

**Desired Results Developmental Profile–Kindergarten (DRDP-K)
Correspondence to California Learning Standards:
Cognition: Math (COG: MATH) and the California Preschool Learning
Foundations (PLF)**

The alignment between the DRDP-K Cognition: Math (COG: MATH) measures and the California Preschool Learning Foundations (PLF) indicates a significant correspondence in structure and content. Both the standards and measures focus on the same key concepts and skills in mathematics, including understanding of numbers, math operations, classification, measurement, patterning, and shapes. The COG: MATH measures describe the developmental progressions in each of the key areas of early mathematics development. One concept that the PLF addresses but is not explicitly represented in the DRDP-K COG: MATH measures is the ability to identify positions of objects and people in space (such as *up*, *down*, *inside*, or *above*). Overall, each of the DRDP-K COG: MATH measures has a similar focus and corresponding developmental level as one or more of the foundations.

**Correspondence between the DRDP-K Instrument and
the California Preschool Learning Foundations**

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Mathematics	Measure Corresponds with PLF in the Following Ways:
<p>COG: MATH 1: Classification</p> <p>Definition: Child shows an increasing ability to compare, match, and sort objects into groups according to their attributes</p>	<p><u>Algebra and Functions</u></p> <p>Children expand their understanding of sorting and classifying objects in their everyday environment. At around 60 months</p> <p>1.1 Sort and classify objects by <i>one or more</i> attributes, into two or more groups, with increasing accuracy (e.g., may sort first by one attribute and then by another attribute).</p>	<p>Child sorts objects into groups based on one or two attributes, sometimes sorting by one attribute and then subdividing those groups based on a second attribute (Algebra and Functions 1.1).</p>
<p>COG: MATH 2: Number Sense of Quantity</p> <p>Definition: Child shows developing understanding of number and quantity</p>	<p><u>Number Sense</u></p> <p>Children expand their understanding of numbers and quantities in their everyday environment. At around 60 months</p> <p>1.1 Recite numbers in order to twenty with increasing accuracy.</p>	<p>Child recites objects correctly up to 20 (Number Sense 1.1).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Mathematics	Measure Corresponds with PLF in the Following Ways:
<p>COG: MATH 2: Number Sense of Quantity (continued)</p> <p>Definition: Child shows developing understanding of number and quantity</p>	<p>Children expand their understanding of numbers and quantities in their everyday environment. At around 60 months (continued)</p> <p>1.2 Recognize and know the name of some written numerals.</p> <p>1.3 Identify, without counting, the number of objects in a collection of up to four objects (i.e., subitize).</p> <p>1.4 Count up to ten objects, using one-to-one correspondence (one object for each number word) with increasing accuracy.</p> <p>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).</p> <p>Children expand their understanding of number relationships and operations in their everyday environment. At around 60 months</p> <p>2.1 Compare, by counting or matching, two groups of up to five objects and communicate, “more,” “same as,” or “fewer” (or “less”).</p> <p><u>Mathematical Reasoning</u></p> <p>Children expand the use of mathematical thinking to solve problems that arise in their everyday environment. At around 60 months</p> <p>1.1 Identify and apply a variety of mathematical strategies to solve problems in their environment.</p>	<p>Child reads numerals 0–20 (Number Sense 1.2).</p> <p>Child identifies small quantities, without counting, up to four (Number Sense 1.3).</p> <p>Child counts up to 10 objects using one-to-one correspondence (Number Sense 1.4).</p> <p>Child shows understanding that the last number counted is the total number of objects in the group (Number Sense 1.5).</p> <p>Child compares by counting two groups of objects (Number Sense 2.1).</p> <p>Child solves simple everyday problems involving numbers (Mathematical Reasoning 1.1).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Mathematics	Measure Corresponds with PLF in the Following Ways:
<p>COG: MATH 3: Number Sense of Math Operations</p> <p>Definition: Child shows increasing ability to add and subtract small quantities of objects</p>	<p><u>Number Sense</u></p> <p>Children expand their understanding of number relationships and operations in their everyday environment. At around 60 months</p> <p>2.2 Understand that adding one or taking away one changes the number in a small group of objects by exactly one.</p> <p>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.</p> <p>2.4 Solve simple addition and subtraction problems with a small number of objects (sums up to 10), usually by counting.</p> <p><u>Mathematical Reasoning</u></p> <p>Children expand the use of mathematical thinking to solve problems that arise in their everyday environment. At around 60 months</p> <p>1.1 Identify and apply a variety of mathematical strategies to solve problems in their environment.</p>	<p>Child identifies the new number of objects after one object is added or removed (Number Sense 2.2).</p> <p>Child demonstrates understanding that two groups can be put together to make a bigger group and that any group of objects can be taken apart into smaller groups (Number Sense 2.3).</p> <p>Child develops ability to solve addition and subtraction problems (Number Sense 2.4).</p> <p>Child solves simple addition or subtraction word problems by using fingers or objects to represent numbers or by mental calculation (Mathematical Reasoning 1.1).</p>

<p>DRDP-K Measure</p>	<p>California Preschool Learning Foundations (PLF) in Mathematics</p>	<p>Measure Corresponds with PLF in the Following Ways:</p>
<p>COG: MATH 4: Measurement</p> <p>Definition: Child shows an increasing understanding of measurable properties such as size, length, weight, and capacity (volume), and how to quantify those properties</p>	<p><u>Measurement</u></p> <p>Children expand their understanding of comparing, ordering, and measuring objects. At around 60 months</p> <p>1.1 Compare two objects by length, weight, or capacity directly (e.g., putting objects side by side) or indirectly (e.g., using a third object).</p> <p>1.2 Order four or more objects by size.</p> <p>1.3 Measure length using multiple duplicates of the same-size concrete units laid end to end.</p> <p><u>Mathematical Reasoning</u></p> <p>Children expand the use of mathematical thinking to solve problems that arise in their everyday environment. At around 60 months</p> <p>1.1 Identify and apply a variety of mathematical strategies to solve problems in their environment.</p>	<p>Child identifies differences in size, length, weight, or capacity between two objects using comparative words (Measurement 1.1).</p> <p>Child orders three or more objects by directly comparing them using a measurable property (Measurement 1.2).</p> <p>Child explores the properties of objects (e.g., size, length, weight, capacity) through the use of measurement tools with either standard units (e.g., ruler, scale) or nonstandard units (e.g., footsteps, blocks) (Measurement 1.3, Mathematical Reasoning 1.1).</p>
<p>COG: MATH 5: Patterning</p> <p>Definition: Child shows an increasing ability to recognize, reproduce, and create patterns of varying complexity</p>	<p><u>Algebra and Functions</u></p> <p>Children expand their understanding of simple, repeating patterns. At around 60 months</p> <p>2.1 Recognize and duplicate simple repeating patterns.</p> <p>2.2 Begin to extend and create simple repeating patterns.</p>	<p>Child creates, copies, or extends complex patterns (Algebra and Functions 2.1).</p> <p>Child attempts to create simple repeating patterns (Algebra and Functions 2.2).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Mathematics	Measure Corresponds with PLF in the Following Ways:
<p>COG: MATH 6: Shapes</p> <p>Definition: Child shows an increasing knowledge of shapes and their characteristics</p>	<p><u>Geometry</u></p> <p>Children identify and use a variety of shapes in their everyday environment. At around 60 months</p> <p>1.1 Identify, describe, and construct a variety of different shapes, including variations of a circle, triangle, rectangle, square, and other shapes.</p> <p>1.2 Combine different shapes to create a picture or design.</p>	<p>Child identifies, names, and describes several shapes (Geometry 1.1).</p> <p>Child combines different shapes to create a design (Geometry 1.2).</p>

Foundations in Mathematics not addressed by DRDP-K (2015) COG: MATH domain

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

The COG: MATH domain contains no explicit reference to identifying positions of objects and people in space.