

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

The alignment between the DRDP-K Cognition: Science (COG: SCI) measures and the California Preschool Learning Foundations (PLF) indicates a significant correspondence in content. Although the DRDP-K COG: SCI measures do not directly correspond in structure with the main strands in the preschool science foundations, the four DRDP-K measures cover key concepts and skills in the preschool foundations of Scientific Inquiry and the Physical, Life, and Earth Sciences. Each of the DRDP-K COG: SCI measures correspond with the various strands of the foundations for science. For example, the measure COG: SCI 2 *Inquiry Through Observation and Investigation* about children’s developing ability to observe and investigate objects corresponds with the science foundations related to scientific inquiry and the exploration of physical objects (physical science), living objects (life science), and earth materials (earth science). One concept addressed in the PLF not explicitly represented in the DRDP-K COG: SCI is children’s ability to discuss how to care for the environment and to participate in activities related to its care. Overall, each of the DRDP-K COG: SCI measures has a similar focus and corresponding developmental level of a set of science foundations.

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

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Science	Measure Corresponds with PLF in the Following Ways:
<p>COG: SCI 1: Cause and Effect</p> <p>Definition: Child demonstrates an increasing ability to observe, anticipate, and reason about the relationship between cause and effect</p>	<p><u>Physical Sciences</u></p> <p>Changes in Nonliving Objects and Materials, at around 60 months</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>	<p>Child offers possible explanations for why certain actions or behaviors result in specific effects. Child shows understanding that variations in actions or degrees of actions with the same objects or materials cause different results (Changes in Nonliving Objects and Materials 2.1).</p> <p>Child offers possible explanations for why certain actions or behaviors result in specific effects. Child conducts investigations to gather evidence to support ideas about causes of observable events (Changes in Nonliving Objects and Materials 2.2).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Science	Measure Corresponds with PLF in the Following Ways:
<p>COG: SCI 1: Cause and Effect (continued)</p> <p>Definition: Child demonstrates an increasing ability to observe, anticipate, and reason about the relationship between cause and effect</p>	<p><u>Earth Sciences</u></p> <p>Changes in the Earth, at around 60 months</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>	<p>Child reasons about cause and effect (Changes in the Earth 2.3).</p>
<p>COG: SCI 2: Inquiry through Observation and Investigation</p> <p>Definition: Child observes and investigates objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them</p>	<p><u>Scientific Inquiry</u></p> <p>Observation and Investigation, at around 60 months</p> <p>1.1 Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment.</p> <p>1.2 Observe objects and events in the environment and describe them in greater detail.</p> <p>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.</p> <p>1.4 Compare and contrast objects and events and describe similarities and differences in greater detail.</p>	<p>Child contributes to planning and carries out detailed observations and complex investigations to answer questions of interest (Observation and Investigation 1.1).</p> <p>Child engages in detailed observations and complex investigations (Observation and Investigation 1.2).</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) (Observation and Investigation 1.3).</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) (Observation and Investigation 1.4).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Science	Measure Corresponds with PLF in the Following Ways:
<p>COG: SCI 2: Inquiry through Observation and Investigation (continued)</p> <p>Definition: Child observes and investigates objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them</p>	<p>Observation and Investigation, at around 60 months (continued)</p> <p>1.5 Demonstrates 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><u>Physical Sciences</u></p> <p>Properties and Characteristics of Nonliving Objects and Materials, at around 60 months</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>Changes in Nonliving Objects and Materials, at around 60 months</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>Child observes objects and events of interest in the environment, makes simple predictions about them, and checks the predictions. Child later 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) (Observation and Investigation 1.5).</p> <p>Child contributes to planning and carries out detailed observations and complex investigations to answer questions of interest. Child later conducts systematic observations and investigations to collect data that provide evidence to answer specific questions on scientific topics (Observation and Investigation 1.6).</p> <p>Child engages in detailed observations and complex investigations of objects and events in the environment (Properties and Characteristics of Nonliving Objects and Materials 1.1).</p> <p>Child engages in detailed observations and complex investigations of objects and events in the environment (Changes in Nonliving Objects and Materials 2.1).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Science	Measure Corresponds with PLF in the Following Ways:
<p>COG: SCI 2: Inquiry through Observation and Investigation (continued)</p> <p>Definition: Child observes and investigates objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them</p>	<p>Changes in Nonliving Objects and Materials, at around 60 months (continued)</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> <p><u>Earth Sciences</u></p> <p>Properties and Characteristics of Earth Materials and Objects, at around 60 months</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> <p>Changes in the Earth, at around 60 months</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>Child engages in detailed observations and complex investigations of objects and events (Changes in Nonliving Objects and Materials 2.2).</p> <p>Child engages in detailed observations and complex investigations of objects and events in the environment (e.g., tests predictions, makes comparisons) (Properties and Characteristics of Earth Materials and Objects 1.1).</p> <p>Child engages in detailed observations and complex investigations of objects and events in the environment (Changes in the Earth 2.1).</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) (Changes in the Earth 2.2).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Science	Measure Corresponds with PLF in the Following Ways:
<p>COG: SCI 3: Documentation and Communication of Inquiry</p> <p>Definition: Child develops the capacity to describe and record observations and investigations about objects (living and nonliving things) and events, and to share ideas and explanations with others</p>	<p><u>Scientific Inquiry</u></p> <p>Observation and Investigation, at around 60 months</p> <p>1.6 Demonstrate an increased ability to make inferences and form generalizations based on evidence.</p> <p>Documentation and Communication, at around 60 months</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 identifies patterns by summarizing recorded data (Observation and Investigation 1.6).</p> <p>Child includes details when recording observations and investigations. Child participates in recording detailed information by tallying, charting, simple graphing, or making complex drawings (Documentation and Communication 2.1).</p> <p>Child communicates about findings, related ideas, or simple explanations. Child describes detailed findings to others (Documentation and Communication 2.2).</p>
<p>COG: SCI 4: Knowledge of the Natural World</p> <p>Definition: 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>	<p><u>Life Sciences</u></p> <p>Properties and Characteristics of Living Things, at around 60 months</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>Child demonstrates awareness of differences among living things and knowledge of categories of living things (Properties and Characteristics of Living Things 1.1).</p> <p>Child demonstrates awareness of basic needs and processes that are unique to living things (Properties and Characteristics of Living Things 1.2).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Science	Measure Corresponds with PLF in the Following Ways:
<p>COG: SCI 4: Knowledge of the Natural World (continued)</p> <p>Definition: 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>	<p>Properties and Characteristics of Living Things, at around 60 months (continued)</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 living things (humans, animals, and plants) undergo biological processes such as growth, illness, healing, and dying.</p> <p>Changes in Living Things, at around 60 months</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> <p><u>Earth Sciences</u></p> <p>Properties and Characteristics of Earth Materials and Objects, at around 60 months</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>	<p>Child demonstrates an awareness of differences among living things by identifying some of their specific characteristics (appearance, behaviors, habitats). Child demonstrates knowledge of the relationships between what living things need to survive and where they live (Properties and Characteristics of Living Things 1.3).</p> <p>Child demonstrates awareness of basic needs and processes that are unique to living things. Child demonstrates knowledge of categories of living things and the knowledge of processes unique to living things (Properties and Characteristics of Living Things 1.4).</p> <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). Child demonstrates knowledge of processes unique to living things (changes through the life cycle) (Changes in Living Things 2.1).</p> <p>Child demonstrates knowledge of what living things need to survive (Changes in Living Things 2.2).</p> <p>Child demonstrates an awareness of living things, earth materials, or events in the environment by identifying some of their specific characteristics (Properties and Characteristics of Earth Materials and Objects 1.1).</p>

DRDP-K Measure	California Preschool Learning Foundations (PLF) in Science	Measure Corresponds with PLF in the Following Ways:
<p>COG: SCI 4: Knowledge of the Natural World (continued)</p> <p>Definition: 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>	<p>Changes in the Earth, at around 60 months</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>	<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). Child demonstrates knowledge of patterns that can be predicted in living things (e.g., life cycle, similarities between plants and animals and their offspring) and in the natural environment (e.g., seasonal changes, movement of objects in the sky) (Changes in the Earth 2.1).</p> <p>Child demonstrates knowledge of patterns that can be predicted in living things (e.g., life cycle, similarities between plants and animals and their offspring) and in the natural environment (e.g., seasonal changes, movement of objects in the sky) (Changes in the Earth 2.2).</p> <p>Child demonstrates knowledge of what living things need to survive and the relationships between what living things need to survive and where they live (Changes in the Earth 2.3).</p>

Foundations in Science not addressed by DRDP-K (2015) COG: SCI domain

- Earth Sciences 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

This foundation is addressed in the HSS 3, Ecology, domain of the DRDP-K (2015).