

Grade	"New" NGSS Topics	"Old" CA Science Standards Topics
Kindergarten	<ul style="list-style-type: none"> 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)* 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)* 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)* 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)* 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)* 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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