<table>
<thead>
<tr>
<th>Grade</th>
<th>&quot;New&quot; NGSS Topics</th>
<th>&quot;Old&quot; CA Science Standards Topics</th>
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</thead>
</table>
| Kindergarten | ● Weather & Climate (ESS)*  
                     ● Effects of Sunlight on Earth's Surface (PS)*  
                     ● Identify Needs of Plants & Animals (LS)  
                     ● Plants & Animals can Change their Environment (ESS)  
                     ● Human Impact on Environment (ESS)*  
                     ● Force & Motion (PS)* | ● Landforms (ESS)  
                     ● Weather and Seasons (ESS) (K, 1, 3, 5)  
                     ● Resource Use and Conservation (ESS) (K, 5)  
                     ● Animal and Plant Parts (LS) (2,4)  
                     ● Describing Properties of Materials (PS) (2,5)  
                     ● Water’s Different States (PS) |
| Grade 1 | ● Waves: Light & Sound (PS)*  
                     ● Patterns in Sun, Moon and Stars (ESS)  
                     ● Seasons: Relate Daylight to Time of Year (ESS)  
                     ● Variation & Inheritance of Traits (LS)  
                     ● How Parents Help Offspring Survive (LS)  
                     ● How Plants & Animals Meet Needs (LS)* | ● Measuring Weather Observations (ESS)  
                     ● Sun Warming the Earth (ESS)  
                     ● Plant and Animal Habitats (LS)  
                     ● How Plants/Animals Meet Needs (LS)  
                     ● Properties of Solids/Liquids/Gases (PS)  
                     ● Changing Properties w/ Mixing / Cooling / Heating (PS) |
| Grade 2 | ● Describe & Classify Properties of Materials (PS)*  
                     ● Heating or Cooling Substances may be Reversible (PS)  
                     ● Identify Where Water is Found on Earth (ESS)  
                     ● Modeling Landforms (ESS)  
                     ● Processes that Shape the Earth (ESS)*  
                     ● Diversity of Life in Different Habitats (LS)  
                     ● Plant Growth Investigations (LS)  
                     ● Modeling Seed Dispersal & Pollination (LS)* | ● Rocks, Sand and Soil (ESS)  
                     ● Fossils Provide Evidence of Life (ESS) (3,4)  
                     ● Resources Meet Our Needs (ESS)  
                     ● Plant & Animal Life Cycles/Reproduction (LS)  
                     ● Inherited Characteristics and Variation (LS) (1,3)  
                     ● Force and Motion (PS) (K, 3)  
                     ● Simple Tools and Machines (PS)  
                     ● Sound (PS) |
| Grade 3 | ● Forces & Motion (PS)  
                     ● Electricity & Magnetism (PS)*  
                     ● Seasons & Weather (ESS)*  
                     ● Climates in Different Regions of the World (ESS)  
                     ● Interdependent Relationships & Ecosystems (LS)  
                     ● Fossils Provide Evidence of Past Life (LS)  
                     ● Plant & Animal Life Cycles & Reproduction (LS)  
                     ● Inherited Characteristics & Variation (LS)  
                     ● Adaptation: Change Over Time (LS)* | ● Star Patterns in the Sky (ESS) (1,5)  
                     ● Phases of the Moon (ESS)  
                     ● Earth and Moon Orbits (ESS)  
                     ● Adaptations: Change Over Time (LS)  
                     ● Biodiversity and Extinction (LS) (K, 3, 5)  
                     ● Energy (PS)  
                     ● States of Matter (PS)  
                     ● Mixtures and Solutions (PS)  
                     ● All Matter is Atoms (PS)  
                     ● Light and Vision (PS) (1,4) |
| Grade 4 | ● Energy: Forms, Storage, Conversion & Transfer (PS)*  
                     ● Properties of Waves (PS)  
                     ● Light & Vision (PS)  
                     ● Patterns to Transfer Information (PS)*  
                     ● Internal/External Structures of Plants & Animals Senses/Brain Roles in Receiving/Processing Info (LS)  
                     ● Rock Formations & Fossils (ESS)  
                     ● Erosion & Weathering (ESS)  
                     ● Analyzing and Interpreting Maps (ESS)  
                     ● Impact of Earth Processes on Humans (ESS)* | ● The Rock Cycle (ESS)  
                     ● Properties of Rocks and Minerals (ESS)  
                     ● Shaping the Earth's Surface (ESS) (2, 4, 5)  
                     ● Food Chains and Webs (LS)  
                     ● Ecosystems (LS) (2,3,5)  
                     ● Electric Circuits (PS)  
                     ● Magnets, Compasses, Electromagnets (PS)  
                     ● Doing Work with Electrical Energy (ESS) |
| Grade 5 | ● All Matter is made up of small particles (PS)  
                     ● Identifying Materials Based on Properties (PS)  
                     ● Measuring & Graphing Quantitative Data Regarding Conservation of Matter (PS)  
                     ● Chemical Reactions (PS)  
                     ● Earth's Gravitational pull is down (PS)  
                     ● Identifying Patterns in the Earth/Sun Relationship (ESS)  
                     ● Interactions Between Earth Systems (ESS)  
                     ● Water Distribution & Sources (ESS)  
                     ● Plants Get Materials for Growth from Water/Air (LS)  
                     ● Energy in Food Comes from the Sun (PS)  
                     ● Decomposers & Ecosystems (LS)  
                     ● Protecting Earth’s Resources (ESS) | ● Water Distribution and Sources (ESS) (2,5)  
                     ● Water Cycle (ESS)  
                     ● Causes of Weather (ESS)  
                     ● Gravity (ESS)  
                     ● Solar System (ESS)  
                     ● Animal & Plant Internal Processes (LS)  
                     ● Atoms, Elements, and Periodic Table (PS)  
                     ● Separating Mixtures and Identifying Compounds (PS)  
                     ● Properties of Common Molecules (PS) |

*Performance Expectation is an engineering design challenge
Note: Middle School concepts are in grey
Created in collaboration with science coordinators across Northern California.
Adapted from a Community Resources for Science document