

Desired Results Developmental Profile (DRDP-K) Correspondence to California Learning Standards: Cognition: Science (COG: SCI) and the Next Generation Science Standards (NGSS)

The DRDP-K Cognition: Science (COG: SCI) domain includes four key measures related to science: Cause and Effect; Inquiry through Observation and Investigation; Documentation and Communication of Inquiry; and Knowledge of the Natural World. These four measures in the DRDP-K cover key concepts and skills in the kindergarten (KG) science standards. An alignment between the DRDP-K and the science standards for kindergarten indicates a high-level correspondence in content. The measures in the DRDP-K focus on foundational concepts and skills that are covered in the NGSS for kindergarten, including the ability to ask key questions, make observations, analyze data, construct explanations, collect data, document observations, understand cause and effect, and understand key concepts related to the natural world. The early skills and concepts described in the KG science standards (in areas such as motion and stability, energy, biological structures and processes, Earth’s system, Earth and human activity, and engineering design) can be assessed through the various COG: SCI measures in the DRDP-K. Some skills related to engineering such as designing and building are not covered in the DRDP-K science standards.

Correspondence between the DRDP-K Instrument and the Next Generation Science Standards

DRDP-K Measure	Next Generation Science Standards (NGSS)	Measure Corresponds with NGSS 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>K-PS2 Motion and Stability: Forces and Interactions</p> <p>K-PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.</p>	<p>Child demonstrates an understanding that variations in actions or degrees of actions with the same object cause different results (K-PS2-1).</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>K-PS2 Motion and Stability: Forces and Interactions</p> <p>K-PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.</p>	<p>Child demonstrates ability to plan and conduct investigations to answer specific questions (K-PS2-1).</p>

DRDP-K Measure	Next Generation Science Standards (NGSS)	Measure Corresponds with NGSS 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>K-PS2 Motion and Stability: Forces and Interactions (cont.)</p> <p>K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.</p> <p>K-PS3 Energy</p> <p>K-PS3-1. Make observations to determine the effect of sunlight on Earth’s surface.</p> <p>K-PS3-2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.</p> <p>K-LS1 From Molecules to Organisms: Structures and Processes</p> <p>K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.</p> <p>K-ESS2 Earth’s Systems</p> <p>K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.</p> <p>K-ESS3 Earth and Human Activity</p> <p>K-ESS3-2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.</p>	<p>Child demonstrates ability to conduct systematic observations and investigations to collect data that provide evidence to answer specific questions. Additionally, the child demonstrates ability to provide a general description of this process (K-PS2-2).</p> <p>Child demonstrates ability to contribute to planning and can carry out detailed systematic observations (K-PS3-1).</p> <p>Child contributes to planning and carries out detailed observations and investigations to answer specific questions (K-PS3-2).</p> <p>Child conducts systematic observations and investigations (K-LS1-1).</p> <p>Child demonstrates ability to conduct systematic observations and investigations that include tracking changes over time (K-ESS2-1).</p> <p>Child conducts detailed observations and complex investigations to answer specific questions (K-ESS3-2).</p>

DRDP-K Measure	Next Generation Science Standards (NGSS)	Measure Corresponds with NGSS 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>K-2-ETS Engineering Design</p> <p>K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.</p> <p>K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.</p>	<p>Child demonstrates ability to contribute to planning and carries out detailed and systematic observations and complex investigations to answer questions of interest and specific questions on scientific topics (K-2-ETS1-1).</p> <p>Child demonstrates ability to contribute to planning and can carry out detailed and systematic observations and complex investigations to answer questions of interest and specific questions on scientific topics by use of comparing data findings (K-2-ETS1-3).</p>
<p>COG: SCI 3: Documentation and Communication of Inquiry</p> <p>Definition: Child develops the capacity to describe and record observations and investigation about objects (living and nonliving things) and events, and to share ideas and explanations with others</p>	<p>K-PS2 Motion and Stability: Forces and Interactions</p> <p>K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.</p> <p>K-LS1 From Molecules to Organisms: Structures and Processes</p> <p>K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.</p>	<p>Child identifies patterns by summarizing recorded data and constructs explanations based on recorded evidence. Additionally, the child demonstrates ability to provide a general description of the process (K-PS2-2).</p> <p>Child demonstrates ability to identify patterns by summarizing recorded data (K-LS1-1).</p>

DRDP-K Measure	Next Generation Science Standards (NGSS)	Measure Corresponds with NGSS in the Following Ways:
<p>COG: SCI 3: Documentation and Communication of Inquiry (continued)</p> <p>Definition: Child develops the capacity to describe and record observations and investigation about objects (living and nonliving things) and events, and to share ideas and explanations with others</p>	<p>K-ESS2 Earth’s Systems</p> <p>K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.</p> <p>K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p> <p>K-ESS3 Earth and Human Activity</p> <p>K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.</p> <p>K-2-ETS Engineering Design</p> <p>K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.</p> <p>K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.</p>	<p>Child demonstrates ability to identify patterns by summarizing recorded data (K-ESS2-1).</p> <p>Child demonstrates ability to construct thoughtful explanations based on recorded evidence (K-ESS2-2).</p> <p>Child constructs thoughtful explanations based on recorded evidence and communicates explanations to others (K-ESS3-3).</p> <p>Child demonstrates ability to participate in recording detailed information by tallying, charting, simple graphing, or making complex drawings. Additionally, the child communicates about findings, related ideas, or simple explanations (K-2-ETS1-2).</p> <p>Child constructs thoughtful explanations based on recorded evidence. Additionally, the child demonstrates ability to identify patterns by summarizing recorded data (K-2-ETS1-3).</p>

DRDP-K Measure	Next Generation Science Standards (NGSS)	Measure Corresponds with NGSS in the Following Ways:
<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>K-LS1 From Molecules to Organisms: Structures and Processes</p> <p>K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.</p> <p>K-ESS2 Earth’s Systems</p> <p>K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.</p> <p>K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p> <p>K-ESS3 Earth and Human Activity</p> <p>K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p>	<p>Child demonstrates knowledge of what living things need to survive (K-LS1-1).</p> <p>Child demonstrates knowledge of patterns that can be predicted in living things and in the natural environment (e.g., seasonal changes, movement of objects in the sky) (K-ESS2-1).</p> <p>Child has knowledge of what living things need to survive and the relationships between what they need and where they live (K-ESS2-2).</p> <p>Child has knowledge and uses models to demonstrate what living things need to survive and the relationships between what they need and where they live (K-ESS3-1).</p>