

California Science Standards Mapped to NGSS Disciplinary Core Ideas

PS - Physical Science LS - Life Science ES - Earth, Space, and Environmental Science *** Standard remained in grade

Grade Level	1998 Topics	NGSS Topics	Notes
K	<p>PS- Physical properties of matter, Liquid/solid, Evaporation</p> <p>LS- Structures of plants and animals (moved to 1st), Similarities and differences (moved to 1st)</p> <p>ES- Characteristics of landforms, Change in weather and its effects,*** Resources and their conservation</p> <p>Investigation and Experimentation</p>	<p>PS- Pushes and Pulls, Sunlight's effects</p> <p>LS- Patterns of what animals and plants need for survival</p> <p>ES- Weather patterns***, Forecasting to prepare, Changing environment to meet needs Reducing impacts of humans</p> <p>Engineering</p>	<ul style="list-style-type: none"> Forces and motion moved from 2nd Animal and plant needs moved from 1st Weather patterns moved from 1st
1	<p>PS- States of matter, Change through heating and cooling (moved to 2nd)</p> <p>LS- Structure and function of plants and animals and their needs (Moved to K and 2nd)</p> <p>ES- Weather Observation, Sunlight warms the surface (Moved to K)</p> <p>Investigation and Experimentation</p>	<p>PS- Sound/vibrations, Sound to communicate, Light pathways, shadows, illumination</p> <p>LS- Plant/animal structures, similarities and differences, Behavior for survival, Traits passed on to offspring</p> <p>ES- Sun, moon, star patterns</p> <p>Engineering</p>	<ul style="list-style-type: none"> Patterns of objects in the sky moved from 3rd Sound moved from 2nd Light moved from 3rd Inheritance moved from 2nd
2	<p>PS- Simple Machines, Pushes and Pulls (moved to K), Magnets cause movement (moved to 3rd), Sound (moved to 1st)</p> <p>LS- Life Cycles (moved to 3rd), Inheritance (moved to 1st)</p> <p>ES- Physical properties of rocks, Fossils and history of Earth (moved to 4th), Natural Resources (moved to 4th)</p> <p>Investigation and Experimentation</p>	<p>PS- Classify materials by properties, Reassembling of objects, Heating and cooling cause changes</p> <p>LS- Plants need water, light, animals for pollination, Diversity of life in different habitats</p> <p>ES- Earth events can be fast or slow, Slowing erosion, Water states and where water is found</p> <p>Engineering</p>	<ul style="list-style-type: none"> No more life cycles No forces and motion No sound Matter:solid/liquid moved from 1st

3	<p>PS- Energy (wave energy to 4th), States of matter (moved to 2nd), Atoms (not covered K-5), Light (moved to 1st, light and eye to 4th)</p> <p>LS- Adaptations (moved to 4th), Animals/plants in different environments***</p> <p>ES- Objects in sky and patterns (moved to 5th)</p> <p>Investigation and Experimentation</p>	<p>PS- Balanced and unbalanced Forces, Patterns of motion, Electric and magnetic forces</p> <p>LS- Unique life cycles, common birth, growth and death, Animals form groups for survival, Inherited traits/influence of environment, Characteristics, Adaptation, Biodiversity*** Fossils are evidence of past environment, Changes in environment affect plants and animals</p> <p>ES- Seasonal weather conditions, Regional climates, Reducing impacts of weather-related hazards</p> <p>Engineering</p>	<ul style="list-style-type: none"> • Life cycles are new! moved from 2nd • Magnets moved from 4th • Balanced/unbalanced forces are new! • Energy moved to 4th
4	<p>PS- Circuits (not covered K-5), Magnetism (moved to 3rd), Electromagnets (not covered K-5), Convert energy to other forms ***</p> <p>LS- Food chains (moved to 5th), Plant and animal survival (moved to 3rd), Interdependence of plants/animals (moved to 2nd)</p> <p>ES- Rock Types (not covered K-5), Erosion and weathering ***</p> <p>Investigation and Experimentation</p>	<p>PS- Speed related to energy, energy transfer, Energy and force, energy conversion***, Wave properties, light reflection, Patterns to transfer information</p> <p>LS- Structure and function, Senses and response</p> <p>ES- Patterns in rock formations and fossils, Weathering and erosion***, Patterns in geological formations through map analysis, Natural resources and effect on environment, Hazards of natural processes and reducing their impacts</p> <p>Engineering</p>	<ul style="list-style-type: none"> • Waves are new! Moved from 3rd • Light to eye/ reflection moved from 3rd
5	<p>PS- Elements/Atoms (not covered K-5), Chemical Reactions/rearrangement of particles***</p> <p>LS- Body systems/structures (not covered K-5), Plants convert sunlight to food energy***</p> <p>ES- Water Cycle (some water standards moved to 2nd)***, Uneven heating and ocean effect on weather (not covered K-5), Air pressure (not covered K-5), Solar System: planets, asteroids (not covered K-5)</p> <p>Investigation and Experimentation</p>	<p>PS- Properties of Matter: conservation, small particles, ID of materials based on properties, Mixing of substances***, Gravity pulls object towards Earth's center, Food Energy comes from sun***</p> <p>LS- Plants need air and water, Food webs, Energy cycled through web</p> <p>ES- Relationship of distance of star and its brightness, Day/night, Shadow patterns, positions of sun, moon stars at different times, Earth's major systems and their interactions, Distribution of water*** Protecting earth's resources and environment</p> <p>Engineering</p>	<ul style="list-style-type: none"> • No more systems (respiration, etc.) • Food webs are new! Moved from 4th • Patterns of sky objects moved from 3rd