

**Desired Results Developmental Profile (2015) [DRDP (2015)]**  
**Correspondence to California Foundations:**  
**Cognition, Including Math and Science (COG) and the California Preschool Learning Foundations (PLF)**

A comparison between the DRDP (2015) Cognition (COG) measures and the California Preschool Learning Foundations indicates a high level of correspondence in content. The DRDP COG measures assess key concepts, skills, and behaviors described in the foundations, particularly in the domains of math and science. As indicated in the table below, each of the COG measures corresponds with a key foundation or a set of foundations with a similar focus. For example, the DRDP measure Number Sense of Quantity (COG 3) embeds foundational skills related to understanding number and quantity (e.g., one-to-one correspondence, cardinality). Similarly, the COG measures Patterning, Classification, and Measurement each addresses key abilities described in the foundations for these areas. Some COG measures, such as Cause and Effect, Inquiry Through Observation and Investigation, and Knowledge of the Natural World, focus on fundamental skills and understandings that underlie the learning and development of scientific concepts and skills represented in science foundations across different sub-domains. The COG measures contain no explicit reference to the math foundation on identifying positions of objects and objects in space (Geometry 2.1) and the science foundation on caring and respecting the environment (Earth Science 2.4). Overall, the DRDP measures in Cognition assess the development of key concepts, skills, and behaviors addressed in the Preschool Learning Foundations in the math and science domains.

**Correspondence between the DRDP (2015) and  
the California Preschool Learning Foundations**

<b>DRDP (2015) Measure</b>	<b>California Preschool Learning Foundations (PLF)</b>		<b>Measure Corresponds with PLF in the Following Ways:</b>
<b>COG 1: Spatial Relationships</b>  <b>Definition:</b> Child increasingly shows understanding of how objects move in space or fit in different spaces	<b>Mathematics: Geometry</b>		<i>This is a conditional measure on the DRDP (2015) Preschool View. It is recommended for preschool children when the information would be useful for documenting progress or planning the child's learning activities and supports.</i>  <i>Also see alignment to I/TLDF.</i>  Child develops understanding of positions in space ( <b>Geometry 2.1, at around 48 months</b> ).
	<i>At around 48 months</i>	<i>At around 60 months</i>	
	<b>Children begin to understand positions in space.</b>  2.1 Identify positions of objects and people in space, such as in/on/ under, up/down, and inside/outside.	<b>Children expand their understanding of positions in space.</b>  <i>No corresponding DRDP COG measure.</i>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 2: Classification</b>  <b>Definition:</b> Child shows an increasing ability to compare, match, and sort objects into groups according to their attributes</p>	<b>Mathematics: Algebra and Functions</b>		<p>Child develops ability to sort objects by their attributes (<b>Algebra and Functions 1.1</b>).</p>
	<i>48 months</i>	<i>60 months</i>	
	<p><b>Children begin to sort and classify objects in their everyday environment.</b></p> <p>1.1 Sort and classify objects by one attribute into two or more groups, with increasing accuracy.</p>	<p><b>Children expand their understanding of sorting and classifying objects in their everyday environment.</b></p> <p>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).</p>	
	<b>Mathematics: Mathematical Reasoning</b>		
	<i>48 months</i>	<i>60 months</i>	<p>Child develops the ability to sort objects into two or more groups (<b>Mathematical Reasoning 1.1</b>).</p>
	<p><b>Children use mathematical thinking to solve problems that arise in their everyday environment.</b></p> <p>1.1 Begin to apply simple mathematical strategies to solve problems in their environment.</p>	<p><b>Children expand the use of mathematical thinking to solve problems that arise in their everyday environment.</b></p> <p>1.1 Identify and apply a variety of mathematical strategies to solve problems in their environment.</p>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 3: Number Sense of Quantity</b>  <b>Definition:</b> Child shows developing understanding of number and quantity</p>	<b>Mathematics: Number Sense</b>		<p>Child recites numbers one through ten with increasing accuracy (<b>Number Sense 1.1</b>).</p> <p>Child develops the ability to use number names in situations related to number and quantity (<b>Number Sense 1.2</b>).</p> <p>Child develops the ability to identify quantities up to three without counting (<b>Number Sense 1.3</b>).</p> <p>Child develops the ability to count up to five objects (<b>Number Sense 1.4</b>).</p> <p>Child shows understanding that the last number counted is the total number of objects in the group (<b>Number Sense 1.5</b>).</p>
	<i>48 months</i>	<i>60 months</i>	
	<p><b>Children begin to understand numbers and quantities in their everyday environment.</b></p> <p>1.1 Recite numbers in order to ten with increasing accuracy.</p> <p>1.2 Begin to recognize and name a few written numerals.</p> <p>1.3 Identify, without counting, the number of objects in a collection of up to three objects (i.e., subitize).</p> <p>1.4 Count up to five objects, using one-to-one correspondence (one object for each number word) with increasing accuracy.</p> <p>1.5 the number name of the last object counted to answer the question, “How many . . . ?”</p>	<p><b>Children expand their understanding of numbers and quantities in their everyday environment.</b></p> <p>1.1 Recite numbers in order to twenty with increasing accuracy.</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>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 3: Number Sense of Quantity (continued)</b>  <b>Definition:</b> Child shows developing understanding of number and quantity</p>	<p><b>Children begin to understand number relationships and operations in their everyday environment.</b></p> <p>2.1 Compare visually (with or without counting) two groups of objects that are obviously equal or nonequal and communicate, “more” or “same.”</p>	<p><b>Children expand their understanding of number relationships and operations in their everyday environment.</b></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>Child solves simple everyday problems involving numbers and identifies small quantities without counting (<b>Number Sense 2.1</b>).</p>
<p><b>COG 4: Number Sense of Math Operations</b>  <b>Definition:</b> Child shows increasing ability to add and subtract small quantities of objects</p>	<p><b>Mathematics: Number Sense</b></p>		<p>Child compares small quantities (<b>Number Sense 2.1</b>).</p>
	<p><i>48 months</i></p>	<p><i>60 months</i></p>	<p>Child demonstrates understanding that adding objects makes more and taking away objects makes fewer (<b>Number Sense 2.2</b>).</p>
	<p><b>Children begin to understand number relationships and operations in their everyday environment.</b></p> <p>2.1 Compare visually (with or without counting) two groups of objects that are obviously equal or nonequal and communicate, “more” or “same.”</p> <p>2.2 Understand that adding to (or taking away) one or more objects from a group will increase (or decrease) the number of objects in the group.</p>	<p><b>Children expand their understanding of number relationships and operations in their everyday environment.</b></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>2.2 Understand that adding one or taking away one changes the number in a small group of objects by exactly one.</p>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 4: Number Sense of Math Operations (continued)</b>  <b>Definition:</b> Child shows increasing ability to add and subtract small quantities of objects</p>	<p><b>Children begin to understand number relationships and operations in their everyday environment. (continued)</b></p> <p>2.3 Understand that putting two groups of objects together will make a bigger group.</p> <p>2.4 Solve simple addition and subtraction problems nonverbally (and often verbally) with a very small number of objects (sums up to 4 or 5).</p>	<p><b>Children expand their understanding of number relationships and operations in their everyday environment. (continued)</b></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>Child demonstrates understanding that adding objects to a group makes more <b>(Number Sense 2.3)</b>.</p> <p>Child uses counting to identify the new number of objects after one to two objects are added or removed from a set of two to four objects <b>(Number Sense 2.4)</b>.</p>
	<p><b>Mathematics: Mathematical Reasoning</b></p>		<p>Child uses counting to identify the new number of objects after one object is added or removed <b>(Mathematical Reasoning 1.1)</b>.</p>
	<p><i>48 months</i></p>	<p><i>60 months</i></p>	
	<p><b>Children use mathematical thinking to solve problems that arise in their everyday environment.</b></p> <p>1.1 Begin to apply simple mathematical strategies to solve problems in their environment.</p>	<p><b>Children expand the use of mathematical thinking to solve problems that arise in their everyday environment.</b></p> <p>1.1 Identify and apply a variety of mathematical strategies to solve problems in their environment.</p>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 5: Measurement</b>  <b>Definition:</b> Child shows an increasing understanding of measurable properties such as size, length, weight, and capacity (volume), and how to quantify those properties</p>	<b>Mathematics: Measurement</b>		<p>Child shows understanding of measurable properties and may describe or identify differences in size, weight, and capacity (<b>Measurement 1.1</b>).</p> <p>Child orders three or more objects by directly comparing them (<b>Measurement 1.2</b>).</p>
	<i>48 months</i>	<i>60 months</i>	
	<p><b>Children begin to compare and order objects.</b></p> <p>1.1 Demonstrate awareness that objects can be compared by length, weight, or capacity, by noting gross differences, using words such as bigger, longer, heavier, or taller, or by placing objects side by side to compare length.</p> <p>1.2 Order three objects by size.</p>	<p><b>Children expand their understanding of comparing, ordering, and measuring objects.</b></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>	
	<b>Mathematics: Mathematical Reasoning</b>		<p>Child applies mathematical strategies to solve problems in the environment by identifying differences in size, length, weight, or capacity (<b>Mathematical Reasoning 1.1</b>).</p>
<i>48 months</i>	<i>60 months</i>		
<p><b>Children use mathematical thinking to solve problems that arise in their everyday environment.</b></p> <p>1.1 Begin to apply simple mathematical strategies to solve problems in their environment.</p>	<p><b>Children expand the use of mathematical thinking to solve problems that arise in their everyday environment.</b></p> <p>1.1 Identify and apply a variety of mathematical strategies to solve problems in their environment.</p>		

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 6: Patterning</b>  <b>Definition:</b> Child shows an increasing ability to recognize, reproduce, and create patterns of varying complexity</p>	<b>Mathematics: Algebra and Functions</b>		<p>Child matches simple sequences that are seen, heard, or experienced (<b>Algebra and Functions 2.1</b>).</p> <p>Child attempts to create simple repeating patterns (<b>Algebra and Functions 2.2</b>).</p>
	<i>48 months</i>	<i>60 months</i>	
	<p><b>Children begin to recognize simple, repeating patterns.</b></p> <p>2.1 Begin to identify or recognize a simple repeating pattern.</p> <p>2.2 Attempt to create a simple repeating pattern or participate in making one.</p>	<p><b>Children expand their understanding of simple, repeating patterns.</b></p> <p>2.1 Recognize and duplicate simple repeating patterns.</p> <p>2.2 Begin to extend and create simple repeating patterns.</p>	
<p><b>COG 7: Shapes</b>  <b>Definition:</b> Child shows an increasing knowledge of shapes and their characteristics</p>	<b>Mathematics: Geometry</b>		<p>Child identifies or names several shapes (<b>Geometry 1.1</b>).</p> <p>Child recognizes and matches similar shapes and distinguishes them from dissimilar shapes (e.g., chooses blocks of the same shape to build a tower) (<b>Geometry 1.2</b>).</p>
	<i>48 months</i>	<i>60 months</i>	
	<p><b>Children begin to identify and use common shapes in their everyday environment.</b></p> <p>1.1 Identify simple two-dimensional shapes, such as a circle and square.</p> <p>1.2 Use individual shapes to represent different elements of a picture or design.</p>	<p><b>Children identify and use a variety of shapes in their everyday environment.</b></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>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)	Measure Corresponds with PLF in the Following Ways:	
<p><b>COG 8: Cause and Effect</b>  <b>Definition:</b> Child demonstrates an increasing ability to observe, anticipate, and reason about the relationship between cause and effect</p>	<b>Science: Scientific Inquiry</b>		
	<b>Observation and Investigation</b>		
	<i>48 months</i>	<i>60 months</i>	<p>Child searches for possible causes of actions, events, or behaviors and offers possible explanations for why certain actions or behaviors result in specific effects  <b>(Observation and Investigation 1.6).</b></p>
	1.6 Make inferences and form generalizations based on evidence.	1.6 Demonstrate an increased ability to make inferences and form generalizations based on evidence.	
	<b>Science: Physical Sciences</b>		
	<b>Changes in Nonliving Objects and Materials</b>		<p>Child offers possible explanations for why certain actions or behaviors result in specific effects <b>(Changes in Nonliving Objects and Materials 2.1).</b></p> <p>Child acts on objects to cause a specific result <b>(Changes in Nonliving Objects and Materials 2.2).</b></p>
<i>48 months</i>	<i>60 months</i>		
<p>2.1 Demonstrate awareness that objects and materials can change; explore and describe changes in objects and materials (rearrangement of parts; change in color, shape, texture, temperature).</p> <p>2.2 Observe and describe the motion of objects (in terms of speed, direction, the ways things move), and explore the effect of own actions (e.g., pushing, pulling, rolling, dropping) on making objects move.</p>	<p>2.1 Demonstrate an increased awareness that objects and materials can change in various ways. Explore and describe in greater detail changes in objects and materials (rearrangement of parts; changes in color, shape, texture, form, and temperature).</p> <p>2.2 Demonstrate an increased ability to observe and describe in greater detail the motion of objects (in terms of speed, direction, the ways things move), and to explore the effect of own actions on the motion of objects, including changes in speed and direction.</p>		

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 8: Cause and Effect (continued)</b>  <b>Definition:</b> Child demonstrates an increasing ability to observe, anticipate, and reason about the relationship between cause and effect</p>	<b>Science: Earth Sciences</b>		<p>Child offers possible explanations for why certain actions or behaviors result in specific effects (<b>Changes in the Earth 2.3</b>).</p>
	<b>Changes in the Earth</b>		
	<i>48 months</i>	<i>60 months</i>	
<p><b>COG 9: Inquiry Through Observation and Investigation</b>  <b>Definition:</b> Child <i>observes, explores, and investigates</i> objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them</p>	2.3 Begin to notice the effects of weather and seasonal changes on their own lives and on plants and animals.	2.3 Demonstrate an increased ability to notice and describe the effects of weather and seasonal changes on their own lives and on plants and animals.	<p>Child engages in sustained explorations (<b>Observation and Investigation 1.1</b>).</p> <p>Child observes objects and events of interest (<b>Observation and Investigation 1.2</b>).</p> <p>Child engages in detailed observations and complex investigations of objects and events in the environment (e.g., tests predictions, makes comparisons, uses scientific tools, or tracks changes over time) (<b>Observation and Investigation 1.3</b>).</p>
	<b>Science: Scientific Inquiry</b>		
	<b>Observation and Investigation</b>		
	<i>48 months</i>	<i>60 months</i>	
	1.1 Demonstrate curiosity and raise simple questions about objects and events in their environment.	1.1 Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment.	
	1.2 Observe objects and events in the environment and describe them.	1.2 Observe objects and events in the environment and describe them in greater detail.	
	1.3 Begin to identify and use, with adult support, some observation and measurement tools.	1.3 Identify and use a greater variety of observation and measurement tools. May spontaneously use an appropriate tool, though may still need adult support.	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 9: Inquiry Through Observation and Investigation (continued)</b>  <b>Definition:</b> Child <i>observes, explores, and investigates</i> objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them</p>	<p>1.4 Compare and contrast objects and events and begin to describe similarities and differences.</p> <p>1.5 Make predictions and check them, with adult support, through concrete experiences.</p> <p>1.6 Make inferences and form generalizations based on evidence.</p>	<p>1.4 Compare and contrast objects and events and describe similarities and differences in greater detail.</p> <p>1.5 Demonstrate an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to test predictions, and discuss why predictions were correct or incorrect).</p> <p>1.6 Demonstrate an increased ability to make inferences and form generalizations based on evidence.</p>	<p>Child engages in detailed observations and complex investigations of objects and events in the environment (e.g., tests predictions, makes comparisons, uses scientific tools, or tracks changes over time) (<b>Observation and Investigation 1.4</b>).</p> <p>Child observes objects and events of interest in the environment, makes simple predictions, and checks the predictions (<b>Observation and Investigation 1.5</b>).</p> <p>Child contributes to planning and carries out detailed observations and complex investigations to answer questions of interest (<b>Observation and Investigation 1.6</b>).</p>
<b>Science: Physical Sciences</b>			
<b><i>Properties and Characteristics of Nonliving Objects and Materials</i></b>			<p>Child observes objects and events of interest in the environment and may engage in detailed observations and complex investigations (<b>Properties and Characteristics of Nonliving Objects and Materials 1.1</b>).</p>
<i>48 months</i>		<i>60 months</i>	
<p>1.1 Observe, investigate, and identify the characteristics and physical properties of objects and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).</p>	<p>1.1 Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).</p>		

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 9: Inquiry Through Observation and Investigation (continued)</b></p> <p><b>Definition:</b> Child <i>observes, explores, and investigates</i> objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them</p>	<b><i>Changes in Nonliving Objects and Materials</i></b>		<p>Child engages in detailed observations and complex investigations of objects and events in the environment (tracks changes over time) <b>(Changes in Nonliving Objects and Materials 2.1)</b>.</p> <p>Child observes objects and events of interest in the environment, makes simple predictions about them, and checks the predictions <b>(Changes in Nonliving Objects and Materials 2.2)</b>.</p>
	<i>48 months</i>	<i>60 months</i>	
	<p>2.1 Demonstrate awareness that objects and materials can change; explore and describe changes in objects and materials (rearrangement of parts; change in color, shape, texture, temperature).</p> <p>2.2 Observe and describe the motion of objects (in terms of speed, direction, the ways things move), and explore the effect of own actions (e.g., pushing, pulling, rolling, dropping) on making objects move.</p>	<p>2.1 Demonstrate an increased awareness that objects and materials can change in various ways. Explore and describe in greater detail changes in objects and materials (rearrangement of parts; change in color, shape, texture, form, and temperature).</p> <p>2.2 Demonstrate an increased ability to observe and describe in greater detail the motion of objects (in terms of speed, direction, the ways things move), and to explore the effect of own actions on the motion of objects, including changes in speed and direction.</p>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)	Measure Corresponds with PLF in the Following Ways:	
<p><b>COG 9: Inquiry Through Observation and Investigation (continued)</b></p> <p><b>Definition:</b> Child <i>observes, explores, and investigates</i> objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them</p>	<b>Science: Earth Sciences</b>		
	<b><i>Properties and Characteristics of Earth Materials and Objects</i></b>		
	<i>48 months</i>	<i>60 months</i>	<p>Child engages in simple, purposeful, and sustained observations (<b>Properties and Characteristics of Earth Materials and Objects 1.1</b>).</p>
	1.1 Investigate characteristics (size, weight, shape, color, texture) of earth materials such as sand, rocks, soil, water, and air.	1.1 Demonstrate increased ability to investigate and compare characteristics (size, weight, shape, color, texture) of earth materials such as sand, rocks, soil, water, and air.	
	<b><i>Changes in the Earth</i></b>		
	<i>48 months</i>	<i>60 months</i>	
2.1 Observe and describe natural objects in the sky (sun, moon, stars, clouds) and how they appear to move and change.	2.1 Demonstrate an increased ability to observe and describe natural objects in the sky and to notice patterns of movement and apparent changes in the sun and the moon.	<p>Child engages in detailed observations and complex investigations of objects and events in the environment (e.g., tests predictions, makes comparisons, uses scientific tools, or tracks changes over time) (<b>Changes in the Earth 2.1</b>).</p>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)	Measure Corresponds with PLF in the Following Ways:	
<p><b>COG 10: Documentation and Communication of Inquiry</b>  <b>Definition:</b> Child develops the capacity to describe and record <i>observations</i> and <i>investigations</i> about objects (living and nonliving things) and events, and to share ideas and explanations with others</p>	<b>Science: Scientific Inquiry</b>		
	<b><i>Observation and Investigation</i></b>		
	<i>48 months</i>	<i>60 months</i>	<p>Child communicates simple observations about objects or events in the environment (<b>Observation and Investigation 1.2</b>).</p> <p>Child communicates similarities or differences in the characteristics of objects (<b>Observation and Investigation 1.4</b>).</p>
	<p>1.2 Observe objects and events in the environment and describe them.</p> <p>1.4 Compare and contrast objects and events and begin to describe similarities and differences.</p>	<p>1.2 Observe objects and events in the environment and describe them in greater detail.</p> <p>1.4 Compare and contrast objects and events and describe similarities and differences in greater detail.</p>	
	<b><i>Documentation and Communication</i></b>		
	<i>48 months</i>	<i>60 months</i>	
<p>2.1 Record observations or findings in various ways, with adult assistance, including pictures, words (dictated to adults), charts, journals, models, and photos.</p> <p>2.2 Share findings and explanations, which may be correct or incorrect, with or without adult prompting.</p>	<p>2.1 Record information more regularly and in greater detail in various ways, with adult assistance, including pictures, words (dictated to adults), charts, journals, models, photos, or by tallying and graphing information.</p> <p>2.2 Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.</p>	<p>Child records information in simple ways and may participate in recording detailed information, which may include tallying, charting, simple graphing, or making complex drawings (<b>Documentation and Communication 2.1</b>).</p> <p>Child communicates similarities and differences in the characteristics of objects and may participate in recording and communicate about findings, related ideas, or simple explanations (<b>Documentation and Communication 2.2</b>).</p>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)	Measure Corresponds with PLF in the Following Ways:		
<p><b>COG 10: Documentation and Communication of Inquiry (continued)</b></p> <p><b>Definition:</b> Child develops the capacity to describe and record <i>observations</i> and <i>investigations</i> about objects (living and nonliving things) and events, and to share ideas and explanations with others</p>	<p><b>Science: Physical Sciences</b></p>	<p>Child communicates similarities or differences in the characteristics of objects (<b>Properties and Characteristics of Nonliving Objects and Materials 1.1</b>).</p> <p>Child communicates simple observations about objects or events in the environment (<b>Changes in Nonliving Objects and Materials 2.2</b>).</p>		
	<p><b><i>Properties and Characteristics of Nonliving Objects and Materials</i></b></p>			
	<p><i>48 months</i></p>		<p><i>60 months</i></p>	
	<p>1.1 Observe, investigate, and identify the characteristics and physical properties of objects and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).</p>		<p>1.1 Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).</p>	
	<p><b><i>Changes in Nonliving Objects and Materials</i></b></p>			
<p><i>48 months</i></p>	<p><i>60 months</i></p>			
<p>2.2 Observe and describe the motion of objects (in terms of speed, direction, the ways things move), and explore the effect of own actions (e.g., pushing, pulling, rolling, dropping) on making objects move.</p>	<p>2.2 Demonstrate an increased ability to observe and describe in greater detail the motion of objects (in terms of speed, direction, the ways things move), and to explore the effect of own actions on the motion of objects, including changes in speed and direction.</p>			

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)	Measure Corresponds with PLF in the Following Ways:
<p><b>COG 11: Knowledge of the Natural World</b>  <b>Definition:</b> Child develops the capacity to understand objects (living and nonliving things) and events in the natural world, including how they change and their characteristics</p>	<b>Science: Life Sciences</b>	
	<b><i>Properties and Characteristics of Living Things</i></b>	
	<b><i>48 months</i></b>	<b><i>60 months</i></b>
	<p>1.1 Identify characteristics of a variety of animals and plants, including appearance (inside and outside) and behavior, and begin to categorize them.</p> <p>1.2 Begin to indicate knowledge of body parts and processes (e.g., eating, sleeping, breathing, walking) in humans and other animals.</p> <p>1.3 Identify the habitats of people and familiar animals and plants in the environment and begin to realize that living things have habitats in different environments.</p> <p>1.4 Indicate knowledge of the difference between animate objects (animals, people) and inanimate objects to initiate movement and to have different insides than inanimate objects.</p>	<p>1.1 Identify characteristics of a greater variety of animals and plants and demonstrate an increased ability to categorize them.</p> <p>1.2 Indicate greater knowledge of body parts and processes (e.g., eating, sleeping, breathing, walking) in humans and other animals.</p> <p>1.3 Recognize that living things have habitats in different environments suited to their unique needs.</p> <p>1.4 Indicate knowledge of the difference between animate and inanimate objects, providing greater detail, and recognize that only animals and plants undergo biological processes such as growth, illness, healing, and dying.</p>
<p>Child shows interest in and identifies the characteristics and differences of living things and explores how they behave and function <b>(Properties and Characteristics of Living Things 1.1)</b>.</p> <p>Child demonstrates awareness of basic needs and processes that are unique to living things <b>(Properties and Characteristics of Living Things 1.2)</b>.</p> <p>Child demonstrates an awareness of differences among living things by identifying some of their specific characteristics (appearance, behaviors, habitats) <b>(Properties and Characteristics of Living Things 1.3)</b>.</p> <p>Child shows interest in the characteristics of living or nonliving things, explores how they behave or function, and demonstrates awareness of basic needs and processes that are unique to living things <b>(Properties and Characteristics of Living Things 1.4)</b>.</p>		

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 11: Knowledge of the Natural World (continued)</b>  <b>Definition:</b> Child develops the capacity to understand objects (living and nonliving things) and events in the natural world, including how they change and their characteristics</p>	<b><i>Changes in Living Things</i></b>		<p>Child demonstrates knowledge of basic needs and processes that are unique to living things (e.g., need for water and food, change and growth) <b>(Changes in Living Things 2.1)</b>.</p> <p>Child demonstrates awareness of basic needs and processes that are unique to living things (e.g., need for water and food, change and growth) <b>(Changes in Living Things 2.2)</b>.</p>
	<i>48 months</i>	<i>60 months</i>	
	<p>2.1 Observe and explore growth and changes in humans, animals, and plants and demonstrate an understanding that living things change over time in size and in other capacities as they grow.</p> <p>2.2 Recognize that animals and plants require care and begin to associate feeding and watering with the growth of humans, animals, and plants.</p>	<p>2.1 Observe and explore growth in humans, animals, and plants and demonstrate an increased understanding that living things change as they grow and go through transformations related to the life cycle (for example, from a caterpillar to butterfly).</p> <p>2.2 Develop a greater understanding of the basic needs of humans, animals, and plants (e.g., food, water, sunshine, shelter).</p>	
	<b>Science: Earth Sciences</b>		
	<b><i>Properties and Characteristics of Earth Materials and Objects</i></b>		<p>Child identifies characteristics of living things, earth materials, or events in the environment (e.g., how they look, feel, sound, or behave) <b>(Properties and Characteristics of Earth Materials and Objects 1.1)</b>.</p>
	<i>48 months</i>	<i>60 months</i>	
	<p>1.1 Investigate characteristics (size, weight, shape, color, texture) of earth materials such as sand, rocks, soil, water, and air.</p>	<p>1.1 Demonstrate increased ability to investigate and compare characteristics (size, weight, shape, color, texture) of earth materials such as sand, rocks, soil, water, and air.</p>	

DRDP (2015) Measure	California Preschool Learning Foundations (PLF)		Measure Corresponds with PLF in the Following Ways:
<p><b>COG 11: Knowledge of the Natural World (continued)</b>  <b>Definition:</b> Child develops the capacity to understand objects (living and nonliving things) and events in the natural world, including how they change and their characteristics</p>	<b><i>Changes in the Earth</i></b>		<p>Child demonstrates an awareness of differences among living things, earth materials, or events in the environment by identifying some of their specific characteristics (appearance, behaviors, habitats) <b>(Changes in the Earth 2.1)</b>.</p> <p>Child identifies basic characteristics of living things, earth materials, or events in the environment (e.g., how they look, feel, sound, or behave) <b>(Changes in the Earth 2.2)</b>.</p> <p>Child demonstrates awareness of basic needs and processes that are unique to living things (e.g., need for water and food, change and growth) <b>(Changes in the Earth 2.3)</b>.</p>
	<i>48 months</i>	<i>60 months</i>	
	<p>2.1 Observe and describe natural objects in the sky (sun, moon, stars, clouds) and how they appear to move and change.</p> <p>2.2 Notice and describe changes in weather.</p> <p>2.3 Begin to notice the effects of weather and seasonal changes on their own lives and on plants and animals.</p>	<p>2.1 Demonstrate an increased ability to observe and describe natural objects in the sky and to notice patterns of movement and apparent changes in the sun and the moon.</p> <p>2.2 Demonstrate an increased ability to observe, describe, and discuss changes in weather.</p> <p>2.3 Demonstrate an increased ability to notice and describe the effects of weather and seasonal changes on their own lives and on plants and animals.</p>	

### **Foundations not addressed by DRDP (2015) COG domain**

#### Mathematics: Geometry:

- *At around 60 months, 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 domain contains no explicit reference to identifying positions of objects and people in space.

#### Science: Earth Sciences:

- *At around 40 months, 2.4:* Develop awareness of the importance of caring for and respecting the environment and participate in activities related to its care.
- *At around 60 months, 2.4:* Demonstrate an increased awareness and the ability to discuss in simple terms how to care for the environment, and participate in activities related to its care.

These foundations are addressed in the measure HSS 3, Ecology, of the DRDP (2015).