

The Forest Foundation



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Sharing Knowledge about Forests

Content Standards for California Public Schools Matrix Grades 4-6

Framework for CA Public Schools Standard	Lesson(s) in which standard is taught or reinforced	Standard Description
GRADE 4 – SCIENCE		
Life Sciences 2	1,2,5,6,7,9	All organisms need energy and matter to live and grow.
Life Sciences 2a	1,2,7	Plants are the primary source of matter and energy entering most food chains
Life Sciences 2b	1,5,7	Producers and consumers are related in food chains and food webs and may compete with each other for resources in an ecosystem
Life Sciences 2c	1,6,7	Decomposers, including many fungi, insects, and microorganisms recycle matter from dead plants and animals
Life Sciences 3	1,2,3,4,5,6,7,8,9	Living organisms depend on one another and on their environment for survival
Life Sciences 3a	1,4,5	Ecosystems can be characterized by their living and nonliving components
Life Sciences 3b	1,5,7,9	In any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all
Life Sciences 3c	1,2,6,7	Many plants depend on animals for pollination and seed dispersal and animals depend on plants for food and shelter
Life Sciences 3d	1,6	Most microorganisms do not cause disease and many are beneficial
Earth Sciences 5	4,8	Waves, wind, water and ice shape and reshape Earth's land surface
Earth Sciences 5a	4,8	Some changes in the earth are due to slow processes, such as erosion and some changes are due to rapid processes such as landslides, volcanic eruptions and earthquakes
Earth Sciences 5c	4,8	Moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt, and mud in other places (weather, transport and deposition)
Investigation and Experimentation 6 c & f	3	Formulate and justify predictions based on cause and effect relationships Follow a set of written instructions for a scientific investigation
GRADE 4 – READING / LANGUAGE ARTS		
Reading 1.1	4,9	Read narrative and expository text aloud with grade-appropriate fluency and accuracy and with appropriate pacing, intonation, and expression
Reading 1.2	4,5,6	Apply knowledge of word origins, derivations, synonyms, antonyms and idioms to determine the meaning of words and phrases
Reading 1.3	1,4,5	Use knowledge of root words to determine the meaning of unknown words within a passage
Reading 1.4	1,2,4,5,6	Know common roots and affixes derived from Greek and Latin and use this knowledge to analyze the meaning of complex words
Reading 2.0	3,4,6,7,9	Read and understand grade-level appropriate material and draw upon a variety of comprehension strategies as needed
Reading 2.1	1,2	Identify structural patterns found in informational text
Reading 2.2	2,3,6,9	Use appropriate strategies when reading for different purposes
Reading 2.3	4	Make and confirm predictions about text by using prior knowledge and ideas presented in the text itself including illustrations, titles, topic sentences, important words, and foreshadowing clues
Reading 2.4	1	Evaluate new information and hypothesis by testing them against known information and ideas
Reading 2.5	1	Compare and contrast information on the same topic after reading several passages or articles

Reading 2.7	3	Follow multiple step instructions in a basic technical manual
Writing 1.3	2	Use traditional structures for conveying information
Writing 2.4	1	Write summaries that contain the main ideas of the reading selection and the most significant details
Written and Oral Language Conventions 1.0	1,2,3,4,5,6,7,8,9	Write and speak with a command of standard English conventions appropriate to this grade level
Listening and Speaking 1.0	1,5,6	Listen critically and respond appropriately to oral communication. They guide the listener to understand important ideas by using proper phrasing, pitch and modulation
Listening and Speaking 1.1	1,2,4,5,6	Ask thoughtful questions and respond to relevant questions with appropriate elaboration in oral settings
Listening and Speaking 1.2	2,5,6	Summarize major ideas and supporting evidence presented in spoken messages and formal presentations
Listening and Speaking 1.6	1,4	Use traditional structures for conveying information
Listening and Speaking 1.7	1,9	Emphasize points in ways that help the listener or viewer to follow important ideas and concepts
Listening and Speaking 1.8	1,4,8	Use details, examples, anecdotes, or experiences to explain or clarify information
Listening and Speaking 2.3	1	Deliver oral summaries of articles and books that contain the main ideas of the event or article and the most significant details

GRADE 4 - MATHEMATICS

Mathematical Reasoning 1.0	5,9	Students make decisions on how to approach problems
Mathematical Reasoning 1.1	5	Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing, and prioritizing information and observing patterns

GRADE 5 - SCIENCE

Physical Sciences 1	9	Elements and their combinations account for all the varied types of matter in the world
Physical Sciences 1b	9	Students know all matter is made of atoms, which may combine to form molecules
Life Sciences 2	2,3,7	Plants and animals have structures for respiration , digestion, waste disposal and transport of materials
Life Sciences 2a	2,3,7	Many multicellular organisms have specialized structures to support the transport of materials
Life Sciences 2e	2,7	Students know how sugar, water, and minerals are transported in a vascular plant
Life Sciences 2f	2,7	Plants use carbon dioxide (CO ₂) and energy from sunlight to build molecules of sugar and release oxygen
Life Sciences 2g	2	Plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO ₂) and water (respiration)
Earth Sciences 3	8	Water on Earth moves between the oceans and land through the processes of evaporation and condensation
Earth Sciences 3a	8	Most of Earth's water is present as salt water in the oceans, which covers most of the Earth's surface
Earth Sciences 3b	8	When liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water
Earth Sciences 3c	8	Water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall to Earth as rain, hail, sleet, or snow
Earth Sciences 3d	8	The amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water
Earth Sciences 3e	8	Know the origin of the water used by your local communities
Investigation and Experimentation 6a	3	Classify objects in accordance with appropriate criteria

GRADE 5 - READING / LANGUAGE ARTS

Reading 1.0	1,4,6,7	Use knowledge of word origins and word relationships, as well as historical and literary context clues, to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words
Reading 1.1	4	Read aloud narrative and expository text fluently and accurately and with appropriate pacing, intonation, and expression
Reading 1.2	4,5,6	Use word origins to determine the meaning of unknown words
Reading 1.4	1,2,4,5,6	Know abstract, derived roots and affixes from Greek and Latin and use this knowledge to analyze the meaning of complex words
Reading 2.0	3,4,6	Read and understand grade-level-appropriate material. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose
Reading 2.1	2,4	Understand how text features make information accessible and usable
Reading 2.2	1,2	Analyze text that is organized in sequential or chronological order
Reading 2.3	1,3,4,6	Discern main ideas and concepts presented in texts, identifying and assessing evidence that supports those ideas
Reading 2.4	1,3,4,6	Draw inferences, conclusions, or generalizations about text and support them with textual evidence and prior knowledge
Written and Oral Language Conventions 1.0	1,2,3,4,5,6,7,8,9	Write and speak with a command of standard English conventions appropriate to this grade level
Listening and Speaking 1.3	1	Make inferences or draw conclusions based on an oral report
Listening and Speaking 1.5	1,2	Clarify and support spoken ideas with evidence and examples

GRADE 5 - MATHEMATICS

Mathematical Reasoning 1.0	5,9	Students make decisions on how to approach problems
Mathematical Reasoning 1.1	5	Analyze problems by identifying relationships, distinguish relevant from irrelevant information, sequencing and prioritizing information and observing patterns

GRADE 6 - SCIENCE

Shaping Earth's Surface 2	4,8	Topography is reshaped by the weathering of rock and soil and by the transportation and deposition of sediment
Shaping Earth's Surface 2a	4,8	Water running downhill is the dominant process in shaping the landscape, including California's landscape
Shaping Earth's Surface 2b	4,8	Rivers and streams are dynamic systems that erode, transport sediment, change course, and flood their banks in natural and recurring patterns
Ecology 5	1,2,4,6,7,9	Organisms in ecosystems exchange energy and nutrients among themselves and with the environment
Ecology 5a	1,2,4,6,7,9	Energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis and then from organism to organism through food webs
Ecology 5b	1,2,4,6,7,9	Matter is transferred over time from one organism to others in the food web and between organisms and the physical environment
Ecology 5c	1,5,9	Populations of organisms can be categorized by the functions they serve in an ecosystem
Ecology 5d	1,2	Different kinds of organisms may play similar ecological roles in similar biomes
Ecology 5e	1,4,5,7,9	The number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors, such as quantities of light and water, a range of temperatures, and soil composition
Resources 6	6,7,8,9	Sources of energy and materials differ in amounts, distribution, usefulness, and the time required for their formation
Resources 6a	6,7,9	The utility of energy sources is determined by factors that are involved in converting these sources to useful forms and the consequences of the conversion process

Resources 6b	1,3,4,6,7,8,9	Know different natural energy and material resources, including air, soil, rocks, minerals, petroleum, fresh water, wildlife, and forests, and know how to classify them as renewable or nonrenewable
Resources 6c	3,5,6,7,8,9	Know the natural origin of the materials used to make common objects
Investigation and Experimentation 7g & 7h	1,2	Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions) Identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, a hillslope)

GRADE 6 - READING / LANGUAGE ARTS

Reading 1.0	1,4,6,7	Use knowledge of word origins and word relationships, as well as historical and literary context clues, to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words
Reading 1.1	4,9	Read aloud narrative and expository text fluently and accurately and with appropriate pacing, intonation, and expression
Reading 1.3	1,5	Recognize the origins and meanings of frequently used foreign words in English and use these words accurately in speaking and writing
Reading 2.0	3,4,6,8,9	Students read and understand grade-level-appropriate material. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose
Reading 2.1	8,9	Identify the structural features of popular media (e.g., newspapers, magazines, online information) and use the features to obtain information
Reading 2.2	1	Analyze text that uses the compare-and-contrast organizational pattern
Reading 2.4	1	Clarify an understanding of texts by creating outlines, logical notes, summaries, or reports.
Reading 2.6	1,9	Determine the adequacy and appropriateness of the evidence for an author's conclusions
Reading 2.7	1,8,9	Make reasonable assertions about a text through accurate, supporting citations
Writing 2.3b	1,8,9	In a research report, support the main idea or ideas with facts, details, examples and explanations for multiple authoritative sources
Written and Oral Language Conventions 1.0	1,2,3,4,5,6,7,8,9	Write and speak with a command of standard English conventions appropriate to this grade level

GRADE 6 - MATHEMATICS

Mathematical Reasoning 1.0	5,9	Students make decisions about how to approach problems
Mathematical Reasoning 1.1	5,9	Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns

GRADE 6 - HISTORY / SOCIAL SCIENCE

World History and Geography: Ancient Civilizations 6.1.3	3,6	Discuss the climatic changes and human modifications of the physical environment that gave rise to the domestication of plants and animals and new sources of clothing and shelter
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