

SAUSALITO MARIN CITY SCHOOL DISTRICT

Mathematics Standards - Kindergarten

By the end of kindergarten, students understand the consistency of small numbers, quantities and simple shapes in their everyday environment. They count, compare, describe and sort objects, and develop a sense about properties and patterns.

NUMBER SENSE

+1. Students understand the relationship between numbers and quantities, i.e., that a set of objects has the same number of objects in different situations, regardless of its position or arrangement.

1.1. recognize, describe, reproduce and extend a simple 3-part pattern in a variety of contexts

1.2. compare two or more sets (up to 10 objects in each group), and identify which set is equal to, more than, or less than the other
1.3. count, recognize, represent, name and order numbers (to 30) using objects
1.4. know that the larger numbers describe sets with more objects in them than smaller numbers

1.5. place objects first, second, third
1.6. name the number which comes before or after a given number up to the number ten
1.7. internalize the concept of four
(1) give automatic responses for the number of objects missing from the set of four or fewer

2. Students understand and describe simple addition and subtraction situations.

+2.1. use concrete objects to determine the answers to addition and subtraction problems for two numbers each less than 10

3. Students use estimation strategies in computation and problem solving that involve numbers that use the ones and tens places.

3.1. recognize when an estimate is reasonable

ALGEBRA AND FUNCTIONS

1. Students sort and classify objects.

+1.1. identify, sort and classify objects by attribute and identify objects that do not belong to a particular grouping
(e.g., all these balls are green, those are red)

MEASUREMENT AND GEOMETRY

+1. Students understand that there are properties such as length, weight, capacity and time and that comparisons can be made by using these properties.

1.1. compare the length, weight and capacity of objects by making direct comparisons or using

reference objects (e.g., shorter/longer/taller, lighter/heavier, which holds more?)

1.2. demonstrate understanding of concepts of time (e.g., morning, afternoon, evening, day, yesterday, tomorrow, week, year) including tools that measure time (e.g., clock, calendar)
1.3. name the days of the week

1.4. identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock, bed time is 8 o'clock at night)

2. Students identify common geometric objects in their environment and describe their features.

2.1. identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone)
2.2. compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners)

STATISTICS, DATA ANALYSIS and PROBABILITY

1. Students collect information about objects and events in their environment.

1.1. pose information questions, collect data and record the results using objects, pictures and picture graphs
+1.2. identify, describe and extend simple patterns involving shape, size, or color (e.g., circle, triangle, red, blue)

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 and strategies such as manipulatives or sketches to model problems

2. Students solve problems in reasonable ways and justify reasoning.

2.1. explain the reasoning used with concrete objects and pictorial representations

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