

# CALIFORNIA PRESCHOOL FOUNDATIONS: MATHEMATICS (5 year olds)

## NUMBER SENSE

1.0 Children expand their understanding of numbers and quantities in their everyday environment.

- 1.1 Recite numbers in order to twenty with increasing accuracy.
- 1.2 Recognize and know the name of some written numerals.
- 1.3 Identify, without counting, the number of objects in a collection of up to four objects (i.e., subitize).
- 1.4 Count up to 10 objects, using 1-to-1 correspondence (one object for each number word) with increasing accuracy.
- 1.5 Understand, when counting, that the number name of the last object counted represents the total number of objects in the group (i.e., cardinality).

2.0 Children expand their understanding of number relationships and operations in their everyday environment.

- 2.1 Compare, by counting or matching, two groups of up to 5 objects and communicate, "more," "same as," "fewer"
- 2.2 Understand that adding one or taking away one changes the number in a small group of objects by exactly one.
- 2.3 Understand that putting two groups of objects together will make a bigger group and that a group of objects can be taken apart into smaller groups.
- 2.4 Solve simple addition and subtraction problems with a small number of objects (sums to 10), usually by counting

## ALGEBRA

1.0 Children expand their understanding of sorting and classifying objects in their everyday environment.

- 1.1 Sort and classify objects by one or more attributes, into two or more groups, with increasing accuracy (e.g., may sort first by one attribute and then by another attribute).

2.0 Children expand their understanding of simple, repeating patterns.

- 2.1 Recognize and duplicate simple repeating patterns.
- 2.2 Begin to extend and create simple repeating patterns.

## MEASUREMENT

1.0 Children expand their understanding of comparing, ordering, and measuring objects.

- 1.1 Compare 2 objects by length, weight, or capacity directly (putting objects side by side) or indirectly (using a third object).
- 1.2 Order four or more objects by size.
- 1.3 Measure length using multiple duplicates of the same-size concrete units laid end to end.

## GEOMETRY

1.0 Children identify and use a variety of shapes in their everyday environment.

- 1.1 Identify, describe, and construct a variety of different shapes, including variations of a circle, triangle, rectangle, square, and other shapes.
- 1.2 Combine different shapes to create a picture or design.

2.0 Children expand their understanding of positions in space.

- 2.1 Identify positions of objects and people in space, including in/on/ under, up/down, inside/outside, beside/between, and in front/behind.

## MATHEMATICAL REASONING

1.0 Children expand the use of mathematical thinking to solve problems that arise in their everyday environment.

- Identify and apply a variety of mathematical strategies to solve problems in their environment.