



A Look at...

Kindergarten
in California Public Schools

and the
Common Core State Standards



CURRICULUM FRAMEWORKS AND INSTRUCTIONAL RESOURCES DIVISION
INSTRUCTION AND LEARNING SUPPORT BRANCH
CALIFORNIA DEPARTMENT OF EDUCATION
October 2011 Edition

Contents



	Page
Kindergarten Curriculum	K.1
English Language Arts	K.2
Overview.....	K.2
What Kindergarten Students Should Know.....	K.2
What Students Learn in Kindergarten.....	K.3
Reading.....	K.3
Writing.....	K.5
Speaking and Listening.....	K.5
Language.....	K.6
Extra Support for Struggling Readers.....	K.6
Support for English Learners.....	K.7
The Standards.....	K.10
Mathematics	K.17
Overview.....	K.17
What Kindergarten Students Should Know.....	K.17
What Students Learn in Kindergarten.....	K.18
Counting and Cardinality.....	K.18
Operations and Algebraic Thinking.....	K.19
Number and Operations in Base Ten.....	K.19
Measurement and Data.....	K.19
Support for English Learners.....	K.20
Transition to the Common Core State Standards.....	K.21
The Standards.....	K.25
CCSS Domains.....	K.28
History–Social Science	K.29
Overview.....	K.29
What Kindergarten Students Should Know.....	K.29
What Students Learn in Kindergarten.....	K.29

Learning and Working Together.....	K.29
National and State Symbols	K.30
Working Now and Long Ago.....	K.30
Geography of the Neighborhood	K.31
Time and Chronology	K.31
Reaching Out to Times Past.....	K.31
The Education and the Environment Initiative	K.31
Support for English Learners	K.32
The Standards.....	K.32
Science	K.36
Overview.....	K.36
What Kindergarten Students Should Know	K.36
What Students Learn in Kindergarten.....	K.36
Physical Sciences	K.37
Life Sciences	K.37
Earth Sciences.....	K.38
Investigation and Experimentation	K.38
The Education and the Environment Initiative	K.38
Science Across the Content Areas	K.39
Support for English Learners	K.39
The Standards.....	K.40
Visual and Performing Arts	K.42
Overview.....	K.42
What Kindergarten Students Should Know	K.42
What Students Learn in Kindergarten.....	K.42
Dance	K.42
Music.....	K.43
Theatre	K.43
Visual Arts	K.43
The Standards.....	K.43
Key Content Standards	K.44
Health	K.50
Overview.....	K.50

What Kindergarten Students Should Know	K.50
What Students Learn in Kindergarten.....	K.50
Nutrition and Physical Activity	K.51
Growth and Development	K.51
Injury Prevention and Safety	K.51
Alcohol, Tobacco, and Other Drugs	K.52
Mental, Emotional, and Social Health	K.52
Personal and Community Health	K.52
Support for English Learners	K.52
The Standards.....	K.53
Physical Education	K.59
Overview.....	K.59
What Kindergarten Students Should Know	K.59
What Students Learn in Kindergarten.....	K.60
Overarching Standard 1: Students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities.....	K.60
Overarching Standard 2: Students demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities.	K.60
Overarching Standard 3: Students assess and maintain a level of physical fitness to improve health and performance.....	K.60
Overarching Standard 4: Students demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance.....	K.61
Overarching Standard 5: Students demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity.....	K.61
Support for English Learners.....	K.61
Support for Students with Special Needs.....	K.62
The Standards.....	K.62
World Languages	K.66
Overview.....	K.66
What Kindergarten Students Should Know	K.66
What Students Learn in Kindergarten.....	K.66
Organization of the Standards.....	K.67

Content.....	K.67
Communication.....	K.67
Cultures.....	K.68
Structures	K.68
Settings.....	K.68
Stages of Proficiency	K.68
The Standards.....	K.69
School Libraries	K.71
Overview.....	K.71
What Kindergarten Students Should Know	K.71
What Students Learn in Kindergarten.....	K.71
The Standards.....	K.72

Kindergarten Curriculum



What will my child learn in kindergarten?

I've been teaching fifth grade, and this year I've been reassigned to kindergarten. What does the kindergarten curriculum look like?

I'm the principal of a small, private elementary school, and I want to be sure my students are meeting the state's standards. How can I find out what students are expected to learn at each grade?

In August 2010, the state adopted the Common Core State Standards for English language arts and mathematics. How will the new standards enhance kindergarten curriculum?

Will the new legislation that provides the option of a transitional kindergarten affect the curriculum?

This chapter is organized by sections for each subject, describing what students should know and be able to do by the end of kindergarten. Each section includes a brief overview of what the student should have learned before entering kindergarten, followed by a description of the kindergarten standards. Each subject concludes with a list of the kindergarten standards for that content area. The English language arts and mathematics sections include the new Common Core State Standards (CCSS), with California additions.

For a more in-depth discussion of each subject, please consult the state-adopted curriculum frameworks for kindergarten through grade twelve. The frameworks are posted on the CDE Curriculum and Instruction Web page at <http://www.cde.ca.gov/ci/cr/cf/allfwks.asp>. Those interested in prekindergarten programs are encouraged to consult the preschool learning foundations and framework available on the CDE Child Development Web page at <http://www.cde.ca.gov/sp/cd/re/prekguide.asp>.

On September 30, 2010, the California State Legislature enacted Senate Bill 1381, which changed the date by which a child must turn five years old to enter kindergarten. The law also created the opportunity for students who do not meet the new start-date requirements to enroll in a *transitional kindergarten*—defined as a program that uses a modified, age- and developmentally appropriate kindergarten curriculum and allows students to attend a structured, high-quality school-readiness program. Currently, a child must turn five on or before December 2 to be admitted to kindergarten. In the 2012–13 school year, the date changes to November 1, and in 2014–15 to October 1. In 2015–16 and every year thereafter, the child must turn five on or before September 1 to be admitted to kindergarten.

On September 30, 2010, the California State Legislature enacted Senate Bill 1381, which changes the date by which a child must turn five years old to enter kindergarten.



Overview

Students learn the foundational reading and English language arts skills that set them on the path to become lifelong readers, writers, and effective communicators.

In kindergarten, students learn the foundational reading and English language arts skills that set them on the path to become lifelong readers, writers, and effective communicators. Reading is the most important skill that students develop during their early academic years, and kindergarten through grade three is the optimal period of time for such learning. The challenge for teachers is to organize and deliver effective, efficient instruction in the essential skills and concepts that students must master. Instruction is differentiated to meet the wide range of students' abilities.

Standards-based instruction is critical to the kindergarten curriculum. Such instruction develops students' literacy and proficiency in English language arts. The standards describe what students are expected to know and be able to do by the end of the school year. In 2010, California adopted new standards in English language arts: the CCSS, with California additions. The CCSS integrate the strands of English language arts: Reading, Writing, Speaking and Listening, and Language. The new standards will be implemented gradually over the next several years as curriculum frameworks, instructional materials, and assessments based on the CCSS are adopted.

There are many similarities between the CCSS and the 1997 California English language arts standards, but there are some notable differences. For instance, in the CCSS, the standards in kindergarten through grade six are divided into strands: Reading, Writing, Speaking and Listening, and Language. The 1997 California English language arts standards are organized around domains: Reading, Writing, Written and Oral English Language Conventions, and Listening and Speaking. The CCSS often extend or enhance the content of the 1997 California English language arts standards. For example, the CCSS focus more on informational text and content-related vocabulary, opinion pieces, informative/explanatory writing, and collaborative conversations on texts and grade-level topics.

This section provides an overview of the new CCSS for kindergarten English language arts. It includes a review of the important English language arts skills and concepts students should have learned before entering kindergarten (prerequisite skills) and guidance to ensure success for English learners. A complete list of the kindergarten CCSS for English language arts, with California additions, can be found at the end of this section. A complete list of the kindergarten 1997 California English language arts standards is located on the CDE Content Standards Web page at <http://www.cde.ca.gov/be/st/ss/documents/elacontentstnds.pdf>.

What Kindergarten Students Should Know

Students entering kindergarten may be four to six years old and bring varied life experiences, social skills, and characteristics of physical and intellectual development. They enter kindergarten with a wide range of individual differences in their prior opportunities to hear, see, and learn the English language and alphabetic writing system. Therefore, it is important for teachers to assess kindergarten students early in the school year to develop instructional objectives that most effectively meet their students' instructional needs.



Students may or may not have received prekindergarten instruction that included literacy development in oral language comprehension, vocabulary, alphabet knowledge, phonological awareness, and print knowledge. They may have been exposed to the alphabet; had the opportunity to see, play with, and manipulate letters; and used letters in meaningful activities, such as spelling their names. These students may enter kindergarten already having developed phonological awareness through word play, songs, and rhyming games. Students may have experience with writing by making cards or writing explanations for their drawings. Students may have been exposed to fiction and nonfiction print materials, including books and magazines, at home or in preschool. On the other hand, there may be many students who have not had as many literacy and English-language experiences, students who have had exposure to reading and writing in only their primary language, or others who have had no literary experiences or exposure. Providing the most appropriate instructional support depends on the needs of each student.

There are many ways to help prepare a child for success in kindergarten and beyond. One of the best ways is participation in a quality preschool program. The *California Preschool Learning Foundations, Volume 1* (California Department of Education 2008) describes the knowledge, skills, and competencies that children typically attain at around 48 and 60 months of age when they participate in a high-quality preschool program and with adequate support. Students are better prepared for kindergarten if parents and families have read to them, taught them about books and print, had discussions and asked questions while reading stories, and exposed them to the alphabet and writing.

What Students Learn in Kindergarten

Instruction in kindergarten is focused on developing foundational skills that prepare students for later learning in the all content areas, including English language arts. Students who learn to read in kindergarten through grade three will be able to read to learn in later grades. A primary focus of language arts instruction in kindergarten is helping students make sense of the alphabet and its role in reading. It is critical that students develop phonological awareness so they can move on to decoding words; yet reading in kindergarten is not merely decoding words. In kindergarten, students learn beginning skills to comprehend and analyze what they are reading.

A primary focus of language arts instruction in kindergarten is helping students make sense of the alphabet and its role in reading.

Kindergarten students begin to develop writing skills by using a combination of drawing, dictation, and writing to express opinions, relate an event, or provide information. With guidance and support from adults, they learn to use digital tools to produce and publish writings. Kindergarten students develop skills in speaking and listening through discussions with peers and adults. In both writing and speaking, students learn the conventions of English.

Students also have to understand and use academic language to succeed in school. *Academic language* refers to the language of literacy and books, tests, and formal writing. It can be words or phrases that apply to specific content areas or that are used to express abstract concepts or feelings. In kindergarten, students learn academic language in context while reading, writing, listening, and engaging in discussions about books and grade-level topics.

Reading

The following section is organized according to three major areas: reading standards for literature, for informational text, and in foundational skills.

Reading Standards for Literature

To build a strong base for reading comprehension, both the 1997 California English language arts standards and the CCSS focus on the important elements of a story. Students identify characters, settings, and major events in a story; ask and answer questions about the essential elements of a story; and retell familiar stories. Students use illustrations and context to make predictions, and they identify common types of texts (e.g., storybooks and poems). The CCSS call for more analysis than do the 1997 California English language arts standards by asking students to compare and contrast the adventures and experiences of characters in familiar stories. In addition, students not only locate the names of the author and the illustrator, but also define the role of each in telling the story. Students describe the relationship between the illustrations and the story. Through guidance and support, students learn and practice these sophisticated skills, which, if learned well, provide them with beginning strategies for literacy analysis.



Reading Standards for Informational Text

One primary difference between the 1997 California English language arts standards and the CCSS is that the CCSS balance the reading of literature with informational text. As a result, there are more standards for reading informational texts in the CCSS than in the 1997 California English language arts standards. Both sets of standards ask students to locate the title of the book, use illustrations and context to make predictions, and ask and answer questions about essential elements of the text. The CCSS introduce students to a greater number of and more complex text-analysis skills. With

prompting and support, students identify the main topic of a text, define the roles of the author and the illustrator, and describe the connection between two individuals, events, ideas, or pieces of information in a text. Students also identify the reasons an author gives to support points in a text. They identify basic similarities in and differences between two texts on the same topic (e.g., illustrations, descriptions, or procedures). This deeper level of analysis of informational text will support students as they read text in other subjects, such as history–social science and science.

Reading Standards in Foundational Skills

In kindergarten, the CCSS and the 1997 California English language arts standards are similar in that they both foster students' making sense of the alphabet and its role in reading—knowing letters of the alphabet and understanding the sound-symbol relationship. Comprehensive knowledge of the alphabetic principle is a powerful predictor of early reading success. By the end of kindergarten, students should be able to recognize that spoken words are represented in written language by specific sequences of letters, as well as name all uppercase and lowercase letters. Ongoing assessment and analysis of student progress is essential to identify students who are not making progress and need early phonological-awareness intervention. Assessment will also identify those students who have developed, or are successfully developing, phonological awareness and are ready to learn additional skills.

The 1997 California English language arts standards and the CCSS call for kindergarten students to learn the sound structure of language, which is the development of phonological awareness. Students develop *phonological awareness*, defined as the ability to hear and manipulate the sounds in spoken words and the understanding that spoken words and syllables are made up of sequences of speech sounds (called *phonemes*). For example, students pronounce, count, blend, and segment syllables in spoken words. Kindergarten students should participate in simple tasks in which they recognize and produce rhyming words and blend two to three phonemes into recognizable words.

Kindergarten students begin to work with words in three important ways: decoding or word recognition skills, spelling, and writing.

Although early phonological awareness is oral, students should have ample opportunities with print. Kindergarten students begin to work with words in three important ways: decoding or word-recognition skills, spelling, and writing. Decoding is of primary importance. Students demonstrate their knowledge of decoding by applying letter-sound correspondences and blending individual letter-sound correspondences to read whole words in both isolation and text. Kindergarten students use their phonetic knowledge by associating the long and short sounds with common spellings for the five major vowels while decoding words both in isolation and connected text. They can also read common high-frequency words by sight (e.g., *the, of, you, are*).

Although the 1997 California English language arts standards and CCSS are very similar, the CCSS set an expectation that students will read texts, at the emergent-reader level, with purpose and understanding as they begin to develop fluency.

Writing

The connections between reading and writing are important in reinforcing essential skills. Kindergarten students learn to recognize, identify, comprehend, and write letters, words, and sentences. As students study the sound structure of language and learn how to read and write phonetically spelled words, they begin to use that knowledge to document their ideas in words. Kindergarteners write, using real letters, to spell out words phonetically. The 1997 California English language arts standards call for students to write about experiences, stories, people, objects, and events. The CCSS introduce kindergarten students to opinion pieces and informative/explanatory texts, in addition to narratives. Students use a combination of drawing, dictation, and writing in their writing activities. They compose opinion pieces that state an opinion about a topic or a book. They compose informative/explanatory texts that supply information about a topic. In their narrative writing, students narrate a single event or several events, relate the events in the order in which they occurred, and express a reaction to the events. The CCSS also call for students to respond to questions and suggestions from peers and adults to strengthen their writing and to gather information from provided resources to answer a question. Students work collaboratively, with digital tools, to produce and publish writing and shared research and writing projects. Participation in these writing activities reinforces students' use of language conventions, new vocabulary, and analytical skills.

The CCSS introduce kindergarten students to opinion pieces and informative/explanatory texts, in addition to narratives.

Speaking and Listening

Kindergarten instruction focuses on the development of receptive and expressive language. Both the 1997 California English language arts standards and the CCSS address basic oral communication skills. Kindergarten students learn about sentence structure and use that knowledge to produce clear, coherent sentences in order to share information and ideas. They speak audibly as they describe people, places, things, and events. They understand and can follow one- and two-step oral directions. The 1997 California English language arts standards also call for students to recite short poems, rhymes, and songs.

In contrast, the CCSS focus on collaborative conversations with multiple exchanges between students and peers and students and adults. The CCSS also emphasize the skills of asking and answering questions to confirm understanding of key details and gain clarification. Students participate in collaborative conversations with peers and adults in which they follow rules for discussion, such as listening to others and taking turns speaking.



Conversations are centered on kindergarten texts and topics, which provide opportunities for students to practice new vocabulary, especially content-specific vocabulary. Students learn to ask and answer questions to seek help, get information, or clarify something they do not understand. Students also learn to use drawings, or other visual displays, to provide additional detail for their descriptions of people, places, things, and events.

Language

Knowledge of written and oral language conventions is essential for effective communication in both writing and speaking. In kindergarten, students begin to learn and use English conventions in their writing activities, when speaking, and when asking and answering questions about the stories and informational texts they read or hear. Both the CCSS and the 1997 California English language arts standards call for students to recognize and use complete, coherent sentences when speaking and to spell independently using their phonetic ability and growing knowledge of letter names and the sounds of the alphabet. But the CCSS set additional expectations for learning the conventions of English. Students learn to use common, frequently occurring nouns and verbs and to form regular plural nouns by adding /s/ or /es/ to the end of words. They use frequently occurring prepositions (e.g., *to, from, in, out*). Kindergarten students participate in shared language activities in which they produce and then expand complete sentences. They learn to write sentences that begin with a capital letter and end with the correct punctuation. They capitalize the pronoun *I* in their writing. Learning and practicing English language conventions help kindergarten students prepare for writing independently in later grades.

In the 1997 California English language arts standards, vocabulary development standards are found in the Reading strand. Students in kindergarten are expected to identify and sort common words into basic categories (e.g., colors, shapes, foods). Students also use both general and specific language to describe events and common objects, which they do in both speaking and writing.

In the CCSS, standards for vocabulary acquisition and use are found in the Language strand. The CCSS emphasize multiple-meaning words, word relationships, and nuances in word meanings. With guidance and support from adults, students acquire new words and phrases through conversations about grade-level topics, by reading and being read to, and by responding to text. Students learn strategies to determine the meaning of unknown words. For example, students learn to use frequently occurring inflections and affixes as clues to the meaning of unknown words. They identify new meanings for familiar words, demonstrate understanding of common verbs and adjectives by relating them to their opposites, and sort common objects into categories to gain a sense of the concepts the categories represent. Students also explore the richness of language, distinguishing—and acting out—shades of meaning among verbs that describe the same general action (e.g., *walk, march, strut, prance*), and recognizing the real-life connections between words and their use. Teachers should provide students with many opportunities to use their new vocabulary in conversations about kindergarten texts and topics and in their writing activities in all kindergarten subjects, not just English language arts and English-language development (ELD) instruction.

...students acquire new words and phrases through conversations about grade-level topics, by reading and being read to, and by responding to text.

Extra Support for Struggling Readers

Reading is the key to success in all content areas. Kindergarten students who do not achieve success in phonological awareness, phonics, and word-recognition skills may experience academic difficulties. Early screening can identify specific areas of instructional need that can be addressed in a timely manner. Struggling readers—any students experiencing difficulty learning to read, which may include those who use nonstandard

English, English learners, and students with disabilities—need additional support to participate in daily lessons with their peers and to ensure they will experience success. Instructional support for students should include:

- the use of assessment data for planning differentiated instruction;
- flexible grouping for differentiated instruction, with instructional resources specially designed for universal access;
- brief instructional sessions (significant gains in phonemic awareness are often made in 15–20 minutes of daily instruction over a period of 9–12 weeks);
- preteaching of phonemic-awareness skills and ample practice in listening, identifying, and producing the targeted sounds;
- instruction that progresses from the easier phonemic-awareness activities to the more difficult—from rhyming and sound matching to blending, segmenting, and manipulating sounds;
- systematic, explicit phonics instruction targeting mastery of letter-sound correspondences;
- additional opportunities in developing oral vocabulary, including academic language;
- diagnostic assessment and ongoing progress monitoring;
- opportunities to build background knowledge;
- reinforcement and extension of the regular classroom program.

Support for English Learners

Instructional programs for English learners should be planned according to students’ assessed level of literacy (reading and writing) in both English and their primary language as well their proficiency in English (listening, speaking, reading, and writing).

English-language development (ELD) is a critical component of the language arts program for English learners and comes with direct, explicit, and systematic instruction in reading and writing. Instructional programs for English learners should be planned according to students’ assessed level of literacy (reading and writing) in both English and their primary language as well as their proficiency in English (listening, speaking, reading, and writing). Students with strong literacy skills in their primary language have an advantage: They can concentrate on learning English rather than on receiving initial instruction in reading and writing. Students who enter kindergarten with little prior schooling and limited English must learn to read and write while learning English. They begin language arts instruction in English with literacy instruction augmented by concurrent formal linguistic instruction in English (i.e., ELD).

Instructional support for students and suggested procedures to follow should:

- ensure that students have had sufficient opportunities through prior activities in phonemic awareness to hear, distinguish, and produce sounds being introduced. Phonological differences between English and

the students' primary language should be identified, and students should be provided with additional exposure to and practice with the difficult sounds;

- provide students with additional systematic guidance and practice if they are unable to match all consonant and short-vowel sounds to appropriate letters;
- include brief, additional practice sessions for English learners who have difficulty in learning letter-sound correspondences. Students should benefit from additional review and practice of particularly difficult letter sounds;
- ensure that students have had previous instruction or experiences (or both) with the words included in the instruction and that they understand their meaning;
- encourage English learners to take home age-appropriate materials (e.g., flash cards, decodable text, handouts) related to the teaching objective.

Specially designed academic instruction in English (SDAIE) is one instructional strategy to meet the needs of English learners. For additional resources to support the teaching of English learners, please visit the CDE English Learners Web page <http://www.cde.ca.gov/sp/el/>. The CDE has published an excellent resource, *Improving Education for English Learners: Research-Based Approaches* (2010b), that provides the most comprehensive and up-to-date strategies to serve English learners. Guidelines for teaching ELD and SDAIE strategies are provided, as well as recommended instructional practices. The publication is available at the CDE Press Web page at <http://www.cde.ca.gov/re/pn/rc/>.

English learners need additional time for appropriate instructional support. The CCSS set rigorous expectations for student learning, and ELD instruction must accommodate these enhanced expectations. The following chart illustrates the enhancements in the CCSS in English language arts that may affect ELD instruction. This chart provides teachers with initial guidance in planning effective ELD instruction.

Transition to the Common Core State Standards with California Additions Planning ELD Instruction: Kindergarten	
Reading Standards for Literature	<p>4. Ask and answer questions about unknown words in a text. <u>(See grade K Language standards 4–6 for additional expectations.)</u></p> <p>5. Recognize common types of texts (e.g., storybooks, poems, <u>fantasy, realistic text</u>).</p> <p>6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.</p> <p>9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.</p>
Reading Standards for Informational Text	<p>3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.</p>

	<p>4. With prompting and support, ask and answer questions about unknown words in a text. <u>(See grade K Language standards 4–6 for additional expectations.)</u></p> <p>6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.</p> <p>8. With prompting and support, identify the reasons an author gives to support points in a text.</p> <p>9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).</p>
<p>Reading Standards: Foundational Skills</p>	<p>4. Read emergent-reader texts with purpose and understanding.</p>
<p>Writing Standards</p>	<p>1. Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is . . .).</p> <p>5. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.</p> <p>6. With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.</p> <p>7. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).</p> <p>8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p>
<p>Language Standards</p>	<p>1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>d. Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>).</p> <p>e. Use the most frequently occurring prepositions (e.g., <i>to, from, in, out, on, off, for, of, by, with</i>).</p> <p>2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>

	<p>c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).</p> <p>d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.</p> <p>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>kindergarten reading and content</i>.</p> <p>b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed, -s, re-, un-, pre-, -ful, -less</i>) as a clue to the meaning of an unknown word.</p> <p>5. With guidance and support from adults, explore word relationships and nuances in word meanings.</p> <p>a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.</p> <p>c. Identify real-life connections between words and their use (e.g., note places at school that are <i>colorful</i>).</p>
--	---

Note: California additions are in boldface and underlined.

The Standards

The CCSS, with California additions, that follow are the prepublication version of the standards prepared by the Sacramento County Office of Education (SCOE), updated on October 15, 2010. Content that is unique to the CCSS and was added by California to the multistate common core standards is in **boldface type and underlined**. The SCOE document is available online at http://www.scoe.net/castandards/agenda/2010/ela_ccs_recommendations.pdf (Outside Source). These kindergarten CCSS for English language arts were adopted by the California State Board of Education on August 2, 2010. The CCSS College and Career Readiness (CCR) Anchor Standards (Appendix A) define the literacy expectations for students entering college and careers and provide the foundation for the K–12 English language arts standards. Although the CCR Anchor Standards were not part of the State Board of Education action in August, they are essential to understanding the structure and cohesive nature of the CCSS.

A complete list of the 1997 California English language arts content standards is located on the CDE Content Standards Web page at <http://www.cde.ca.gov/be/st/ss/documents/elacontentstnds.pdf>.

**Common Core State Standards
with California Additions
English Language Arts: Kindergarten**

Reading Standards for Literature

Key Ideas and Details

1.	With prompting and support, ask and answer questions about key details in a text.
2.	With prompting and support, retell familiar stories, including key details.
3.	With prompting and support, identify characters, settings, and major events in a story.

Craft and Structure

4.	Ask and answer questions about unknown words in a text. <u>(See grade K Language standards 4–6 for additional expectations.)</u>
5.	Recognize common types of texts (e.g., storybooks, poems, <u>fantasy, realistic text</u>).
6.	With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.

Integration of Knowledge and Ideas

7.	With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
8.	(Not applicable to literature)
9.	With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

Range of Reading and Level of Text Complexity

10.	Actively engage in group reading activities with purpose and understanding. a. <u>Activate prior knowledge related to the information and events in texts.</u> b. <u>Use illustrations and context to make predictions about text.</u>
-----	--

Reading Standards for Informational Text

Key Ideas and Details

1.	With prompting and support, ask and answer questions about key details in a text.
2.	With prompting and support, identify the main topic and retell key details of a text.

3.	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
Craft and Structure	
4.	With prompting and support, ask and answer questions about unknown words in a text. <u>(See grade K Language standards 4–6 for additional expectations.)</u>
5.	Identify the front cover, back cover, and title page of a book.
6.	Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.
Integration of Knowledge and Ideas	
7.	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
8.	With prompting and support, identify the reasons an author gives to support points in a text.
9.	With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
Range of Reading and Level of Text Complexity	
10.	Actively engage in group reading activities with purpose and understanding. a. <u>Activate prior knowledge related to the information and events in texts.</u> b. <u>Use illustrations and context to make predictions about text.</u>
Reading Standards: Foundational Skills	
Print Concepts	
1.	Demonstrate understanding of the organization and basic features of print: a. Follow words from left to right, top to bottom, and page by page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper- and lowercase letters of the alphabet.
Phonological Awareness	
2.	Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words.

	<p>b. Count, pronounce, blend, and segment syllables in spoken words.</p> <p>c. Blend and segment onsets and rimes of single-syllable spoken words.</p> <p>d. <u>Blend two to three phonemes into recognizable words.</u></p> <p>e. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.* (This does not include CVCs ending with /l/, /r/, or /x/.)</p> <p>f. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.</p>
--	---

Phonics and Word Recognition

3.	<p>Know and apply grade-level phonics and word analysis skills in decoding words <u>both in isolation and in text.</u></p> <p>a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant.</p> <p>b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels.**</p> <p>c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does).</p> <p>d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.</p>
----	---

Fluency

4.	Read emergent-reader texts with purpose and understanding.
----	--

Writing Standards

Text Types and Purposes

1.	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is . . .).
2.	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

* Words, syllables, or phonemes written in /slashes/ refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.

** **Identify which letters represent the five major vowels (Aa, Ee, Ii, Oo, and Uu) and know the long and short sound of each vowel. More complex long vowel graphemes and spellings are targeted in the grade 1 phonics standards.**

3.	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.
Production and Distribution of Writing	
4.	(Begins in grade <u>2</u>)
5.	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.
6.	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.
Research to Build and Present Knowledge	
7.	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
8.	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
9.	(Begins in grade 4)
Range of Writing	
10.	(Begins in grade <u>2</u>)
Speaking and Listening Standards	
Comprehension and Collaboration	
1.	<p>Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.</p> <p>a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).</p> <p>b. Continue a conversation through multiple exchanges.</p>
2.	<p>Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</p> <p>a. <u>Understand and follow one- and two-step oral directions.</u></p>
3.	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Presentation of Knowledge and Ideas	
4.	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
5.	Add drawings or other visual displays to descriptions as desired to provide additional detail.
6.	Speak audibly and express thoughts, feelings, and ideas clearly.
Language Standards	
Conventions of Standard English	
1.	<p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Print many upper- and lowercase letters. b. Use frequently occurring nouns and verbs. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., <i>dog, dogs; wish, wishes</i>). d. Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>). e. Use the most frequently occurring prepositions (e.g., <i>to, from, in, out, on, off, for, of, by, with</i>). f. Produce and expand complete sentences in shared language activities.
2.	<p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Capitalize the first word in a sentence and the pronoun I. b. Recognize and name end punctuation. c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.
Knowledge of Language	
3.	(Begins in grade 2)
Vocabulary Acquisition and Use	
4.	<p>Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>kindergarten reading and content</i>.</p> <ul style="list-style-type: none"> a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb <i>to duck</i>).

	<p>b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed</i>, <i>-s</i>, <i>re-</i>, <i>un-</i>, <i>pre-</i>, <i>-ful</i>, <i>-less</i>) as a clue to the meaning of an unknown word.</p>
5.	<p>With guidance and support from adults, explore word relationships and nuances in word meanings.</p> <p>a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.</p> <p>b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).</p> <p>c. Identify real-life connections between words and their use (e.g., note places at school that are <i>colorful</i>).</p> <p>d. Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk</i>, <i>march</i>, <i>strut</i>, <i>prance</i>) by acting out the meanings.</p>
6.	<p>Use words and phrases acquired through conversations, reading and being read to, and responding to texts.</p>



Overview



Effective mathematics education provides students with a balanced instructional program. In such a program, students become proficient in basic computational skills and procedures, develop conceptual understandings, and become adept at problem solving. Standards-based mathematics instruction starts with basic material and increases in scope and content as the years progress. It is like an inverted pyramid, with the entire weight of the developing subject, including readiness for algebra, resting on the foundations built in the early grades.

In August 2010, California adopted new standards in mathematics: the Common Core State Standards (CCSS), with California additions. The CCSS comprise standards developed by the state-led CCSS Initiative and material taken from the 1997 California mathematics standards. The new standards will be implemented gradually over the next several years as curriculum frameworks, instructional materials, and assessments based on the CCSS are adopted.

There are many similarities between the CCSS and the 1997 California mathematics standards, but there are also a few noteworthy differences. For instance, the CCSS are organized by “domains,” that add grade-level focus and differ slightly by grade. The domains for kindergarten are Counting and Cardinality, Operations and Algebraic Thinking, Number and Operations in Base Ten, Measurement and Data, and Geometry. Furthermore, the CCSS do not include “key standards” as in the 1997 California mathematics standards. Instead, the CCSS are designed to have a greater focus at each grade and to develop mathematics topics in depth. In the early grades, the CCSS continue to emphasize concepts necessary for the study of more advanced mathematics in later years. To ensure that students have adequate time to achieve mastery, some of the 1997 California mathematics standards familiar to California’s kindergarten teachers will be taught in different grades after the CCSS are fully implemented.

This section provides an overview of the new CCSS for kindergarten mathematics, including some highlights of how the kindergarten curriculum, based on the 1997 California mathematics standards, changes with the implementation of the new CCSS. It includes a review of some mathematical concepts for entering kindergarteners to know and guidance on areas of mathematics that may be challenging for some English learners. A complete list of the kindergarten CCSS for mathematics can be found at the end of this section. A complete list of the 1997 California mathematics standards for kindergarten is located on the CDE Content Standards Web page at <http://www.cde.ca.gov/be/st/ss/documents/mathstandards.pdf>.

What Kindergarten Students Should Know

Kindergarten is a critical time for children. Students entering kindergarten may be four to six years old and bring varied life experiences, social skills, and characteristics of physical and intellectual development. Participation in a quality preschool program is one of the best ways to prepare a child for success in kindergarten and beyond.

The *California Preschool Learning Foundations, Volume 1* (California Department of Education 2008), describes the knowledge, skills, and competencies that children typically attain at around 48 and 60 months of age when they participate in a high-quality preschool program and receive adequate support. Such preschool programs promote student learning in mathematics by focusing on the mathematics in a child’s everyday environment. For example, preschool children are introduced to concepts and relationships of numbers and quantities in their everyday environment as they recite the numbers in order to 10, count up to five objects, or visually compare two groups of objects and communicate if they are the “same” or “more.” Children learn about measurement by comparing the length, weight, or capacity of objects by using words such as *bigger, longer, heavier, or taller*. Children learn those important foundations of mathematics while engaging in imaginative play, exploring the environment and materials, making discoveries, or interacting with teachers or other adults.

Students are better prepared if they enter kindergarten with some background in the academic language of mathematics (the language of tests and texts) and an understanding of the concepts represented by such language.

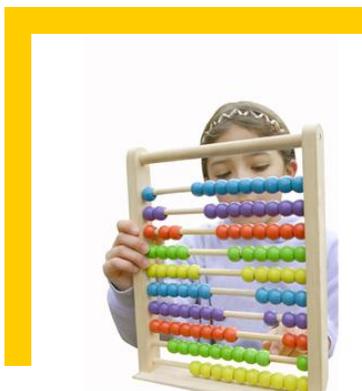
Students are better prepared if they enter kindergarten with some background in the academic language of mathematics (the language of tests and texts) and an understanding of the concepts represented by such language. Students ready for school should have an understanding of mathematical attributes, such as color, shape, and size; abstract concepts, such as *some, all, and none*; and ordinal concepts, such as *before, after, yesterday, and tomorrow*. In addition, students who know the concepts in their native language but do not yet know the English words for the concepts will need extra support from teachers.

Fortunately, kindergarten provides many opportunities to support the development of critical mathematics vocabulary and concepts during both instructional time and playtime. For example, students learn to take turns during a game or line up for recess (first, second, third), count off in a line (one, two, three), or students learn to match the number of balls available for recess to the same number of children (matching sets).

What Students Learn in Kindergarten

In kindergarten, students are introduced to the relationship between numbers and quantities and build a foundation for place value as they count, represent and compare whole numbers, initially with sets of objects. Students also describe and model objects in their environment using simple geometric shapes and vocabulary.

Counting and Cardinality



Both the 1997 California mathematics standards and the CCSS for kindergarten focus on understanding the relationship between numbers and quantities. Kindergarteners learn the number names as they count (to 100 by 1s and 10s) and write number names (from 0 to 20). Students learn that each successive number name refers to a quantity that is one larger as they count objects and say the corresponding number names. Kindergarteners count objects (as many as 20) to answer “how many?” questions and group and compare sets of concrete items (up to 10 objects in each group) to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.

At this age, some children may have difficulty with the coordination needed to write numerals (from 0 to 20) as called for in the standards. To help develop their writing skills, students may copy a numeral many times, then write the numeral with some prompts (e.g., dots or arrows), and finally write it from memory as the teacher

says the number. A multisensory approach is important at this age and students may need to be encouraged to be unconcerned about the quality of their handwriting as they learn to write numerals.

With full implementation of the CCSS, kindergarteners will extend counting to 100 by ones and tens (a first-grade topic in the 1997 California mathematics standards).

Operations and Algebraic Thinking

Both the 1997 California mathematics standards and the CCSS introduce simple addition and subtraction in kindergarten. Kindergarteners use a variety of approaches (e.g., use of objects, fingers, drawings, sounds, verbal explanations or equations) to represent addition and subtraction (putting together and taking apart) and to solve problems (within 10). They decompose numbers (less than or equal to 10) into various pairs (e.g., $5 = 2 + 3$ and $5 = 4 + 1$) and find the missing number that makes 10 (for any number from 1 to 9). Kindergarteners will develop fluency with addition and subtraction (within 5 items).



Number and Operations in Base Ten

The CCSS introduce kindergarten students to the foundations for place value. Students use objects or drawings to compose and decompose numbers (from 11 to 19) into ten ones and some further ones (e.g., $18 = 10 + 8$). In the 1997 California mathematics standards, the concept of place value is covered in a similar way as kindergarteners use estimation strategies in computation and problem solving for numbers in the ones and tens places.

Measurement and Data

Kindergarteners directly compare objects with measureable attributes (such as length or weight) to see which object is longer, shorter, lighter, heavier, or in general have “more of” / “less of” an attribute.

Both the 1997 California mathematics standards and the CCSS provide opportunities for students to develop their measurement and classifying skills. Kindergarteners directly compare objects with measureable attributes (such as length or weight) to see which object is longer, shorter, lighter, heavier, or in general have “more of” / “less of” an attribute. Students also classify objects into categories and sort the categories by count.

In both the 1997 California mathematics standards and the CCSS kindergarten students study the concepts of time and the tools that measure time (e.g., clock, calendar). Students will need repeated practice to memorize the sequence of the days of the week and months of the year. A firm understanding of these items of the calendar will help students avoid difficulty with other important concepts of time such as “before” and “after.”

With full implementation of the CCSS, skills associated with extending simple patterns and collecting and reporting data—part of the 1997 California mathematics standards at kindergarten—will be introduced at grade one.

Geometry

In both the 1997 California mathematics standards and the CCSS, students describe objects in the environment using the names of shapes (e.g., squares, circles, spheres) and identify shapes as two-dimensional (flat) and three-dimensional (solid).

Full implementation of the CCSS will further develop geometry skills as kindergarten students describe the relative positions of objects (e.g., *above* or *behind*), which is a topic in the 1997 California mathematics standards at grade one. The CCSS calls for kindergarteners to “model shapes in the world” by building and drawing shapes and also to compose simple shapes to form larger shapes (e.g., triangles to form rectangles). The concept of putting shapes together and taking them apart is a topic in the 1997 California mathematics standards at grade two.

Support for English Learners



Students need to develop knowledge of mathematics as a language. However, the academic language of mathematics instruction and the specialized vocabulary of mathematics can create particular challenges for English learners.

The language of mathematics is precise compared with the English used in common discourse. English learners need opportunities to develop their knowledge of the features of language that are used to teach mathematics, such as *semantics* (how to translate the words of a problem into a symbolic representation), *syntax* (the order of words and phrases), and *mathematical discourse* (writing or talking about mathematical terms, concepts, etc.). The specialized vocabulary of mathematics should be explicitly taught and reinforced throughout the year.

The following points address areas that may pose special challenges for English learners in the early grades:

- At an early stage, students may have difficulty with English words such as *first*, *second*, *last*, *before*, *every*, *each*, *more*, and *equal*. Students may be unfamiliar with *sum*, *difference*, *solve*, *length*, and *value*.
- The different meanings of multiple-meaning words should be explicitly taught. These words may have a meaning in common discourse that is different from the meaning in mathematics—such as *table* or *face* (as in the face of a clock).
- The place value of some numbers between 10 and 20 is not obvious from their names (e.g., the number 16 is called *sixteen* in English, but “ten plus six” in other languages).
- The narrative descriptions of a word problem may require language skills that students have not yet mastered, particularly when the language of a word problem is ambiguous or includes idioms (e.g., *a dime a dozen*), comparatives (*greater than*, *less than*, *most often*, *least often*), or position words (*behind*, *below*, *in front of*, *to the right or left of*).

Instruction in mathematics, along with critical-thinking skills, should be promoted despite low literacy or limited proficiency in the English language. Specially designed academic instruction in English (SDAIE) is one instructional strategy to meet the needs of English learners. For additional resources to support the teaching of English learners, please visit the CDE English Learners Web page at <http://www.cde.ca.gov/sp/el/>.

Transition to the Common Core State Standards

The following chart highlights a few topics that will continue to be addressed at the grade level, and some changes to be considered, as California progresses toward full implementation of the kindergarten CCSS for mathematics. The chart includes the column heading “Overview of Standards.” For the 1997 California mathematics standards, this information is from the “strands” (e.g., Number Sense) and the “overarching” standards (e.g., Number Sense 1.0) at kindergarten. For the CCSS, the column lists the “domains” (e.g., Operations and Algebraic Thinking) and the “cluster headings” for the standards (e.g., Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from) at kindergarten.

The chart does not, and is not intended to, illustrate all of the differences between the two sets of standards—it is merely a beginning point for more in-depth discussion by teachers and other educators on how instruction may change.

The transition chart is followed by a complete set of the CCSS, with California additions, for kindergarten and then a table of the CCSS domains for kindergarten through grade six.

A Quick Look: Transition to the Common Core State Standards (CCSS)

Mathematics: Kindergarten

Overview of Standards 1997 California Mathematics Standards*	Overview of Standards CCSS	Highlights
<p>Algebra and Functions</p> <ul style="list-style-type: none"> ▪ Students sort and classify objects. <p>Number Sense</p> <ul style="list-style-type: none"> ▪ Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). ▪ Students understand and describe simple additions and subtractions. ▪ Students use estimation strategies in computation and problem solving that involve numbers that use the ones and tens places. 	<p>Counting and Cardinality</p> <ul style="list-style-type: none"> ▪ Know number names and the count sequence. ▪ Count to tell the number of objects. ▪ Compare numbers. 	<ul style="list-style-type: none"> ▪ Introduce counting to 100 by ones and tens (counting from 30 to 100 and introduction to skip counting by tens moves from grade one to kindergarten in the CCSS). ▼** ▪ Represent a number of objects with a written numeral 0–20. ▪ Count objects to understand the relationship between numbers and quantities and to answer “how many” questions for numbers from 1–20. ▪ Identify if the number of objects in one group is greater than, less than, or equal to the number of objects in another (for groups with up to 10 objects).
	<p>Operations and Algebraic Thinking</p> <ul style="list-style-type: none"> ▪ Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. 	<ul style="list-style-type: none"> ▪ Focus on representing addition and subtraction in various ways such as using objects, fingers, drawings, verbal explanations, or equations ▪ Add and subtract and solve addition and subtraction word problems for numbers within 10, by using objects or drawing. ▪ Fluently add and subtract within 5. ▪ Decompose numbers (less than or equal to 10) into pairs.

* The 1997 California mathematics standards will continue to be assessed through the STAR system (in grades two through eleven) until at least 2014.

** The ▼ symbol indicates that all or part of a concept in the 1997 California standards has moved to a lower grade in the in the CCSS; the ▲ symbol indicates movement to a higher grade. Listings without a symbol indicate that a concept will continue to be taught at the current grade level.

<p>Measurement and Geometry</p> <ul style="list-style-type: none"> Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. Students identify common objects in their environment and describe the geometric features. <p>Statistics, Data Analysis, and Probability</p> <ul style="list-style-type: none"> Students collect information about objects and events in their environment. 	<p>Number and Operations in Base Ten</p> <ul style="list-style-type: none"> Work with numbers 11–19 to gain foundations for place value. 	<ul style="list-style-type: none"> Introduce composing and decomposing numbers from 11–19 into tens and ones.
	<p>Measurement and Data</p> <ul style="list-style-type: none"> Describe and compare measurable attributes. Classify objects and count the number of objects in categories. 	<ul style="list-style-type: none"> Directly compare two objects and describe the differences based on a measurable attribute in common (e.g., height). Classify objects into given categories and sort by count. Understand concepts of time (e.g., morning, today, week) and tools that measure time (e.g., clock, calendar). Name the days of the week and identify time of everyday events (e.g., lunch time is 12 o’clock). Introduce collecting data and recording results (moves from kindergarten to grade one in the CCSS). ▲ Introduce simple patterns (moves from kindergarten to grade one in the CCSS). ▲
	<p>Geometry</p> <ul style="list-style-type: none"> Identify and describe shapes. Analyze, compare, create, and compose shapes. 	<ul style="list-style-type: none"> Correctly name and identify shapes as two-dimensional (flat) and three-dimensional (solid). Analyze and compare two- and three-dimensional shapes, using informal language. Model shapes by building and drawing shapes (a new focus in the CCSS). Compose simple shapes to form larger shapes, such as triangles to form rectangles (putting shapes together moves from grade two to kindergarten in the CCSS). ▼ Describe the relative positions of objects, such as above or behind (moves from grade one to kindergarten in the CCSS) ▼

<p>Mathematical Reasoning</p> <ul style="list-style-type: none"> ▪ Students make decisions about how to set up a problem. ▪ Students solve problems in reasonable ways and justify their reasoning. 	<p>Standards for Mathematical Practice</p> <ol style="list-style-type: none"> 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning 	<ul style="list-style-type: none"> ▪ The CCSS include Standards for Mathematical Content (different at each grade) and Standards for Mathematical Practice (recurring throughout the grades). ▪ To master the grade level content, students will need to rely on their understanding of a concept and not only on procedures. Standards for Mathematical Practice define how students develop mathematical understanding as they make sense of a problem, reason abstractly, construct arguments, model with mathematics, use tools strategically, attend to precision, and look for structure and repeated reasoning. ▪ Standards for Mathematical Content that set an expectation of “understanding” are potential points of intersections between these standards and the Standards for Mathematical Practice. ▪ Standards for Mathematical Practice are similar to the previous 1997 California Mathematical Reasoning standards and should be evident throughout future curricula, assessments and professional development.
--	---	---

The Standards

The CCSS, with California additions, that follow are the prepublication version of the standards prepared by the Sacramento County Office of Education (SCOE), updated on October 18, 2010. Content that is unique to California and was added to the multistate common core standards is in **bold typeface and underlined**. The SCOE document is available online at http://www.scoe.net/castandards/agenda/2010/math_ccs_recommendations.pdf. These kindergarten CCSS for mathematics were adopted by the California State Board of Education on August 2, 2010.

A complete list of the 1997 California mathematics standards for kindergarten is located on the CDE Content Standards Web page at <http://www.cde.ca.gov/be/st/ss/documents/mathstandards.pdf>.

Common Core State Standards with California Additions Mathematics : Kindergarten

Counting and Cardinality (K.CC)

Know number names and the count sequence.

- | | |
|----|--|
| 1. | Count to 100 by ones and by tens. |
| 2. | Count forward beginning from a given number within the known sequence (instead of having to begin at 1). |
| 3. | Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). |

Count to tell the number of objects.

- | | |
|----|---|
| 4. | Understand the relationship between numbers and quantities; connect counting to cardinality.

a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

c. Understand that each successive number name refers to a quantity that is one larger. |
| 5. | Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. |

Compare numbers.

- | | |
|----|---|
| 6. | Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. ¹ |
| 7. | Compare two numbers between 1 and 10 presented as written numerals. |

¹ Include groups with up to ten objects.

Operations and Algebraic Thinking (K.OA)

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

1. Represent addition and subtraction with objects, fingers, mental images, drawings², sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
5. Fluently add and subtract within 5.

Number and Operations in Base Ten (K.NBT)

Work with numbers 11–19 to gain foundations for place value.

1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Measurement and Data (K.MD)

Describe and compare measurable attributes.

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*

Classify objects and count the number of objects in each category.

3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.³
4. **Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar). (CA-Standard MG 1.2)**
 - a. Name the days of the week. (CA-Standard MG 1.3)**
 - b. Identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock, bedtime is 8 o'clock at night). (CA-Standard MG 1.4)**

² Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

³ Limit category counts to be less than or equal to 10.

Geometry (K.G)

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

Analyze, compare, create, and compose shapes.

4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
6. Compose simple shapes to form larger shapes. *For example, “Can you join these two triangles with full sides touching to make a rectangle?”*

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

The CCSS for Mathematical Practice describe ways in which students of mathematics ought to engage with the subject matter as they grow in mathematical maturity and expertise. For a complete description of the eight Standards for Mathematical Practice, see Appendix B.

CCSS Domains

The CCSS are organized by domains. The following table lists all of the domains that apply to kindergarten through grade eight, and it identifies which domains are addressed in kindergarten through grade six. The shaded row indicates a domain to be covered at later grades.

Domains	Kindergarten	Grade One	Grade Two	Grade Three	Grade Four	Grade Five	Grade Six
Counting and Cardinality (CC)	X						
Operations and Algebraic Thinking (OA)	X	X	X	X	X	X	
Number and Operations in Base Ten (NBT)	X	X	X	X	X	X	
Measurement and Data (MD)	X	X	X	X	X	X	
Geometry (G)	X	X	X	X	X	X	X
Number and Operations – Fractions (NF)				X	X	X	
Ratios and Proportional Relationships (RP)							X
The Number System (NS)							X
Expressions and Equations (EE)							X
Statistics and Probability (SP)							X
Functions (F)							



Overview



In kindergarten, students begin the study of history–social science with concepts anchored in the experiences they bring to school from their families and communities. Students explore what it means to be a good citizen, national symbols, work (now and long ago), geography, time and chronology, and life in the past. Teachers are encouraged to build students’ understanding of history–social science concepts while furthering beginning literacy skills as outlined in the Common Core State Standards (CCSS). For example, shared readings of narrative and expository text related to the history–social science standards can reinforce academic content vocabulary, concepts about print, phonemic awareness, the alphabetic principle, analysis of text, and fluency.

What Kindergarten Students Should Know

Whether or not they have attended preschool, students bring to kindergarten the spatial, temporal, and causal understandings gained from their families and communities. The primary curriculum builds on this knowledge to develop an ever-expanding sense of place within the world. To extend these understandings, teachers must recognize the critical role of students’ previous learning—learning anchored in the young child’s language, family, and immediate world. These primary studies therefore begin with the child’s immediate present and/or prior knowledge and then move spatially outward to develop important linkages with the larger geographic, historical, political, and economic world.

What Students Learn in Kindergarten

Learning and Working Together

Students explore the meaning of good citizenship by learning about rules, working together, and the basic idea of government. Teachers may use classroom problems that arise as opportunities for critical thinking and problem solving; for example, problems in sharing scarce resources or space with others or in planning ahead and ending one’s activity on time for the next activity teach students to function as a community of learners. Students need help in analyzing problems; considering why the problem arose; examining other alternatives; developing awareness of how alternative behaviors might bring different results; and learning to appreciate behaviors and values that are consistent with the democratic ethic. Students and teachers can dramatize issues that create conflict on the playground, in the classroom, and at a home and brainstorm solutions that exemplify compromise, cooperation, and respect for rules and laws. Students must have opportunities to discuss these more desirable behaviors, try them out, and examine how they lead to more harmonious and socially satisfying relationships with others.

Teachers may use classroom problems that arise as opportunities for critical thinking and problem solving . . .

Students also need guidance in understanding the purpose of rules and laws and why a government is necessary. Teachers can discuss rules at home and at school and ask why they are important. What happens when rules are not followed? Students can help create classroom rules for the purpose of establishing a safe environment where learning can occur. Students can also discuss possible consequences for breaking these rules.

Students further their study of good citizenship by learning about people in American and world history who exhibit honesty, courage, determination, individual responsibility, and patriotism. Teachers may introduce students to important historical figures who exhibit these characteristics by reading biographies such as *Now and Ben: The Modern Inventions of Benjamin Franklin* by Gene Barretta, *Harvesting Hope: The Story of Cesar Chavez* by Kathleen Krull, and *The Story of Ruby Bridges* by Robert Coles.

Stories, fairy tales, and nursery rhymes that incorporate conflict and raise value issues, which are both interesting and understandable to young students, are effective tools for citizenship education. Students deepen their understanding of good citizenship by identifying the behavior of characters in the stories, observe the effect of this behavior on others, examine why characters behaved as they did, and consider whether other choices could have changed the results. These discussions are intended to help them acquire those values of deliberation and individual responsibility that are consistent with being a good citizen in a democratic nation. A few examples of such stories are “Jack and the Beanstalk,” “Goldilocks and the Three Bears,” selections from *Aesop’s Fables*, *Tortillitas para Mamá* (Margot Griego), Helen Lester’s *Me First*, and Virginia Hamilton’s *The People Could Fly*.

National and State Symbols



Kindergarten students explore the strands of national identity and cultural literacy by learning about national and state symbols. Students should learn to recognize national and state symbols such as the national and state flags, the bald eagle, and the Statue of Liberty and how these symbols relate to America’s cultural and national identity. Students can discuss the values and principles in these symbols, such as individual rights, common good, justice, equality, and truth. The teacher may choose to integrate this standard with Standards K.6.1 and K.6.2 and create a larger unit on national symbols, holidays, and important Americans.

Literature—such as *Fireworks, Picnics, and Flags* (James Gribbin) and *Purple Mountain Majesties* (Barbara Younger)—can both engage and develop student understanding of these standards. In addition, songs such as Woody Guthrie’s “This Land Is Your Land,” “America the Beautiful,” and the “Star-Spangled Banner” all support student engagement and learning.

Working Now and Long Ago

Students learn about the different types of jobs and work of people in their school and their local community. This standard can be integrated with Standard K.4; as students construct school and neighborhood maps and talk about neighborhood structures such as fire stations, markets, houses, banks, and hospitals, the jobs and workers can be introduced as well. As students learn about daily life in the past in Standard K.6, teachers can discuss ways in which work and jobs have changed or remained the same over time. Students should understand that one purpose of school is to develop their skills and knowledge and that this is as important as any job in the community. Working collaboratively to complete tasks, students can practice problem solving, conflict resolution, and taking personal responsibility.

Geography of the Neighborhood

Students begin the study of geography by exploring the immediate environment of the school and neighborhood...

Students begin the study of geography by exploring the immediate environment of the school and neighborhood, including its topography, streets, transportation systems, structures, and human activities. Teachers may provide students with opportunities to use a variety of materials such as large building blocks, wood, tools, toys, and other recycled objects to construct neighborhood structures. Activities in these centers carried on through group play become important beginnings of map work for young students. Students should build neighborhoods and landscapes and incorporate such structures as fire stations, airports, houses, banks, hospitals, supermarkets, harbors, and transportation lines. Students should use picture files, stories, and informational texts to deepen their information about the places they are creating and the work that is done in these places.

Time and Chronology

Learning about the calendar, days of the week, and months of the year are important first steps toward understanding time and chronology. Chronological thinking can be enhanced by constructing timelines of the kindergarten day, practicing sequencing of a story, and learning words such as *first*, *next*, *then*, and *finally* while sequencing story events.

Reaching Out to Times Past

Students vicariously take their first steps into times past to develop historical literacy and explore the theme of continuity and change. Students learn about national holidays and their purposes, as well as the events associated with them. Teachers may read historical accounts of famous Americans, which further students' understanding of national identity and cultural literacy.

Students also study the past and consider how life was the same as or different from their lives. For example, students may learn that getting water from a well, growing food and raising livestock, and making clothing are examples of how the past may be different from their lives today. Stories from the *My First Little House Books* series and informational books that illustrate the work and daily lives of characters and people in the past can help students develop historical empathy and understand life in the past. Teachers may introduce primary sources by using photographs of transportation, homes, work, common household items, and clothing while discussing which aspects of these items have changed and remained the same and what this tells us about life in the past.

Student also study the past and consider how life was the same as or different from their lives.

The Education and the Environment Initiative

The following units from the Education and the Environment Initiative (EEI) Curriculum can be used to provide instruction in the history–social science standards listed below.

Kindergarten		
Standard Number	Standard Text	EEI Curriculum Unit Name
K.4.5	Demonstrate familiarity with the school's layout, environs, and the jobs people do there.	<i>Some Things Change and Some Things Stay the Same</i>
K.6.3	Understand how people lived in earlier times and how their lives would be different today (e.g., getting water from a well, growing food, making clothing, having fun, forming organizations, living by rules and laws).	

For more information about EEI instructional units, visit the Environment Protection Agency Web page at www.calepa.ca.gov/Education/EEI (Outside Source).

Support for English Learners

History–social science is particularly challenging for English learners. They must simultaneously develop fluency in a second language and also gain content and analysis skills in a complex subject area with high literacy demands. To learn English and achieve mastery of the history–social science content standards, students must participate in instructional programs that combine critical content knowledge and skill development in both English-language proficiency and the content standards and analysis skills contained in the *History–Social Science Framework for California Public Schools* (California Department of Education 2005).

All students should have an opportunity to actively engage with the history–social science content standards regardless of their proficiency in the English language. Effective instructional practices foster English-language development (ELD) and at the same time teach history–social science content. Early instruction in English literacy and content knowledge across all disciplines must be incorporated into ELD programs. In a structured English immersion program, history–social science for English learners continues to be taught while students are mastering English. In fact, most studies promote instruction in the content areas despite low literacy or limited proficiency in the English language, along with the critical-thinking and analysis skills and the particular reading strategies of the disciplines.

Teachers should align history–social science instruction with the grade-level expectations in the four domains (reading, writing, listening and speaking, and language) described in the CCSS for English language arts. Before classroom instruction, teachers need to determine what they want the students to learn, their students' English-language proficiency, and the language demands of each lesson's instructional materials.

Specially designed academic instruction in English (SDAIE) is one instructional strategy to meet the needs of English learners. For additional resources to support the teaching of English learners, please visit the CDE English Learners Web page at <http://www.cde.ca.gov/sp/el/>.

The Standards

The following kindergarten history–social science content standards were adopted by the California State Board of Education on October 9, 1998. In addition, the recently adopted CCSS include standards for literacy in

history/social studies. These standards do not replace the history–social science content standards but supplement them by setting specific requirements for reading and writing informational texts, including history–social science documents. The new standards will be implemented gradually over the next several years as curriculum frameworks, instructional materials, and assessments based on the CCSS are adopted. Refer to the English language arts section of this document for more information about the CCSS for kindergarten.

History–Social Science Content Standards Kindergarten: Learning and Working Now and Long Ago

K.1 Students understand that being a good citizen involves acting in certain ways.

1. Follow rules, such as sharing and taking turns, and know the consequences of breaking them.
2. Learn examples of honesty, courage, determination, individual responsibility, and patriotism in American and world history from stories and folklore.
3. Know beliefs and related behaviors of characters in stories from times past and understand the consequences of the characters' actions.

K.2 Students recognize national and state symbols and icons such as the national and state flags, the bald eagle, and the Statue of Liberty.

K.3 Students match simple descriptions of work that people do and the names of related jobs at the school, in the local community, and from historical accounts.

K.4 Students compare and contrast the locations of people, places, and environments and describe their characteristics.

1. Determine the relative locations of objects using the terms near/far, left/right, and behind/in front.
2. Distinguish between land and water on maps and globes and locate general areas referenced in historical legends and stories.
3. Identify traffic symbols and map symbols (e.g., those for land, water, roads, cities).
4. Construct maps and models of neighborhoods, incorporating such structures as police and fire stations, airports, banks, hospitals, supermarkets, harbors, schools, homes, places of worship, and transportation lines.
5. Demonstrate familiarity with the school's layout, environs, and the jobs people do there.

K.5 Students put events in temporal order using a calendar, placing days, weeks, and months in proper order.

K.6 Students understand that history relates to events, people, and places of other times.

1. Identify the purposes of, and the people and events honored in, commemorative holidays, including the human struggles that were the basis for the events (e.g., Thanksgiving, Independence Day, Washington's and Lincoln's Birthdays, Martin Luther King Jr. Day, Memorial Day, Labor Day, Columbus Day, Veterans Day).
2. Know the triumphs in American legends and historical accounts through the stories of such people as Pocahontas, George Washington, Booker T. Washington, Daniel Boone, and Benjamin Franklin.
3. Understand how people lived in earlier times and how their lives would be different today (e.g., getting water from a well, growing food, making clothing, having fun, forming organizations, living by rules and laws).

Historical and Social Sciences Analysis Skills Kindergarten Through Grade Five

The intellectual skills noted below are to be learned through, and applied to, the content standards for kindergarten through grade five. They are to be assessed *only in conjunction with* the content standards in kindergarten through grade five.

In addition to the standards for kindergarten through grade five, students demonstrate the following intellectual, reasoning, reflection, and research skills:

Chronological and Spatial Thinking

1. Students place key events and people of the historical era they are studying in a chronological sequence and within a spatial context; they interpret time lines.
2. Students correctly apply terms related to time, including *past, present, future, decade, century, and generation*.
3. Students explain how the present is connected to the past, identifying both similarities and differences between the two, and how some things change over time and some things stay the same.
4. Students use map and globe skills to determine the absolute locations of places and interpret information available through a map's or globe's legend, scale, and symbolic representations.
5. Students judge the significance of the relative location of a place (e.g., proximity to a harbor, on trade routes) and analyze how relative advantages or disadvantages can change over time.

Research, Evidence, and Point of View

1. Students differentiate between primary and secondary sources.

2. Students pose relevant questions about events they encounter in historical documents, eyewitness accounts, oral histories, letters, diaries, artifacts, photographs, maps, artworks, and architecture.
3. Students distinguish fact from fiction by comparing documentary sources on historical figures and events with fictionalized characters and events.

Historical Interpretation

1. Students summarize the key events of the era they are studying and explain the historical contexts of those events.
2. Students identify the human and physical characteristics of the places they are studying and explain how those features form the unique character of those places.
3. Students identify and interpret the multiple causes and effects of historical events.
4. Students conduct cost-benefit analyses of historical and current events.



Overview

Most children are natural scientists—they enjoy exploring, asking questions, playing with new objects, experimenting with different senses, observing, or using inventions to solve problems. In kindergarten, science teaching builds upon this innate curiosity by providing students the time, skills, and structures to formulate and investigate their questions.

Kindergarteners are expected to learn both the content and process of science. Effective science programs reflect a balanced, comprehensive approach that includes the teaching of investigation and experimentation skills along with direct instruction. Key elements of a balanced science program include explicit teaching of science content and concepts, identifying students' prior knowledge, and addressing student misconceptions. Investigation skills should also be highlighted, with students encouraged to find answers or reach conclusions using their own experiences or observations. High quality science instruction should also develop students' command of the academic language of science and use standards-based connections with other core subjects to reinforce science teaching and learning.

Safety should always be the foremost consideration in teacher modeling and the design of demonstrations, investigation and experiments, and science projects. Safety must be taught. Knowing and following safe practices in science are a part of understanding the nature of science and scientific enterprise. Everyone involved in science education should become familiar with the *Science Safety Handbook for California Public Schools*, which is posted on the CDE Web page at <http://www.cde.ca.gov/pd/ca/sc/documents/scisafebk2012.pdf>. It contains specific and useful information relevant to teachers, administrators, parents/guardians, and students.

Most children are natural scientists—they enjoy exploring, asking questions, playing with new objects, experimenting with different senses, observing, or using inventions to solve problems.

What Kindergarten Students Should Know

Students entering kindergarten come with a wide range of knowledge, experiences, and skills. Most students approach the world, and their first structured classroom, with curiosity and a sense of adventure. They ask “how” and “why” questions, can sort and classify objects, and often instigate their own investigations to figure out how things work. New kindergarteners realize that living things need nurturing, such as food and water. They communicate orally and through pictures. Reading, writing, and counting skills will vary among the students, with some reading and writing individual letters, simple words, or their names. Many can count and identify different shapes and textures.

What Students Learn in Kindergarten

During kindergarten, students participate in classroom discussions to share ideas and evidence and are provided with opportunities to change or revise understandings based on new evidence. Hands-on activities and games help develop skills and should include explicit teaching of scientific concepts and vocabulary.

Kindergarteners use their senses of sight, sound, and touch to investigate a variety of objects and learn how to classify, compare, and sort these objects. They observe, measure, and predict the properties of materials.

They begin the study of the properties of matter and its transformation, and observe and describe different types of plants and animals. In addition, kindergarteners use the study of weather as a basis for the study of earth science, including the characteristics of land, air, and water and the use of Earth’s resources in everyday life. Students expand their vocabularies by learning appropriate grade-level scientific terms, such as *freezing*, *melting*, *heating*, *dissolving*, and *evaporating*.

Kindergarten science topics are organized into four standard sets: Physical Sciences, Life Sciences, Earth Sciences, and Investigation and Experimentation. As students learn the content defined by the standards in the Life, Earth, and Physical Sciences strands, they are also practicing investigation and experimentation skills. That is, the investigation and experimentation standards should be infused throughout science instruction.

Physical Sciences

The kindergarten standards for the physical sciences call attention to the properties of common objects (most of which are solids) and to the properties of water. Students are introduced to the term *physical property* by observing the properties of a variety of objects. They learn to make predictions about what will happen under different conditions based upon observations and related information rather than random guesses.

Students learn how to compare objects on the basis of characteristics and physical properties, such as color, size, shape, weight, texture, flexibility, attraction to magnets, and floating and sinking in water. By working with objects and noting their physical properties and characteristics, students develop the ability to make observations and use academic language that is expressive, descriptive, and appropriate to science.

Kindergarteners investigate various objects by using the senses of sight, sound, and touch and sort these objects according to their physical properties. (Activities involving the sense of smell and taste should be done only at home under parental supervision.) They also sort objects according to properties that do not apply directly to those three senses. For example, they might test different objects for the ability to float or sink. Students observe the change from ice to liquid water and back to ice to develop the understanding that a substance may have both solid and liquid forms. They also observe water, covered and uncovered, to study the rate of evaporation.



Life Sciences

Kindergarteners study plants and animals. They learn about the major structures of living things and the needs of all plants and animals for air, food, and water to order to grow and be healthy. Students also learn that most animals move from place to place, which helps them find food, while plants are usually rooted in one place and must obtain their nutrients and energy from the surrounding air, soil, water, and sunlight.

Kindergarten students expand their observation skills and vocabulary by describing the appearance and behavior of different animals and plants. Students learn that although authors may use anthropomorphism to engage students and their imagination, stories sometimes give plants and animals attributes that are not real. Real plants and animals do not talk, wear clothing, or walk like humans. Scientific observation of plants and animals, in concert with the reading of multiple expository texts, helps students in kindergarten to understand the difference between characteristics of the real world and of fantasy.

Earth Sciences

Changing weather conditions (such as rain, wind, and temperature) provide kindergarteners with opportunities to make observations and measurements. Students observe and record weather changes over periods of days, weeks, and months. They observe the effects of weather and seasons on the land and living organisms.

This understanding helps young students to appreciate the importance of recycling and conserving Earth's resources.

Students study landforms and compare and contrast the features of rivers and oceans, mountains and deserts, and hills and valleys. They learn the connection between materials and the resources from which the materials are made. They also learn that the materials that make up the Earth's surface provide resources for human activities, and that human consumption leads to waste that must be disposed of. This understanding helps young students to appreciate the importance of recycling and conserving Earth's resources.

Investigation and Experimentation

The ability to observe and describe common objects developed during prekindergarten experiences is further developed as students study the properties of solids and liquids, plants and animals, and landforms and weather. Students are taught to compare and sort objects based upon their properties and are encouraged to use mathematics, oral descriptions, and drawings to communicate their observations.

The Education and the Environment Initiative

Instruction in environmental literacy—developing an understanding about how students influence the environment and how it influences them—begins in kindergarten. The following units from the Education and the Environment Initiative (EEI) Curriculum may be used to provide instruction in the science standards listed below.

Kindergarten		
Standard Number	Standard Text	EEI Curriculum Unit Name
K.3.a.	Students know characteristics of mountains, rivers, oceans, valleys, deserts, and local landforms.	<i>The World Around Me</i>
K.3.c.	Students know how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved.	<i>A Day in My Life</i>

For more information about EEI instructional units, visit the Environmental Protection Agency Web page at www.calepa.ca.gov/Education/EEI (Outside Source).

Science Across the Content Areas

The kindergarten science standards are readily integrated with other academic content standards. For example, in mathematics, students collect, categorize, and display data using graphs or charts. These skills are paralleled in, and reinforced by, the study of science.

Students develop written and oral language skills as they record observations, participate in shared research activities, and engage in discussions about science topics. They develop information literacy skills as they learn to use pictures and context to retrieve information and make predictions. As students listen to expository texts, teachers may use strategies for teaching vocabulary and comprehension by (1) using pictures and context to make predictions, (2) retelling familiar stories, and (3) answering and asking questions about essential elements.

In 2010, California adopted the Common Core State Standards (CCSS), including standards for literacy in science. These standards do not replace the science content standards but supplement them by setting specific requirements for reading and writing informational texts, including science documents. The new standards will be implemented over the next several years as curriculum frameworks, instructional materials, and assessments based on the CCSS are adopted. Refer to the English language arts section for more information about the CCSS for kindergarten.



Support for English Learners

All students, regardless of English language proficiency, should have access to high-quality science instruction. With its focus on domain-specific vocabulary acquisition and utilization of hands-on, collaborative activities, a balanced kindergarten science program provides many opportunities for English-language development (ELD). However, science instruction may still present challenges for some English learners. Specific challenges include learning science-related terms and academic vocabulary. Directions may be complex and contain multiple steps. Visual information may not be easily comprehensible.

Some strategies that may help students understand new science concepts and processes include connecting to students' background knowledge, experiences, and familiar terminology; focusing on key science terms before, during, and after a lesson; and utilizing different formats (e.g., charts, graphs, pictures).

Students benefit from clear and consistent classroom routines, group or peer interaction to share information and processes, and activities that are relevant and meaningful. ELD is especially enhanced by (1) opportunities for informal conversations about content and concepts, (2) modeling of the appropriate use of equipment, and (3) an adequate amount of wait time for student response.

The Standards

The following kindergarten science content standards were adopted by the California State Board of Education on October 9, 1998.

Science Content Standards Kindergarten	
Physical Sciences	
1.	Properties of materials can be observed, measured, and predicted. As a basis for understanding this concept:
1.a.	Students know objects can be described in terms of the materials they are made of (e.g., clay, cloth, paper) and their physical properties (e.g., color, size, shape, weight, texture, flexibility, attraction to magnets, floating, sinking).
1.b.	Students know water can be a liquid or a solid and can be made to change back and forth from one form to the other.
1.c.	Students know water left in an open container evaporates (goes into the air) but water in a closed container does not.
Life Sciences	
2.	Different types of plants and animals inhabit the earth. As a basis for understanding this concept:
2.a.	Students know how to observe and describe similarities and differences in the appearance and behavior of plants and animals (e.g., seed-bearing plants, birds, fish, insects).
2.b.	Students know stories sometimes give plants and animals attributes they do not really have.
2.c.	Students know how to identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs).
Earth Sciences	
3.	Earth is composed of land, air, and water. As the basis for understanding this concept:
3.a.	Students know characteristics of mountains, rivers, oceans, valleys, deserts, and local landforms.
3.b.	Students know changes in weather occur from day to day and across seasons, affecting Earth and its inhabitants.
3.c.	Students know how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved.

Investigation and Experimentation

4.	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:
4.a.	Observe common objects by using the five senses. [<i>Caution:</i> Observational activities associated with tasting and smelling should be conducted only under parental supervision at home.]
4.b.	Describe the properties of common objects.
4.c.	Describe the relative position of objects using one reference (e.g., above or below).
4.d.	Compare and sort common objects by one physical attribute (e.g., color, shape, texture, size, weight).
4.e.	Communicate observations orally and through drawings.

Visual and Performing Arts



Overview



Kindergarten students dance, sing, act, and paint, exploring their world through their senses and improving their perceptual skills—so important to learning and performing in the arts. They can act like cats; move to music, rhythm, and sounds; and turn everyday movements such as walking and jumping into dance. Listening to music, they repeat the tempo with rhythm sticks and pretend and act out the stories they hear and the pictures they see by performing group pantomimes and improvisations. They like to talk about what they see in pictures and use glue and scissors with

enthusiasm while learning about line, color, shape, texture, value, and space in the world around them and in works of art. While learning vocabulary in each of the arts disciplines, they see, listen, and respond to dance, music, theatre, and the visual arts from various cultures and time periods. For kindergarten students, the arts are among their first exciting adventures in learning. They are beginning to develop the vocabulary and skills unique to the arts.

What Kindergarten Students Should Know

The *Visual and Performing Arts Content Standards for California Public Schools* (California Department of Education 2001) includes standards for prekindergarten, but teachers cannot assume that students entering school have been exposed to this content. However, even children who have not been exposed to any school experience prior to entering kindergarten will have skills and knowledge gained from their families and communities.

What Students Learn in Kindergarten

Dance

Students learn many ways to move through space and respond to their teacher's instructions to hop, turn, wiggle, or be still. They use this ability to control their movements, express ideas, and respond to different types of music. By learning folk and traditional dances, they can talk about how the dances are the same or different by using such terms as *costume*, *speed*, and *force*. They also learn to distinguish between everyday movements and dance movements.

Music

Through music activities, students sing and play instruments, become aware of music in their daily experience, and learn about music from various cultures. Creating movements in response to music helps them connect to dance and discern variations in rhythm, tempo, and dynamics.

Theatre

In theatre, students learn the difference between an actor portraying an imaginary character and a real person. Like actors, they begin to use their senses to observe the world and people and recreate in their minds a feeling or situation to help with character development. They learn that sense memory, which involves sight, smell, touch, taste, or hearing, is an important skill for actors to develop. With their new skills, they can retell a familiar story, myth, or fable and enjoy adding costumes and props to their performance. By portraying firefighters, teachers, and clerks, they learn acting skills. And by developing important skills through working together in dramatizations, they begin to understand what it means to be a member of the audience.

Visual Arts

In the visual arts, students may walk together and observe the repeated patterns made by the leaves on a tree or the bricks on the side of a building. They also may identify lines, colors, shapes and forms, and textures and observe changes in the shadows and in sunlight. And they may begin to talk about perspective, noticing how objects appear to be larger when close and smaller when far away. Students use this visual information to create works of art on paper and in three-dimensional constructions, using geometric shapes and lines that express feelings. Then they advance into analysis as they discover meaning and stories in works of art and see how other artists use the same lines, colors, shapes, and textures as the students did in their own work. Now they have a vocabulary to use as they tell why they like a work of art they made and learn about a variety of artwork in the world around them.

Students use this visual information to create works of art on paper and in three-dimensional constructions, using geometric shapes and lines that express feelings.

The Standards

The visual and performing arts content standards provide expectations for students in four disciplines: dance, music, theatre, and visual arts. At each grade level, the standards are grouped under five strands:

1. **Artistic perception** refers to processing, analyzing, and responding to sensory information through the use of the language and skills unique to dance, music, theatre, and the visual arts.
2. **Creative expression** involves creating a work, performing, and participating in the arts disciplines.
3. **Historical and cultural context** concerns the work students do toward understanding the historical contributions and cultural dimensions of an arts discipline.

4. **Aesthetic valuing** includes analyzing and critiquing works of dance, music, theatre, and the visual arts.
5. **Connections, relationships, and applications** involve connecting and applying what is learned in one arts discipline and comparing it to learning in the other arts, other subject areas, and careers.

When reading the standards at a particular grade level, one must know which standards were accomplished in all the previous grade levels to understand how expectations are based on prior learning. In addition, an examination of the standards for any of the art forms at a given grade level reveals overlaps and points of connection across the strands because the strands and the content standards for the four disciplines are intrinsically related.

Key Content Standards

Each arts discipline and artistic process has many entry points throughout the grades. Because particular ideas, concepts, and experiences are critical to student achievement at certain times in their artistic and cognitive development, the standards provide students with a picture of what is essential to know and be able to do, from kindergarten through grade eight, in each of the four arts disciplines. The key content standards provide a beginning point for standards-based instruction in each grade of elementary and middle school and focus on fundamental content that students need in order to move to the next level of understanding and expression. Like the complete standards, the key standards build up content in each successive grade level and spiral throughout the curriculum for kindergarten through grade eight. They are essential in preparing students for beginning-level high school arts courses, in which they engage in more focused and independent work. Key standards are indicated in the list below with an asterisk (*).

The following kindergarten visual and performing arts content standards were adopted by the California State Board of Education on January 10, 2001.

Visual and Performing Arts Content Standards Kindergarten

Component Strand: 1.0 Artistic Perception

Dance Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to Dance	Music Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to Music	Theatre Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to Theatre	Visual Arts Processing, Analyzing, and Responding to Sensory Information Through the Language and Skills Unique to the Visual Arts
<p>Students perceive and respond, using the elements of dance. They demonstrate movement skills, process sensory information, and describe movement, using the vocabulary of dance.</p> <p>Development of Motor Skills and Technical Expertise</p> <p>1.1 Build the range and capacity to move in a variety of ways.</p> <p>1.2* Perform basic locomotor skills (e.g., walk, run, gallop, jump, hop, and balance).</p> <p>Comprehension and Analysis of Dance Elements</p> <p>1.3* Understand and respond to a wide range of opposites (e.g., high/low, forward/backward, wiggle/freeze).</p> <p>Development of Dance Vocabulary</p> <p>1.4 Perform simple movements in response to oral instructions (e.g., walk, turn, reach).</p>	<p>Students read, notate, listen to, analyze, and describe music and other aural information, using the terminology of music.</p> <p>Read and Notate Music</p> <p>1.1 Use icons or invented symbols to represent beat.</p> <p>Listen to, Analyze, and Describe Music</p> <p>1.2* Identify and describe basic elements in music (e.g., high/low, fast/slow, loud/soft, beat).</p>	<p>Students observe their environment and respond, using the elements of theatre. They also observe formal and informal works of theatre, film/video, and electronic media and respond, using the vocabulary of theatre.</p> <p>Development of the Vocabulary of Theatre</p> <p>1.1* Use the vocabulary of theatre, such as actor, character, cooperation, setting, the five senses, and audience, to describe theatrical experiences.</p> <p>Comprehension and Analysis of the Elements of Theatre</p> <p>1.2 Identify differences between real people and imaginary characters.</p>	<p>Students perceive and respond to works of art, objects in nature, events, and the environment. They also use the vocabulary of the visual arts to express their observations.</p> <p>Develop Perceptual Skills and Visual Arts Vocabulary</p> <p>1.1 Recognize and describe simple patterns found in the environment and works of art.</p> <p>1.2 Name art materials (e.g., clay, paint, and crayons) introduced in lessons.</p> <p>Analyze Art Elements and Principles of Design</p> <p>1.3* Identify the elements of art (line, color, shape/form, texture, value, space) in the environment and in works of art, emphasizing line, color, and shape/form.</p>

*Indicates a key standard.

Component Strand: 2.0 Creative Expression

<p align="center">Dance Creating, Performing, and Participating in Dance</p>	<p align="center">Music Creating, Performing, and Participating in Music</p>	<p align="center">Theatre Creating, Performing, and Participating in Theatre</p>	<p align="center">Visual Arts Creating, Performing, and Participating in the Visual Arts</p>
<p>Students apply choreographic principles, processes, and skills to create and communicate meaning through the improvisation, composition, and performance of dance.</p> <p>Creation/Invention of Dance Movements</p> <p>2.1* Create movements that reflect a variety of personal experiences (e.g., recall feeling happy, sad, angry, excited).</p> <p>2.2 Respond to a variety of stimuli (e.g., sounds, words, songs, props, and images) with original movements.</p> <p>2.3 Respond spontaneously to different types of music, rhythms, and sounds.</p>	<p>Students apply vocal and instrumental musical skills in performing a varied repertoire of music. They compose and arrange music and improvise melodies, variations, and accompaniments, using digital/electronic technology when appropriate.</p> <p>Apply Vocal and Instrumental Skills</p> <p>2.1 Use the singing voice to echo short melodic patterns.</p> <p>2.2* Sing age-appropriate songs from memory.</p> <p>2.3* Play instruments and move or verbalize to demonstrate awareness of beat, tempo, dynamics, and melodic direction.</p> <p>Compose, Arrange, and Improvise</p> <p>2.4 Create accompaniments, using the voice or a variety of classroom instruments.</p>	<p>Students apply processes and skills in acting, directing, designing, and scriptwriting to create formal and informal theatre, film/videos, and electronic media productions and to perform in them.</p> <p>Development of Theatrical Skills</p> <p>2.1 Perform imitative movements, rhythmical activities, and theatre games (freeze, statues, and mirrors).</p> <p>Creation/Invention in Theatre</p> <p>2.2* Perform group pantomimes and improvisations to retell familiar stories.</p> <p>2.3 Use costumes and props in role playing.</p>	<p>Students apply artistic processes and skills, using a variety of media to communicate meaning and intent in original works of art.</p> <p>Skills, Processes, Materials, and Tools</p> <p>2.1 Use lines, shapes/forms, and colors to make patterns.</p> <p>2.2 Demonstrate beginning skill in the use of tools and processes, such as the use of scissors, glue, and paper in creating a three-dimensional construction.</p> <p>2.3 Make a collage with cut or torn paper shapes/forms.</p> <p>Communication and Expression Through Original Works of Art</p> <p>2.4 Paint pictures expressing ideas about family and neighborhood.</p> <p>2.5 Use lines in drawings and paintings to express feelings.</p> <p>2.6 Use geometric shapes/forms (circle, triangle, square) in a work of art.</p> <p>2.7 Create a three-dimensional form, such as a real or imaginary animal.</p>

*Indicates a key standard.

Component Strand: 3.0 Historical and Cultural Context

<p align="center">Dance Understanding the Historical Contributions and Cultural Dimensions of Dance</p>	<p align="center">Music Understanding the Historical Contributions and Cultural Dimensions of Music</p>	<p align="center">Theatre Understanding the Historical Contributions and Cultural Dimensions of Theatre</p>	<p align="center">Visual Arts Understanding the Historical Contributions and Cultural Dimensions of the Visual Arts</p>
<p>Students analyze the function and development of dance in past and present cultures throughout the world, noting human diversity as it relates to dance and dancers.</p> <p>Development of Dance</p> <p>3.1 Name and perform folk/traditional dances from the United States and other countries.</p>	<p>Students analyze the role of music in past and present cultures throughout the world, noting cultural diversity as it relates to music, musicians, and composers.</p> <p>Role of Music</p> <p>3.1 Identify the various uses of music in daily experiences.</p> <p>Diversity of Music</p> <p>3.2 Sing and play simple singing games from various cultures.</p> <p>3.3 Use a personal vocabulary to describe voices and instruments from diverse cultures.</p> <p>3.4 Use developmentally appropriate movements in responding to music from various genres and styles (rhythm, melody).</p>	<p>Students analyze the role and development of theatre, film/video, and electronic media in past and present cultures throughout the world, noting diversity as it relates to theatre.</p> <p>Role and Cultural Significance of Theatre</p> <p>3.1* Retell or dramatize stories, myths, fables, and fairy tales from various cultures and times.</p> <p>3.2 Portray different community members, such as firefighters, family, teachers, and clerks, through role-playing activities.</p>	<p>Students analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists.</p> <p>Role and Development of the Visual Arts</p> <p>3.1 Describe functional and nonutilitarian art seen in daily life; that is, works of art that are used versus those that are only viewed.</p> <p>3.2 Identify and describe works of art that show people doing things together.</p> <p>Diversity of the Visual Arts</p> <p>3.3 Look at and discuss works of art from a variety of times and places.</p>

*Indicates a key standard.

Component Strand: 4.0 Aesthetic Valuing

<p align="center">Dance Responding to, Analyzing, and Making Judgments About Works of Dance</p>	<p align="center">Music Responding to, Analyzing, and Making Judgments About Works of Music</p>	<p align="center">Theatre Responding to, Analyzing, and Critiquing Theatrical Experiences</p>	<p align="center">Visual Arts Responding to, Analyzing, and Making Judgments About Works in the Visual Arts</p>
<p>Students critically assess and derive meaning from works of dance, performance of dancers, and original works based on the elements of dance and aesthetic qualities.</p> <p>Description, Analysis, and Criticism of Dance</p> <p>4.1* Explain basic features that distinguish one kind of dance from another (e.g., speed, force/ energy use, costume, setting, music).</p>	<p>Students critically assess and derive meaning from works of music and the performance of musicians according to the elements of music, aesthetic qualities, and human responses.</p> <p>Derive Meaning</p> <p>4.1 Create movements that correspond to specific music.</p> <p>4.2 Identify, talk about, sing, or play music written for specific purposes (e.g., work song, lullaby).</p>	<p>Students critique and derive meaning from works of theatre, film/video, electronic media, and theatrical artists on the basis of aesthetic qualities.</p> <p>Critical Assessment of Theatre</p> <p>4.1 Respond appropriately to a theatrical experience as an audience member.</p> <p>Derivation of Meaning from Works of Theatre</p> <p>4.2 Compare a real story with a fantasy story.</p>	<p>Students analyze, assess, and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.</p> <p>Derive Meaning</p> <p>4.1 Discuss their own works of art, using appropriate art vocabulary (e.g., color, shape/form, texture).</p> <p>4.2* Describe what is seen (including both literal and expressive content) in selected works of art.</p> <p>Make Informed Judgments</p> <p>4.3 Discuss how and why they made a specific work of art.</p> <p>4.4 Give reasons why they like a particular work of art they made, using appropriate art vocabulary.</p>

*Indicates a key standard.

Component Strand: 5.0 Connections, Relationships, Applications

<p align="center">Dance</p> <p align="center">Connecting and Applying What Is Learned in Dance to Learning in Other Art Forms and Subject Areas and to Careers</p>	<p align="center">Music</p> <p align="center">Connecting and Applying What Is Learned in Music to Learning in Other Art Forms and Subject Areas and to Careers</p>	<p align="center">Theatre</p> <p align="center">Connecting and Applying What Is Learned in Theatre, Film/Video, and Electronic Media to Other Art Forms and Subject Areas and to Careers</p>	<p align="center">Visual Arts</p> <p align="center">Connecting and Applying What Is Learned in the Visual Arts to Other Art Forms and Subject Areas and to Careers</p>
<p>Students apply what they learn in dance to learning across subject areas. They develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills. They also learn about careers in and related to dance.</p> <p>Connections and Applications Across Disciplines</p> <p>5.1 Give examples of the relationship between everyday movement in school and dance movement.</p>	<p>Students apply what they learn in music across subject areas. They develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills. They also learn about careers in and related to music.</p> <p>Connections and Applications</p> <p>5.1 Use music, together with dance, theatre, and the visual arts, for storytelling.</p> <p>Careers and Career-Related Skills</p> <p>5.2 Identify and talk about the reasons artists have for creating dances, music, theatre pieces, and works of visual art.</p>	<p>Students apply what they learn in theatre, film/video, and electronic media across subject areas. They develop competencies and creative skills in problem solving, communication, and time management that contribute to lifelong learning and career skills. They also learn about careers in and related to theatre.</p> <p>Connections and Applications</p> <p>5.1 Dramatize information from other content areas. Use movement and voice, for example, to reinforce vocabulary, such as <i>fast, slow, in, on, through, over, under</i>.</p> <p>Careers and Career-Related Skills</p> <p>5.2 Demonstrate the ability to participate cooperatively in performing a pantomime or dramatizing a story.</p>	<p>Students apply what they learn in the visual arts across subject areas. They develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills. They also learn about careers in and related to the visual arts.</p> <p>Connections and Applications</p> <p>5.1 Draw geometric shapes/forms (e.g., circles, squares, triangles) and repeat them in dance/movement sequences.</p> <p>5.2 Look at and draw something used every day (e.g., scissors, toothbrush, fork) and describe how the object is used.</p> <p>Visual Literacy</p> <p>5.3 Point out images (e.g., photographs, paintings, murals, ceramics, sculptures) and symbols found at home, in school, and in the community, including national and state symbols and icons.</p> <p>Careers and Career-Related Skills</p> <p>5.4 Discuss the various works of art (e.g., ceramics, paintings, sculpture) that artists create and the type of media used.</p>

*Indicates a key standard.



Overview

Through health education, students learn skills that enable them to make healthy choices and avoid high-risk behaviors. They also learn health concepts and acquire related knowledge. Students develop communication skills, decision-making and goal-setting skills, refusal techniques, and the ability to access health information and assess its accuracy. They learn health skills and content simultaneously.

Health literacy is a primary goal of health education. *Health literacy* is defined as the capacity of an individual to obtain, interpret, and understand basic health information and services and the competence to use such information and services to enhance health. The knowledge and skills that comprise health literacy are woven throughout the health education content standards.

The health education content standards provide a vision of what students need to know and be able to do so they can adopt and maintain healthy behaviors. The eight overarching content standards are taught in the context of six content areas. In kindergarten, students are introduced to essential health concepts in all six content areas and skills in four content areas.

Kindergarten students enjoy learning and talking about themselves. They are capable of learning to express their needs and emotions in appropriate ways. Their interest in learning new words and desire to be verbal supports the identification and appropriate expression of emotions. Kindergarten students are able to learn social skills fairly quickly, making this school year a good time for students to learn how to share with friends and classmates and to use social language such as “Please” and “Thank you” in everyday situations. Some kindergarten students are able to prepare snacks or simple meals (e.g., a piece of fruit, a bowl of cereal) but may be more interested in talking than in eating and may need encouragement to try new foods. Because kindergarten students desire more independence and more contact with the world outside their home and family, it is important that they learn and practice basic safety rules and behaviors.

Kindergarten students are able to learn social skills fairly quickly, making this school year a good time for students to learn how to share with friends and classmates and to use social language such as “Please” and “Thank you” in everyday situations.

What Kindergarten Students Should Know

The health-related behaviors that kindergarten students are already practicing are primarily influenced by their families and communities. Before kindergarten, health education is usually provided by family members and focuses on children’s self-care, such as brushing teeth, washing face and hands, and following safety rules at home, in the car, and on the playground. These young students may have learned that to prevent the spread of disease, they cover the nose when they sneeze and the mouth when they cough. They may also know that their doctors and dentists help them to stay healthy and that some foods are good for them, but others are not.

What Students Learn in Kindergarten

In kindergarten, students learn basic health concepts and skills. They learn how to plan nutritious meals and snacks and the importance of physical activity for good health. They learn that living things grow, and they gain

knowledge of their own body parts and the five senses. Concepts and skills for staying safe at home and school and while riding in a vehicle or on a bicycle are introduced. In kindergarten, students learn to identify trusted adults and the people to go to for medical, vision, and dental care and for help with mental and emotional health concerns. By the end of kindergarten, students can demonstrate ways to prevent the spread of disease, such as washing hands, and simple practices that are good for the environment, such as turning off lights and picking up trash.

Nutrition and Physical Activity

In kindergarten, students learn to identify a variety of healthy foods and why eating a nutritious breakfast and a variety of foods are important for good health. They learn to use communication skills to ask family members to provide healthy foods. Kindergarten students learn and practice healthy behaviors such as planning nutritious snacks and meals and choosing healthy foods in a variety of settings (e.g., school, a friend's house, a restaurant). They also learn that not all products they see advertised or at the store are good for them.

Kindergarten students learn about the benefits of being physically active. They can describe ways to participate in active play and enjoyable physical activities. Knowing why and how to be physically active are necessary steps for students to make good decisions about being physically active.

Growth and Development

The students themselves are a main focus of instruction in growth and development at the kindergarten level. They learn that they and other living things grow and mature—not just getting bigger, but also changing. Kindergarten students describe their own physical characteristics, which becomes a starting point for learning about ways in which people are similar and different. They learn the names and functions of body parts (e.g., head, neck, knee) and can name and describe the five senses.

Injury Prevention and Safety



As kindergarten students' worlds expand, being safe requires more knowledge and skills. Essential concepts for kindergarten students include knowing the safety rules at home, in school, in the community, and for traveling by car, bus, bicycle, or foot. They learn to recognize emergency situations and potential poisons. They learn about the dangers of weapons and the importance of telling a trusted adult if they see or hear about someone who has a weapon. Kindergarten students also learn how to identify trusted adults, to avoid contact with strangers, and the difference between appropriate and inappropriate touching. An important concept students learn is that everyone has the right to tell others not to

touch his or her body.

Kindergarten students practice skills to stay safe and injury-free. These skills include identifying trusted adults who can help in an emergency or other dangerous situation, deciding when adult help is necessary, and effectively communicating the need for help. Students role-play what to do if approached by a stranger who is at their home, in a car, or walking on the street. They practice health-enhancing behaviors by following rules for safe play and crossing the street.

Alcohol, Tobacco, and Other Drugs

Because medicines can be found in most households, three of the five essential concepts in this health content area focus on medicines. Kindergarten students learn why medicines are used, that medicines can be helpful or harmful depending on how they are used (or misused), and that medicines should be taken only under the supervision of a trusted adult. Students also learn that some household products (e.g., cleaning products, cosmetics) are harmful if ingested or inhaled. Kindergarten students recognize that tobacco smoke is harmful and should be avoided.

Mental, Emotional, and Social Health

Kindergarten students identify and describe the uniqueness of individuals, characteristics of families, how families and friends promote their well-being, and what makes someone a trusted adult who can help with mental and emotional health concerns. They learn to identify a variety of emotions and to express personal needs, wants, and emotions appropriately. Students learn when it is appropriate to use terms such as “Please,” “Thank you,” and “I’m sorry” and practice these terms at home and in school. They also practice communication skills, such as cooperating and sharing with others, and health-enhancing behaviors, such as showing care, consideration, and concern for others. Kindergarten students learn goal-setting skills by making a plan to help family members. They learn health-promotion skills by encouraging others to engage in safe and healthy behaviors.

Personal and Community Health

Kindergarten students learn to identify and can demonstrate effective dental and personal hygiene practices (e.g., proper technique for brushing teeth and washing hands). They identify health care workers who promote healthy practices, and they learn communications skills to ask for help with health-related problems. Kindergarten students learn about and can describe sun-safety practices. They define “germs,” understand that the transmission of germs may be harmful, and demonstrate ways to prevent the transmission of germs (e.g., washing hands, using tissues). Kindergarten students also learn about practices that are good for the environment (e.g., picking up trash, turning off lights, turning off faucets).



Support for English Learners

Teachers may need to modify instruction to meet the instructional needs of English learners. Strategies to support learning may include using graphic organizers, pictures and other visual cues; summarizing or paraphrasing text; and additional time and opportunities for practice and interactions with classmates and the teacher. As in other subject areas, the academic language of health must be directly taught to all students, but English learners may need additional opportunities to use new words. The interpersonal-communication, decision-making, and health-promotion skills of health education provide opportunities for students to use the

academic language necessary to gain access to health content. Comparing alternatives and justifying choices require the use of academic language and provide meaningful situations for students to practice using new vocabulary and content knowledge.

The Standards

The following kindergarten health education content standards were adopted by the California State Board of Education on March 12, 2008.

Health Education Content Standards Kindergarten	
Overarching Standards	
Standard 1: Essential Health Concepts All students will comprehend essential concepts related to enhancing health.	
Standard 2: Analyzing Health Influences All students will demonstrate the ability to analyze internal and external influences that affect health.	
Standard 3: Accessing Valid Health Information All students will demonstrate the ability to access and analyze health information, products, and services.	
Standard 4: Interpersonal Communication All students will demonstrate the ability to use interpersonal communication skills to enhance health.	
Standard 5: Decision Making All students will demonstrate the ability to use decision-making skills to enhance health.	
Standard 6: Goal Setting All students will demonstrate the ability to use goal-setting skills to enhance health.	
Standard 7: Practicing Health-Enhancing Behaviors All students will demonstrate the ability to practice behaviors that reduce risk and promote health.	
Standard 8: Health Promotion All students will demonstrate the ability to promote and support personal, family, and community health.	
Nutrition and Physical Activity	
Standard 1: Essential Concepts	
1.1.N	Name a variety of healthy foods and explain why they are necessary for good health.
1.2.N	Identify a variety of healthy snacks.

1.3.N	Describe the benefits of being physically active.
1.4.N	Recognize the importance of a healthy breakfast.
Standard 2: Analyzing Influences	
2.1.N	Recognize that not all products advertised or sold are good for them.
Standard 3: Accessing Valid Information	
Skills for this content area are not identified until grade two.	
Standard 4: Interpersonal Communication	
4.1.N	Explain how to ask family members for healthy food options.
Standard 5: Decision Making	
5.1.N	Describe ways to participate regularly in active play and enjoyable physical activities.
Standard 6: Goal Setting	
Skills for this content area are not identified until grade two.	
Standard 7: Practicing Health-Enhancing Behaviors	
7.1.N	Select nutritious snacks.
7.2.N	Plan a nutritious breakfast.
7.3.N	Choose healthy foods in a variety of settings.
Standard 8: Health Promotion	
Skills for this content area are not identified until grade two.	
Growth and Development	
Standard 1: Essential Concepts	
1.1.G	Explain that living things grow and mature.
1.2.G	Describe their own physical characteristics.
1.3.G	Name ways in which people are similar and ways in which they are different.
1.4.G	Identify trusted adults who promote healthy growth and development (e.g., physicians, nurses, dentists, and optometrists).
1.5.G	Name body parts and their functions.

1.6.G	Name and describe the five senses.
Standards 2–8: Skills for this content area are not identified until grade one.	
Injury Prevention and Safety	
Standard 1: Essential Concepts	
1.1.S	Identify safety rules for the home, the school, and the community.
1.2.S	Identify emergency situations.
1.3.S	Explain ways to stay safe when riding in a bus or other vehicle.
1.4.S	Distinguish between appropriate and inappropriate touching.
1.5.S	Explain that everyone has the right to tell others not to touch his or her body.
1.6.S	Describe school rules about getting along with others.
1.7.S	Recognize the characteristics of bullying.
1.8.S	Identify ways to stay safe when crossing streets, riding a bicycle, or playing.
1.9.S	Recognize that anything may be poisonous or cause harm if used unsafely.
1.10.S	Identify people who are strangers and how to avoid contact with strangers.
1.11.S	Demonstrate how to ask trusted adults for help.
1.12.S	Define and explain the dangers of weapons. ¹
1.13.S	Explain the importance of telling a trusted adult if you see or hear about someone having a weapon. ²
Standard 2: Analyzing Influences	
Skills for this content area are not identified until grade one.	
Standard 3: Accessing Valid Information	
3.1.S	Identify trusted adults who can help in emergency situations.
Standard 4: Interpersonal Communication	
4.1.S	Demonstrate how to ask a trusted adult for help or call 9-1-1.
4.2.S	Show how to answer the phone in a safe way.

¹ See *Education Code (EC)* Section 49330 for the legal definition of a weapon (i.e., injurious object).

² *EC* Section 49330.

Standard 5: Decision Making	
5.1.S	Identify situations when it is necessary to seek adult help or call 9-1-1.
5.2.S	Role-play what to do if a stranger at home, in a car, or on the street approaches you.
Standard 6: Goal Setting	
Skills for this content area are not identified until grade four.	
Standard 7: Practicing Health-Enhancing Behaviors	
7.1.S	Follow rules for safe play and safety routines.
7.2.S	Show how to cross the street safely.
Standard 8: Health Promotion	
8.1.S	Show how to tell a trusted adult when you or a friend find a weapon. ³
Alcohol, Tobacco, and Other Drugs	
Standard 1: Essential Concepts	
1.1.A	Explain why medicines are used.
1.2.A	Explain that medicines can be helpful or harmful.
1.3.A	Recognize that medicines should be taken only under the supervision of a trusted adult.
1.4.A	Recognize that some household products are harmful if ingested or inhaled.
1.5.A	Recognize that tobacco smoke is harmful to health and should be avoided.
Standards 2–8: Skills for this content area are not identified until grade one.	
Mental, Emotional, and Social Health	
Standard 1: Essential Concepts	
1.1.M	Identify a variety of emotions.
1.2.M	Describe the characteristics of families.
1.3.M	Identify trusted adults at home and at school.
1.4.M	Describe characteristics that make each individual unique.

³ EC Section 49330.

1.5.M	Describe and practice situations when it is appropriate to use “Please,” ”Thank you,” “Excuse me,” and “I’m sorry.”
Standard 2: Analyzing Influences	
2.1.M	Identify ways family and friends help promote well-being.
Standard 3: Accessing Valid Information	
3.1.M	Identify trusted adults at home and at school who can help with mental and emotional health concerns.
Standard 4: Interpersonal Communication	
4.1.M	Show how to express personal needs and wants appropriately.
4.2.M	Cooperate and share with others.
Standard 5: Decision Making	
Skills for this content area are not identified until grade two.	
Standard 6: Goal Setting	
6.1.M	Make a plan to help family members at home.
Standard 7: Practicing Health-Enhancing Behaviors	
7.1.M	Express emotions appropriately.
7.2.M	Describe positive ways to show care, considerations, and concern for others.
Standard 8: Health Promotion	
8.1.M	Encourage others when they engage in safe and healthy behaviors.
Personal and Community Health	
Standard 1: Essential Concepts	
1.1.P	Identify effective dental and personal hygiene practices.
1.2.P	Describe sun-safety practices.
1.3.P	Define “germs.”
1.4.P	Explain why the transmission of germs may be harmful to health.
1.5.P	Identify practices that are good for the environment, such as turning off lights and water, recycling, and picking up trash.

Standard 2: Analyzing Influences	
Skills for this content area are not identified until grade one.	
Standard 3: Accessing Valid Information	
3.1.P	Identify health care workers who can help promote healthy practices.
Standard 4: Interpersonal Communication	
4.1.P	Demonstrate how to ask for assistance with a health-related problem.
Standard 5: Decision Making	
Skills for this content area are not identified until grade one.	
Standard 6: Goal Setting	
Skills for this content area are not identified until grade one.	
Standard 7: Practicing Health-Enhancing Behaviors	
7.1.P	Show effective dental and personal hygiene practices.
7.2.P	Demonstrate ways to prevent the transmission of germs (e.g., washing hands, using tissues).
Standard 8: Health Promotion	
Skills for this content area are not identified until grade one.	



Overview

Elementary physical education programs emphasize the importance of physical activity and personal fitness. Fitness is developed through the activities in the daily lessons, which emphasize physical activity, continuous movement, and challenges that involve overloading the major muscle groups. Students have opportunities to understand the fitness components, fitness assessment, and the need for a lifetime of physical activity. Participation in physical activity also can be an important venue for the social, psychological, and emotional development of children.

The elementary school physical education program emphasizes the development of fundamental locomotor, nonlocomotor, and manipulative skills. The movement framework, basic biomechanical and motor learning principles (see Appendixes C, D, and E in the *Physical Education Framework for California Public Schools* [California Department of Education 2009]), and fundamental game tactics are also part of the content for elementary school students.

The kindergarten physical education model content standards are organized by five overarching content standards. Under each of the overarching standards are grade-level standards that provide a vision for what students in kindergarten should know and be able to do. Together, the content standards represent the essential skills and knowledge that all students need to be physically active and enjoy a healthy lifestyle.

Kindergarten students are embarking on a journey of formal physical education and a lifetime of movement. The fundamental movement skills learned in kindergarten form the basis for all movement experiences and are used during a lifetime of physical activity. It is important for teachers to focus on what the students *can* do rather than what they cannot do. In this way, kindergarten teachers set the stage for a lifetime of joyful movement.

Kindergarten students are experiencing moderate but steady growth in height, weight, and muscular strength and endurance. Hand–eye coordination is showing steady improvement, but reaction time is still slow. These students enjoy moving to music, so rhythmic activity is an ideal lesson focus for practicing locomotor and nonlocomotor skills.

The fundamental movement skills learned in kindergarten form the basis for all movement experiences and are used during a lifetime of physical activity.

What Kindergarten Students Should Know

As they grow from infancy to school age, children develop mobility and the ability to manipulate objects. Walking and running, stooping and bending, reaching and climbing, and twisting and spinning are part of a repertoire of movement that most kindergarteners bring to the classroom. They have learned that moving is fun and often associate movement with play and games.

Some students enter kindergarten with rich experiences in movement and physical activities, but others have limited experiences because their communities do not provide safe places to play or opportunities to explore movement. Even students who have attended preschool, played and exercised with family members, or participated in sports at the recreational level may not have had opportunities to formally learn foundational skills and concepts of physical education.

What Students Learn in Kindergarten

In kindergarten, students begin to learn the proper technique for locomotor and nonlocomotor movements and how to manipulate (e.g., strike, toss, kick, bounce) objects, such as lightweight balls and beanbags. They learn the names of body parts and can describe locomotor and nonlocomotor skills. By the end of kindergarten, students can demonstrate the proper form for jumping, hopping, galloping, sliding, walking, running, leaping, and skipping. Throughout the kindergarten year, students practice nonlocomotor movements—including bending, stretching, swaying, and twisting—and learn stretching exercises. They also learn that muscles move bones; the heart is a muscle; and the lungs and the heart work together to send oxygen to the other muscles.

Overarching Standard 1: Students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities.

Kindergarten students move through space, including moving side-to-side, forward-and-back, and upward-and-down. They use a variety of pathways (e.g., curved, straight, zigzag) and move in relation to objects (e.g., over, under). Students practice locomotor movements (walking, running, hopping, skipping, jumping, leaping, galloping, and sliding). They also practice nonlocomotor movements, including bending, curling, stretching, swaying, swinging, turning, and twisting. Kindergarten students learn to manipulate (e.g., strike, toss, kick, bounce) a wide variety of objects, including lightweight balls, beanbags, and balloons.



Overarching Standard 2: Students demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities.

Standard 2 represents the cognitive knowledge that supports the skills learned in Standard 1. Kindergarten students begin to develop a movement vocabulary. Besides the names of the locomotor skills (e.g., hop, jump, slide), they learn the names of relationships (e.g., over, under, behind), space (e.g., general, personal, up, down), body parts (e.g., shoulder, neck, back), and balance (e.g., base of support). They are also beginning to describe the correct technique for fundamental manipulative skills.

Overarching Standard 3: Students assess and maintain a level of physical fitness to improve health and performance.

The kindergarten child's energy level and readiness to move contribute to a willingness to meet the goal of performing moderate to vigorous activities three to four days each week. Students' muscular strength and endurance are developed through activities performed on playground equipment, such as horizontal ladders, horizontal bars, and climbing apparatus. Kindergarten students learn appropriate stretching exercises for the shoulders, legs, arms, and back and the importance of slow, static movements to prevent injury.

Overarching Standard 4: Students demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance.

Similar to the relationship between Standards 1 and 2, Standard 4 provides the cognitive information to support the fitness activities experienced in Standard 3. Specifically, students learn the names for internal parts of the body (e.g., bones, organs), how muscles are used for climbing and moving bones, and that muscles must be stretched to be healthy. They also learn the heart is a muscle that works with the lungs to send oxygen to the other muscles throughout the body. Kindergarten students learn the role of nutrition (including the importance of water) in providing energy for physical activity.

Overarching Standard 5: Students demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity.

Kindergarten students enjoy moving, so they are willing participants in many physical activities. It is important, however, for the teacher to help students associate the positive feelings derived from movement with the physical activity experience so that movement becomes an enjoyable lifelong habit. Kindergarten students tend to be solo learners, so the teaching and practicing of sharing is necessary. This practice may include sharing the roles of leader and followers during locomotor practice.

Support for English Learners

The goal of physical education programs in California is to ensure universal access to high-quality curriculum and instruction so that every student can meet or exceed the state’s physical education model content standards. To reach that goal, teachers design instruction to meet the instructional needs of each student. Different instructional approaches may be needed for English learners to gain access to physical education content. Specially designed academic instruction in English (SDAIE), also known as sheltered instruction, provides students with a variety of interactive and multimodal means to obtain information. With sheltered instruction techniques, teachers modify the language demands of the lesson. Cooperative learning with high

Physical education instruction can also provide opportunities for students to develop their English language skills as vocabulary is developed through physical activity instruction (e.g., *over*, *under*, *walk around the cone*, *reach high*) . . .

levels of interaction may also be an effective strategy. (See the *Physical Education Framework for California Public Schools* [California Department of Education 2009], Chapter 7, “Universal Access,” for more information.)

Physical education instruction can also provide opportunities for students to develop their English-language skills as vocabulary (e.g., *over*, *under*, *walk around the cone*, *reach high*) is developed through physical activity instruction and demonstrations of locomotor movements that include labeling of the movement (e.g., the teacher says, “Skip to the line,” and the students demonstrate skipping). Letter recognition can be reinforced by using beanbags with letters printed on them and asking students to name the letter before tossing or catching the beanbag. The names of body parts (e.g., shoulder, neck, back) can be taught through their use in physical activities.

Support for Students with Special Needs

Successful participation in physical activities by students with special needs depends on the teacher's skill and training in providing instruction and support to all students. When systematically planned differentiation strategies are used, students with special needs can benefit from appropriately challenging curriculum and instruction. The strategies for differentiating instruction include pacing, complexity, depth, and novelty. Despite the modifications made, however, the focus is to always help students meet the physical education model content standards to the best of their ability.

In helping students achieve at their grade level, teachers use instructional resources aligned with the standards and provide additional learning and practice opportunities. Some students with 504 Plans or individualized education programs (IEPs) are eligible for special education services in physical education. A student's 504 Plan or IEP often includes suggestions for techniques to ensure that the student has full access to a program designed to provide him or her with appropriate learning opportunities and that uses instructional materials and strategies to best meet his or her needs. The 504 Plan or IEP also determines which services or combination of services best met the student's need. See the *Physical Education Framework for California Public Schools*, Chapter 7, "Universal Access," for more information. The framework is posted at <http://www.cde.ca.gov/ci/pe/cf/index.asp>.

The Standards

The following kindergarten physical education model content standards were adopted by the California State Board of Education on January 12, 2005.

Physical Education Model Content Standards Kindergarten	
STANDARD 1: Students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities.	
Movement Concepts	
1.1	Travel within a large group, without bumping into others or falling, while using locomotor skills.
1.2	Travel forward and sideways while changing direction quickly in response to a signal.
1.3	Demonstrate contrasts between slow and fast speeds while using locomotor skills.
1.4	Create shapes at high, medium, and low levels by using hands, arms, torso, feet, and legs in a variety of combinations.
Body Management	
1.5	Create shapes by using nonlocomotor movements.

1.6	Balance on one, two, three, four, and five body parts.
1.7	Balance while walking forward and sideways on a narrow, elevated surface.
1.8	Demonstrate the relationship of <i>under, over, behind, next to, through, right, left, up, down, forward, backward,</i> and <i>in front of</i> by using the body and an object.
Locomotor Movement	
1.9	Perform a continuous log roll.
1.10	Travel in straight, curved, and zigzag pathways.
1.11	Jump over a stationary rope several times in succession, using forward-and-back and side-to-side movement patterns.
Manipulative Skills	
1.12	Strike a stationary ball or balloon with the hands, arms, and feet.
1.13	Toss a ball to oneself, using the underhand throw pattern, and catch it before it bounces twice.
1.14	Kick a stationary object, using a simple kicking pattern.
1.15	Bounce a ball continuously, using two hands.
Rhythmic Skills	
1.16	Perform locomotor and nonlocomotor movements to a steady beat.
1.17	Clap in time to a simple, rhythmic beat.
STANDARD 2: Students demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities.	
Movement Concepts	
2.1	Explain the difference between under and over, behind and in front of, next to and through, up and down, forward and backward, and sideways.
2.2	Identify and independently use personal space, general space, and boundaries and discuss why they are important.
Body Management	
2.3	Identify and describe parts of the body: the head, shoulders, neck, back, chest, waist, hips, arms, elbows, wrists, hands, fingers, legs, knees, ankles, feet, and toes.
2.4	Explain base of support.

Locomotor Movement	
2.5	Identify the locomotor skills of walk, jog, run, hop, jump, slide, and gallop.
Manipulative Skills	
2.6	Explain the role of the eyes when striking objects with the hands, arms, and feet.
2.7	Identify the point of contact for kicking a ball in a straight line.
2.8	Describe the position of the fingers in the follow-through phase of bouncing a ball continuously.
STANDARD 3: Students assess and maintain a level of physical fitness to improve health and performance.	
Fitness Concepts	
3.1	Participate in physical activities that are enjoyable and challenging.
Aerobic Capacity	
3.2	Participate three to four days each week in moderate to vigorous physical activities that increase breathing and heart rate.
Muscular Strength/Endurance	
3.3	Hang from overhead bars for increasing periods of time.
3.4	Climb a ladder, jungle gym, or apparatus.
Flexibility	
3.5	Stretch shoulders, legs, arms, and back without bouncing.
Body Composition	
3.6	Sustain continuous movement for increasing periods of time while participating in moderate to vigorous physical activity.
Assessment	
3.7	Identify indicators of increased capacity to participate in vigorous physical activity.
STANDARD 4: Students demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance.	
Fitness Concepts	
4.1	Identify physical activities that are enjoyable and challenging.
4.2	Describe the role of water as an essential nutrient for the body.

4.3	Explain that nutritious food provides energy for physical activity.
Aerobic Capacity	
4.4	Identify the location of the heart and explain that it is a muscle.
4.5	Explain that physical activity increases the heart rate.
4.6	Identify the location of the lungs and explain the role of the lungs in the collection of oxygen.
Muscular Strength/Endurance	
4.7	Explain that strong muscles help the body to climb, hang, push, and pull.
4.8	Describe the role of muscles in moving the bones.
Flexibility	
4.9	Identify the body part involved when stretching.
Body Composition	
4.10	Explain that the body is composed of bones, organs, fat, and other tissues.
STANDARD 5: Students demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity.	
Self-Responsibility	
5.1	Identify the feelings that result from participation in physical activity.
5.2	Participate willingly in physical activities.
Social Interaction	
5.3	Demonstrate the characteristics of sharing in a physical activity.
5.4	Describe how positive social interaction can make physical activity with others more fun.
Group Dynamics	
5.5	Participate as a leader and a follower during physical activities.



Overview

To succeed in the twenty-first century, today’s students need to develop linguistic and cultural literacy, including academic knowledge and proficiency in English and in world languages and cultures. California schools teach a wide variety of languages spoken throughout the world, as well as American Sign Language (ASL). Because every language is a “foreign” language to those who do not know it, the term used in this document and in the standards is “world” languages.

Students no longer simply learn about languages and cultures; rather, they are provided with opportunities to learn languages and cultures through participation in communicative interactions that prepare them for real-world language use and global citizenship. Language learning needs to be a lifelong endeavor.

Students no longer simply learn about languages and cultures; rather they are provided with opportunities to learn languages and cultures . . .

What Kindergarten Students Should Know

Although world language instruction is not a required subject for the elementary grades, instruction in world languages is encouraged to begin as early as possible. Some kindergarten students may have participated in language instruction prior to kindergarten, but most will have had no formal instruction in another language. However, because of the diversity of students in California, most classrooms will include students who bring a rich variety of languages and cultures with them. Students may have learned a heritage language in their homes, be recent immigrants, or have acquired the ability to understand and/or produce one or more languages through contact in their communities or abroad.

What Students Learn in Kindergarten

The variety of languages and cultures in California classrooms provides opportunities to learn about and celebrate the contributions of many people to the local community and reinforce lessons from kindergarten-level history–social science.

California schools offer a variety of language programs, some beginning in elementary school, continuing in middle school, and most typically in comprehensive high school. Elementary programs in language instruction include the following types:

- Immersion—a program in which at least 50 percent of the core curriculum instruction is in the target language.
- Foreign Language in the Elementary School (FLES)—a program that provides instruction for a minimum of 70 minutes a week. The goal is to develop proficiency in language and culture.

- Foreign Language Experience (FLEX)—a program that exposes students to the study of a language or languages and cultures to motivate them to pursue further study of a language.

These programs differ substantially in the number of hours allocated for instruction. All programs need to be age-appropriate in order to address students’ cognitive, emotional, and social needs. Programs for heritage and native speakers may include immersion, specialized courses designed to meet learner needs, and accommodations for these learners within the world language classroom.

Organization of the Standards



The world language content standards, adopted by the State Board of Education in 2009, represent a strong consensus that the study of world languages and cultures is part of the core curriculum. The standards present the knowledge, skills, and abilities that all learners should acquire in the California public school system.

Because of the considerable number of languages spoken in California schools, the world language content standards were developed to accommodate all languages and the various stages a learner goes through to become proficient. Therefore, the standards are not language-specific. In addition, because of the various levels of student proficiency and the variety of California’s language programs, the world language content standards are not designated for specific grade levels but rather describe levels of linguistic and cultural acquisition. The standards provide an organizing principle to ensure the continuous development of student proficiency regardless of the multiple points of entry and exit from California’s language programs. For these reasons, this section is also general and not specific to kindergarten, focusing on the organization of the world language content standards and the beginning level of language proficiency.

The standards are separated into five categories and four stages, or levels, of proficiency. The five categories are taught together and in practice merge into seamless instruction within the various stages. The categories are Content, Communication, Cultures, Structures, and Settings.

Content

The content of the language course includes vocabulary from a wide variety of topics that are age- and stage-appropriate. This content enables students to make connections and reinforce knowledge from other areas of the curriculum and to participate in everyday social interactions in the target language. As students develop their ability to communicate in the target language and culture, they address topics that increase in complexity.

Communication

Real-world communication occurs in a variety of ways. It may be interpersonal, in which listening, reading, viewing, speaking, signing, and writing occur as a shared activity among language users. It may be interpretive, in which language users listen, view, and read using knowledge of cultural products, practices, and perspectives. Or it may be presentational, in which speaking, signing, and writing occur. Students actively use language to transmit meaning while responding to real situations.

Cultures

To understand the connection between language and culture, students learn how a culture views the world.

To understand the connection between language and culture, students learn how a culture views the world. Students understand the ideas, attitudes, and values that shape that culture. These shared, common perspectives, practices, and products incorporate not only formal aspects of a culture—such as contributions of literature, the arts, and science—but also the daily living practices, shared traditions, and common patterns of behavior acceptable to a society. Students acquire the ability to interact appropriately with individuals in the target culture, to communicate successfully, and to make connections and comparisons between languages and cultures.

Structures

Languages vary considerably in the structures that learners use to convey meaning; therefore, the curriculum will feature language-specific structures essential to accurate communication. As they acquire vocabulary in the target language, students grasp the associated concepts and understand the structures of the language to convey meaning. Students learn patterns in the language system, which consists of grammar rules and vocabulary and elements such as gestures and other forms of nonverbal communication. A language system also includes discourse, whereby speakers learn what to say to whom and when. As they progress in proficiency with language, students use linguistically and grammatically appropriate structures to comprehend and produce messages. Students identify similarities and differences among the languages they know.

Settings

For students to communicate effectively, they use elements of language appropriate for a given situation. Language conveys meaning best when the setting, or context, in which it is used is known. This knowledge of context assists students not only in comprehending meaning but also in using language that is culturally appropriate. Context also helps define and clarify the meaning of language that is new to the learner. Understanding social linguistic norms will assist learners in communicating effectively in real-world encounters.

Stages of Proficiency

The world language content standards describe four levels of proficiency for each of the five categories. These levels of proficiency are based on the stages of the Language Learning Continuum, a framework developed by the College Board to indicate growth in linguistic and cultural proficiency. The stages provide benchmarks of progress:

- Stage I (Formulaic): Learners understand and produce signs, words, and phrases. (*Note:* It is common in the elementary school context for nonheritage learners to remain in Stage I for an extended period of time.)

- Stage II (Created): Learners understand and produce sentences and strings of sentences.
- Stage III (Planned): Learners understand and produce paragraphs and strings of paragraphs.
- Stage IV (Extended): Learners understand and produce cohesive texts composed of multiple paragraphs.

The Language Learning Continuum also includes Stage V (Tailored) proficiency, which represents performance typically achieved through university-level study. Stage V is not included in the standards.

The Standards

The world language content standards, adopted by the California State Board of Education on January 7, 2009, are organized by stage, not by grade level. Most kindergarten students would be at Stage I, so only those standards are listed below. For a complete list of the standards for all four stages, view the world language content standards posted on the CDE Content Standards Web page (<http://www.cde.ca.gov/be/st/ss/>).

World Language Content Standards Stage I	
Content	
1.0	Students acquire information, recognize distinctive viewpoints, and further their knowledge of other disciplines.
1.1	Students address discrete elements of daily life, including: <ul style="list-style-type: none"> a. Greetings and introductions b. Family and friends c. Pets d. Home and neighborhood e. Celebrations, holidays, and rites of passage f. Calendar, seasons, and weather g. Leisure, hobbies and activities, songs, toys and games, sports h. Vacations and travel, maps, destinations, and geography i. School, classroom, schedules, subjects, numbers, time, directions j. Important dates in the target culture k. Jobs l. Food, meals, restaurants m. Shopping, clothes, colors, and sizes n. Parts of the body, illness o. Technology
Communication	
1.0	Students use formulaic language (learned words, signs [ASL], and phrases).

1.1	Engage in oral, written, or signed (ASL) conversations.
1.2	Interpret written, spoken, or signed (ASL) language.
1.3	Present to an audience of listeners, readers, or ASL viewers.
Functions	
1.4	List, name, identify, enumerate.
1.5	Identify learned words, signs (ASL), and phrases in authentic texts.
1.6	Reproduce and present a written, oral, or signed (ASL) product in a culturally authentic way.
Cultures	
1.0	Students use appropriate responses to rehearsed cultural situations.
1.1	Associate products, practices, and perspectives with the target culture.
1.2	Recognize similarities and differences within the target cultures and among students' own cultures.
1.3	Identify cultural borrowings.
Structures	
1.0	Students use orthography, phonology, or ASL parameters to understand words, signs (ASL), and phrases in context.
1.1	Use orthography, phonology, or ASL parameters to produce words or signs (ASL) and phrases in context.
1.2	Identify similarities and differences in the orthography, phonology, or ASL parameters of the languages the students know.
Settings	
1.0	Students use language in highly predictable common daily settings
1.1	Recognize age-appropriate cultural or language-use opportunities outside the classroom.



Overview



School libraries have evolved from having a focus on print materials to providing a rich selection of resources, both print and digital; from students learning how to search a card catalog to learning strategies for searching a variety of digital resources and using Web browsers; from basic literacy to information literacy (the ability to access, evaluate, and use information effectively). However, the skills learned from print transcend their use in books alone. “Students who understand systems of text organization are better equipped to use the Internet as it is today. Most notably, they expect worthy resources to have order. This may drive them to probe complex web sites, which, for all their bells and whistles, are fundamentally arranged like reference books, with A-Z lists and topical divisions” (Preston 2009, 80).

California *Education Code* Section 18100 reinforces the essential role of school libraries:

The governing board of each school district shall provide school library services for the pupils and teachers of the district by establishing and maintaining school libraries or by contractual arrangements with another public agency.

The following describes what students should know and be able to do in kindergarten as a result of having an effective school library program at their school.

What Kindergarten Students Should Know

Children come to kindergarten with a wide range of prior experiences and background knowledge. Children who had experiences with books by being read to at home or who visited public libraries with their families to listen to stories or to check out materials will be more familiar with books and libraries when they begin kindergarten. Children who have had the benefit of attending high-quality preschools will be more comfortable in school and will have been exposed to reading, books, and other activities. Many homes and preschools have computers that young children use to play games or watch movies, allowing them to learn how to operate a computer, a mouse, and other electronic equipment.

However, a number of children may begin kindergarten with very little experience with books or computers. They may have had few, if any, books at home; may not have been read to; or may not have attended preschool.

What Students Learn in Kindergarten

In kindergarten, students begin to learn the basics of information literacy by asking and answering questions about text. They identify a personal interest and possible information sources to learn more about it. Kindergarten students identify types of everyday print and digital materials such as storybooks, poems, newspapers, and signs. They begin to distinguish fact from fiction.

Kindergarten students learn that printed and digital materials provide information by identifying meaning from simple symbols and pictures. They connect information and events in text to their own life experiences and identify basic facts and ideas in what was read or heard.

In kindergarten, students learn where the library is located, how it is organized, and whom they can ask for help in the library. They learn the process for checking out materials and are able to borrow materials from the school library.

Kindergarten students listen and respond to stories based on well-known characters, themes, plots, and settings, retelling the central ideas of simple passages. They share information with others, speaking in complete, coherent sentences.

Students understand the need to follow privacy and safety guidelines and ask a trusted adult for permission before providing information in person, on a form, or online.

An added benefit for students is when the classroom teacher and school librarian collaborate to plan and implement a lesson that addresses different content areas. An example of a possible student lesson that includes the science, English language arts, and school library standards is provided below.

In kindergarten, students learn where the library is located, how it is organized, and whom they can ask for help in the library.

Sample Collaborative Lesson

Standards:

- | | |
|-----------|--|
| SCI 2.b | Students know that stories sometimes give plants and animals attributes they do not really have. |
| ELA RL.5 | Recognize common types of texts (e.g., storybooks, poems, fantasy, realistic text). |
| SLS 1.3.b | Distinguish fact from fiction (e.g., “Does this happen in real life?”) |

Students visit the library, where the school librarian reads several short stories about animals, some of them factual and some in which animals have human characteristics. The school librarian may also show photos or Web sites with illustrations of animals and ask if they are realistic or not. After each example, the students are asked if the depiction of the animals is true or not and the librarian leads a discussion about why it is or is not true. Students learn that a fact is a true statement and fiction is something that is not true but is made up or imaginative.

The Standards

The model school library standards for students incorporate information literacy (the ability to access, evaluate, and use information effectively) and digital literacy (the ability to use digital technology, communications tools, or networks to access, manage, integrate, evaluate, create, and communicate) to enable students to function in a knowledge-based economy and society. They describe what students should know and be able to do by the end of kindergarten.

The standards are organized around four overarching concepts with detailed standards that each student is expected to have successfully achieved by the end of a grade level (or school year). In addition, students are expected to have mastered the standards for previous grades and continue to use those skills and knowledge as they advance in school.

School library standards align with many of the academic content standards and are best learned through the content taught collaboratively between the school librarian and the classroom teacher. The following

kindergarten model school library content standards were adopted by the California State Board of Education on September 16, 2010.

Model School Library Content Standards Kindergarten

1. Students access information.

The student will access information by applying knowledge of the organization of libraries, print materials, digital media, and other sources.

1.1 Recognize the need for information:

1.1.a	Understand the concept that printed and digital materials provide information by identifying meaning from simple symbols and pictures.
-------	--

1.2 Formulate appropriate questions:

1.2.a	Ask questions that can be answered by available resources.
-------	--

1.3 Identify and locate a variety of resources online and in other formats by using effective search strategies:

1.3.a	Locate the school library and the library resources.
-------	--

1.3.b	Know how, and be able, to check out resources from the school library responsibly.
-------	--

1.3.c	Identify, with guidance, two sources of information that may provide an answer to an identified question.
-------	---

1.3.d	Distinguish fact from fiction (e.g., “Does this happen in real life?”).
-------	---

1.3.e	Identify whom to ask for help in the school library.
-------	--

1.3.f	Describe the general organization of the library.
-------	---

1.3.g	Identify types of everyday print, media, and digital materials (such as storybooks, poems, newspapers, periodicals), signs, and labels.
-------	---

1.4 Retrieve information in a timely, safe, and responsible manner:

1.4.a	Practice responsible use and care of all learning resources.
-------	--

2. Students evaluate information.

The student will evaluate and analyze information to determine what is appropriate to address the scope of inquiry.

2.1 Determine the relevance of the information:

2.1.a	Connect the information and events in print, media, and digital resources to life experiences.
-------	--

2.2 Assess the comprehensiveness, currency, credibility, authority, and accuracy of resources:	
2.2.a	Identify basic facts and ideas in what was read, heard, seen, or voiced.
2.3 Consider the need for additional information:	
2.3.a	Recognize that a trusted adult is a resource for information.
3. Students use information. The student will organize, synthesize, create, and communicate information.	
3.1 Demonstrate ethical, legal, and safe use of information in print, media, and online resources:	
3.1.a	Understand the need to adhere to privacy and safety guidelines.
3.1.b	Understand the need to ask a trusted adult for permission when asked to provide personal information in person, on a form, or online.
3.2 Draw conclusions and make informed decisions:	
3.2.a	Participate in completion of a graphic organizer showing aspects of a topic.
3.3 Use information and technology creatively to answer a question, solve a problem, or enrich understanding:	
3.3.a	Use a picture or other visual aid when telling a story.
4. Students integrate information literacy skills into all areas of learning. The student will independently pursue information to become a lifelong learner.	
4.1 Read widely and use various media for information, personal interest, and lifelong learning:	
4.1.a	Read or be read to from a variety of sources.
4.1.b	Identify a personal interest and possible information resources to learn more about it.
4.2 Seek, produce, and share information:	
4.2.a	Share information and ideas in a clear and concise manner.
4.3 Appreciate and respond to creative expressions of information:	
4.3.a	Understand and respond to stories based on well-known characters, themes, plots, and settings.
4.3.b	Understand and respond to nonfiction.