

Grade Two Content Standards

Access Visual & Performing Arts Standards and English-Language Development Standards at www.cde.ca.gov/be/st/ss

Mathematics

By the end of grade two, students understand place value and number relationships in addition and subtraction, and they use simple concepts of multiplication. They measure quantities with appropriate units. They classify shapes and see relationships among them by paying attention to their geometric attributes. They collect and analyze data and verify the answers.

Number Sense (STAR – 58%)

1.0 Students understand the relationship between numbers, quantities, and place value in whole numbers up to 1,000:

- 1.1* Count, read, and write whole numbers to 1,000 and identify the place value for each digit.
- 1.2 Use words, models, and expanded forms (e.g., $45 = 4 \text{ tens} + 5$) to represent numbers (to 1,000).
- 1.3* Order and compare whole numbers to 1,000 by using the symbols $<$, $=$, $>$.

2.0 Students estimate, calculate, and solve problems involving addition and subtraction of two- and three-digit numbers:

- 2.1* Understand and use the inverse relationship between addition and subtraction (e.g., an opposite number sentence for $8 + 6 = 14$ is $14 - 6 = 8$) to solve problems and check solutions.
- 2.2* Find the sum or difference of two whole numbers up to three digits long.
- 2.3 Use mental arithmetic to find the sum or difference of two two-digit numbers.

3.0* Students model and solve simple problems involving multiplication and division:

- 3.1* Use repeated addition, arrays, and counting by multiples to do multiplication.
- 3.2* Use repeated subtraction, equal sharing, and forming equal groups with remainders to do division.
- 3.3* Know the multiplication tables of 2s, 5s, and 10s (to "times 10") and commit them to memory.

4.0 Students understand that fractions and decimals may refer to parts of a set and parts of a whole:

- 4.1* Recognize, name, and compare unit fractions from $\frac{1}{12}$ to $\frac{1}{2}$.
- 4.2* Recognize fractions of a whole and parts of a group (e.g., one-fourth of a pie, two-thirds of 15 balls).
- 4.3* Know that when all fractional parts are included, such as four-fourths, the result is equal to the whole and to one.

5.0 Students model and solve problems by representing, adding, and subtracting amounts of money:

- 5.1* Solve problems using combinations of coins and bills.
- 5.2* Know and use the decimal notation and the dollar and cent symbols for money.

6.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, hundreds, and thousands places:

- 6.1 Recognize when an estimate is reasonable in measurements (e.g., closest in)

*CA Key standards comprise at least 70% of STAR Test

Algebra and Functions (STAR – 9%)

1.0 Students model, represent, and interpret number relationships to create and solve problems involving addition and subtraction:

- 1.1* Use the commutative and associative rules to simplify mental calculations and to check results.
- 1.2 Relate problem situations to number sentences involving addition and subtraction.
- 1.3 Solve addition and subtraction problems by using data from simple charts, picture graphs, and number sentences.

Measurement and Geometry (STAR – 22%)

1.0 Students understand that measurement is accomplished by identifying a unit of measure, iterating (repeating) that unit, and comparing it to the item to be measured:

- 1.1 Measure the length of objects by iterating (repeating) a nonstandard or standard unit.
- 1.2 Use different units to measure the same object and predict whether the measure will be greater or smaller when a different unit is used.
- 1.3* Measure the length of an object to the nearest inch and/or centimeter.
- 1.4 Tell time to the nearest quarter hour and know relationships of time (e.g., minutes in an hour, days in a month, weeks in a year).
- 1.5 Determine the duration of intervals of time in hours (e.g., 11:00am to 4:00pm).

2.0 *Students identify and describe the attributes of common figures in the plane and of common objects in space:

- 2.1* Describe and classify plane and solid geometric shapes (e.g., circle, triangle, square, rectangle, sphere, pyramid, cube, rectangular prism) according to the number and shape of faces, edges, and vertices.
- 2.2* Put shapes together and take them apart to form other shapes (e.g., two congruent right triangles can be arranged to form a rectangle).

Statistics, Data Analysis, and Probability (STAR – 11%)

1.0* Students collect numerical data and record, organize, display, and interpret the data on bar graphs and other representations:

- 1.1 Record numerical data in systematic ways, keeping track of what has been counted.
- 1.2 Represent the same data set in more than one way (e.g., bar graphs and charts with tallies).
- 1.3 Identify features of data sets (range and mode).
- 1.4 Ask and answer simple questions related to data representations.

2.0* Students demonstrate an understanding of patterns and how patterns grow and describe them in general ways:

- 2.1 Recognize, describe, and extend patterns and determine a next term in linear patterns (e.g., 4, 8, 12 ...; the number of ears on one horse, two horses, three horses, four horses).
- 2.2 Solve problems involving simple number patterns.

Mathematical Reasoning (STAR – Questions embedded in other strands)

1.0 Students make decisions about how to set up a problem:

- 1.1 Determine the approach, materials, and strategies to be used.
- 1.2 Use tools, such as manipulatives or sketches, to model problems.

2.0 Students solve problems and justify their reasoning:

- 2.1 Defend the reasoning used and justify the procedures selected.
- 2.2 Make precise calculations and check the validity of the results in the context of the problem.

3.0 Students note connections between one problem and another.

English-Language Arts

All ABC students in 2nd Grade will study:

A Picture Book of Martin Luther King, Jr. by David Adler
Amazing Grace by Mary Hoffman
Butterfly House by Eve Bunting
My Great Aunt Arizona by Gloria Houston
Our Home is the Sea by Riki Levinson
Strega Nona by Tomie de Paola

Reading

1.0 Word Analysis, Fluency, and Systematic Vocabulary Development (STAR – 34%)

Students understand the basic features of reading. They select letter patterns and know how to translate them into spoken language by using phonics, syllabication, and word parts. They apply this knowledge to achieve fluent oral and silent reading.

Decoding and Word Recognition

- 1.1 Recognize and use knowledge of spelling patterns (e.g., diphthongs, special vowel spellings) when reading.
- 1.2 Apply knowledge of basic syllabication rules when reading (e.g., vowel-consonant-vowel = su/ per; vowel-consonant/consonant-vowel = sup/ per).
- 1.3 Decode two-syllable nonsense words and regular multisyllable words.
- 1.4 Recognize common abbreviations (e.g., Jan., Sun., Mr., St.).
- 1.5 Identify and correctly use regular plurals (e.g., -s, -es, -ies) and irregular plurals (e.g., fly/ flies, wife/ wives).
- 1.6 Read aloud fluently and accurately and with appropriate intonation and expression.

Vocabulary and Concept Development

- 1.7 Understand and explain common antonyms and synonyms.
- 1.8 Use knowledge of individual words in unknown compound words to predict their meaning.
- 1.9 Know the meaning of simple prefixes and suffixes (e.g., over-, un-, -ing, -ly).
- 1.10 Identify simple multiple-meaning words

2.0 Reading Comprehension (STAR – 23%)

Students read and understand grade-level-appropriate material. They draw upon a variety of comprehension strategies as needed (e.g., generating and responding to essential questions, making predictions, comparing information from several sources). The selections in *Recommended Readings in Literature, Kindergarten Through Grade Eight* illustrate the quality and complexity of the materials to be read by students. In addition to their regular school reading, by grade four, students read one-half million words annually, including a good representation of grade-level-appropriate narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information). In grade two, students continue to make progress toward this goal.

Structural Features of Informational Materials

2.1 Use titles, tables of contents, and chapter headings to locate information in expository text.

Comprehension and Analysis of Grade-Level-Appropriate Text

- 2.2 State the purpose in reading (i. e., tell what information is sought).
- 2.3 Use knowledge of the author's purpose(s) to comprehend informational text.
- 2.4 Ask clarifying questions about essential textual elements of exposition (e.g., why, what if, how).
- 2.5 Restate facts and details in the text to clarify and organize ideas.
- 2.6 Recognize cause-and-effect relationships in a text.
- 2.7 Interpret information from diagrams, charts, and graphs.
- 2.8 Follow two-step written instructions.

3.0. Literary Response and Analysis (STAR – 9%)

Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and the literary terms or elements (e.g., theme, plot, setting, characters). The selections in *Recommended Readings in Literature, Kindergarten Through Grade Eight* illustrate the quality and complexity of the materials to be read by students.

Narrative Analysis of Grade-Level-Appropriate Text

- 3.1 Compare and contrast plots, settings, and characters presented by different authors.
- 3.2 Generate alternative endings to plots and identify the reason or reasons for, and the impact of, the alternatives.
- 3.3 Compare and contrast different versions of the same stories that reflect different cultures.
- 3.4 Identify the use of rhythm, rhyme, and alliteration in poetry.

Writing

1.0 Writing Strategies (STAR – 12%)

Students write clear and coherent sentences and paragraphs that develop a central idea. Their writing shows they consider the audience and purpose. Students progress through the stages of the writing process (e.g., prewriting, drafting, revising, editing successive versions).

Organization and Focus

- 1.1 Group related ideas and maintain a consistent focus.
- Penmanship*
 - 1.2 Create readable documents with legible handwriting.

Research

- 1.3 Understand the purposes of various reference materials (e.g., dictionary, thesaurus, atlas).

Evaluation and Revision

- 1.4 Revise original drafts to improve sequence and provide more descriptive detail.

2.0 Writing Applications (Genres and Their Characteristics)

Students write compositions that describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of standard American English and the drafting, research, and organizational strategies outlined in Writing Standard 1.0. Using the writing strategies of grade two outlined in Writing Standard 1.0, students:

- 2.1 Write brief **narratives** based on their experiences:
 - a. Move through a logical sequence of events.
 - b. Describe the setting, characters, objects, and events in detail.
- 2.2 Write a **friendly letter** complete with the date, salutation, body, closing, and signature.

Written and Oral English Language Conventions

The standards for written and oral English language conventions have been placed between those for writing and for listening and speaking because these conventions are essential to both sets of skills.

1.0 Written and Oral English Language Conventions (STAR – 22%)

Students write and speak with a command of standard English conventions appropriate to this grade level.

Sentence Structure

- 1.1 Distinguish between complete and incomplete sentences.
- 1.2 Recognize and use the correct word order in written sentences.

Grammar

- 1.3 Identify and correctly use various parts of speech, including nouns and verbs, in writing and speaking.

Punctuation

- 1.4 Use commas in the greeting and closure of a letter and with dates and items in a series.
- 1.5 Use quotation marks correctly.

Capitalization

- 1.6 Capitalize all proper nouns, words at the beginning of sentences and greetings, months and days of the week, and titles and initials of people.

Spelling

- 1.7 Spell frequently used, irregular words correctly (e.g., *was, were, says, said, who, what, why*).
- 1.8 Spell basic short-vowel, long-vowel, *r*-controlled, and consonant-blend patterns correctly.

Listening and Speaking

1.0 Listening and Speaking Strategies

Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.

Comprehension

- 1.1 Determine the purpose or purposes of listening (e.g., to obtain information, to solve problems, for enjoyment).
- 1.2 Ask for clarification and explanation of stories and ideas.
- 1.3 Paraphrase information that has been shared orally by others.
- 1.4 Give and follow three- and four-step oral directions.

Organization and Delivery of Oral Communication

- 1.5 Organize presentations to maintain a clear focus.
- 1.6 Speak clearly and at an appropriate pace for the type of communication (e.g., informal discussion, report to class).
- 1.7 Recount experiences in a logical sequence.
- 1.8 Retell stories, including characters, setting, and plot.
- 1.9 Report on a topic with supportive facts and details.

2.0 Speaking Applications (Genres and Their Characteristics)

Students deliver brief recitations and oral presentations about familiar experiences or interests that are organized around a coherent thesis statement. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.

Using the speaking strategies of grade two outlined in Listening and Speaking Standard 1.0, students:

- 2.1 Recount experiences or present stories:
 - a. Move through a logical sequence of events.
 - b. Describe story elements (e.g., characters, plot, setting).
- 2.2 Report on a topic with facts and details, drawing from several sources of information.

Physical Education

200 minutes of PE instruction each ten school days

History-Social Science

People Who Make a Difference

Students in grade two explore the lives of actual people who make a difference in their everyday lives and learn the stories of extraordinary people from history whose achievements have touched them, directly or indirectly. The study of contemporary people who supply goods and services aids in understanding the complex interdependence in our free-market system.

2.1 Students differentiate between things that happened long ago and things that happened yesterday.

1. Trace the history of a family through the use of primary and secondary sources, including artifacts, photographs, interviews, and documents.
2. Compare and contrast their daily lives with those of their parents, grandparents, and/ or guardians.
3. Place important events in their lives in the order in which they occurred (e.g., on a time line or storyboard).

2.2 Students demonstrate map skills by describing the absolute and relative locations of people, places, and environments.

1. Locate on a simple letter-number grid system the specific locations and geographic features in their neighborhood or community (e.g., map of the classroom, the school).
2. Label from memory a simple map of the North American continent, including the countries, oceans, Great Lakes, major rivers, and mountain ranges. Identify the essential map elements: title, legend, directional indicator, scale, and date.
3. Locate on a map where their ancestors live(d), telling when the family moved to the local community and how and why they made the trip.
4. Compare and contrast basic land use in urban, suburban, and rural environments in California.

2.3 Students explain governmental institutions and practices in the United States and other countries.

1. Explain how the United States and other countries make laws, carry out laws, determine whether laws have been violated, and punish wrongdoers.
2. Describe the ways in which groups and nations interact with one another to try to resolve problems in such areas as trade, cultural contacts, treaties, diplomacy, and military force.

2.4 Students understand basic economic concepts and their individual roles in the economy and demonstrate basic economic reasoning skills.

1. Describe food production and consumption long ago and today, including the roles of farmers, processors, distributors, weather, and land and water resources.
2. Understand the role and interdependence of buyers (consumers) and sellers (producers) of goods and services.
3. Understand how limits on resources affect production and consumption (what to produce and what to consume).

2.5 Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives (e.g., from biographies of Abraham Lincoln, Louis Pasteur, Sitting Bull, George Washington Carver, Marie Curie, Albert Einstein, Golda Meir, Jackie Robinson, Sally Ride).

Science Physical Sciences

The following 2a-d standards are part of the 3rd Grade standards. ABC students will study these standards in 2nd Grade to better align with the instructional materials. The 2nd grade 1a-g(motion) standards are not listed here and will be studied in 3rd Grade.

2. Light has a source and travels in a direction.

- a. Students know sunlight can be blocked to create shadows.
- b. Students know light is reflected from mirrors and other surfaces.
- c. Students know the color of light striking an object affects the way the object is seen.
- d. Students know an object is seen when light traveling from the object enters the eye.

Life Sciences

2. Plants and animals have predictable life cycles.

- a. Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.
- b. Students know the sequential stages of life cycles are different for different animals, such as butterflies, frogs, and mice.
- c. Students know many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.
- d. Students know there is variation among individuals of one kind within a population.
- e. Students know light, gravity, touch, or environmental stress can affect the germination, growth, and development of plants.
- f. Students know flowers and fruits are associated with reproduction in plants.

Earth Sciences

3. Earth is made of materials that have distinct properties and provide resources for human activities

- a. Students know how to compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals.
- b. Students know smaller rocks come from the breakage and weathering of larger rocks.
- c. Students know that soil is made partly from weathered rock and partly from organic materials and that soils differ in their color, texture, capacity to retain water, and ability to support the growth of many kinds of plants.
- d. Students know that fossils provide evidence about the plants and animals that lived long ago and that scientists learn about the past history of Earth by studying fossils.
- e. Students know rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.

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:

- a. Make predictions based on observed patterns and not random guessing.
- b. Measure length, weight, temperature, and liquid volume with appropriate tools and express those measurements in standard metric system units.
- c. Compare and sort common objects according to two or more physical attributes (e. g., color, shape, texture, size, weight).
- d. Write or draw descriptions of a sequence of steps, events, and observations.
- e. Construct bar graphs to record data, using appropriately labeled axes.
- f. Use magnifiers or microscopes to observe and draw descriptions of small objects or small features of objects.
- g. Follow oral instructions for a scientific investigation.