresponding subtraction facts, and commit them to memory

+3.2. use the inverse relationship between addition and subtraction to solve problems

+3.3. identify one more than, one less than, ten more than, ten less than a given number

+3.4. count by 2s, 5s and 10s with numbers to 100

+3.5. show the meaning of addition (putting together, increasing) and subtraction (taking away, comparing, finding the difference)

3.6. solve addition and subtraction problems with one- and two-digit numbers (e.g., 5 + 58 = __)

3.7. find the sum of three one-digit numbers

**4. Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, and hundreds places.**

4.1. make reasonable estimates when comparing larger or smaller numbers

**5. Students understand the concept of a whole unit and that it can be divided into equal parts.**

## ALGEBRA AND FUNCTIONS
**1. Students use number sentences to solve problems.**

1.1. write and solve number sentences from problem situations that express relationships involving addition and subtraction

1.2. understand the meaning of the symbols +, -, =

1.3. create problem situations that could lead to given number sentences involving addition and subtraction

1.4. know odd and even numbers through 10

## MEASUREMENT AND GEOMETRY
**1. Students use direct comparison and non-standard units to describe the measurements of objects.**

1.1. compare the length, weight and volume of two or more objects using direct comparison or a non-standard unit

1.2. tell time to the nearest half hour and compare time related to events (e.g., before/after, shorter/longer)

**2. Students identify common geometric figures, classify them by common attributes and describe their relative position/or their location in space.**

2.1. identify, describe, and compare triangles, rectangles, squares and circles, including the faces of three-dimensional objects

2.2. classify familiar plane and solid objects by common attributes like color, position, shape, size, roundness, number of corners and explain which attributes are being used for classification

2.3. give and follow directions about location

2.4. describe and arrange objects in space in terms of proximity, position and direction (e.g., near, far, below, above, up, down, behind, in front of, next to, left/right)

## STATISTICS, DATA ANALYSIS and PROBABILITY

**1. Students organize, represent and compare categorical data on simple graphs and charts.**

1.1. sort objects and data by common attributes and describe the groups formed using categorical labels

1.2. represent and compare data (e.g., largest, smallest, most often, least often), using pictures, bar graphs, tally charts and picture graphs

## MATHEMATICAL REASONING

**1. Students make decisions about how to set up a problem.**

1.1. decide about the approach, materials and strategies to use

1.2. use tools such as manipulatives or sketches to model problems

**2. Students solve problems and justify their reasoning.**

2.1. explain the reasoning used and justify the procedures selected

2.2. make precise calculations and check the validity of the results from the context of the problem

**3. Students note connections between one problem and another**