

**California's
Common Core Standards
Kindergarten
Parent Handbook**



Introduction

This handbook gives parents an introduction to California's Common Core Standards and a summary of what students are expected to learn as they advance from kindergarten through grade 8. The standards are designed to reflect the knowledge and skills that our young people need for success in college and careers. A common set of learning goals helps teachers and parents ensure students are challenged and making appropriate progress.

Why Common Core Standards?

California educators have joined a national movement to adopt common standards and assessments for English language arts and mathematics. Currently, standards for what students should know and be able to do vary among states, as does the difficulty of the assessments used to determine whether students are meeting those standards. Common standards allow for collaboration among states on best practices and professional development.

Common learning goals provide a clear vision of what educators and parents in all states should aim for. These learning goals help ensure that students meet college and work expectations, are prepared to succeed in a global economy and society, and are provided with rigorous content and application of higher knowledge thinking. Benchmarked against international standards, the Common Core Standards assist students in their preparation to complete the requirements for enrollment at a California public university.

California's Adoption of Common Core Standards

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The Common Core also added strength to the existing California standards by including additional standards for vocabulary and new standards for collaborative discussions. Literacy standards that focus on reading and writing instruction during history/social studies, science, and technology also were included. In mathematics, standards were added to demonstrate a stronger emphasis on number sense and algebraic thinking. Implementation of the Common Core in California's schools will occur in stages over the next few years.

Mathematics | Standards for Mathematical Practice

The Standards for Mathematical Practice describe behaviors that all students will develop in the Common Core Standards. These practices rest on important “processes and proficiencies” including problem solving, reasoning and proof, communication, representation, and making connections. These practices will allow students to understand and apply mathematics with confidence.

- Make sense of problems and persevere in solving them.
 - Find meaning in problems
 - Analyze, predict and plan solution pathways
 - Verify answers
 - Ask themselves the question: “Does this make sense?”
- Reason abstractly and quantitatively.
 - Make sense of quantities and their relationships in problems
 - Create coherent representations of problems
- Construct viable arguments and critique the reasoning of others.
 - Understand and use information to construct arguments
 - Make and explore the truth of conjectures
 - Justify conclusions and respond to arguments of others
- Model with mathematics.
 - Apply mathematics to problems in everyday life
 - Identify quantities in a practical situation
 - Interpret results in the context of the situation and reflect on whether the results make sense
- Use appropriate tools strategically.
 - Consider the available tools when solving problems

- Are familiar with tools appropriate for their grade or course (pencil and paper, concrete models, ruler, protractor, calculator, spreadsheet, computer programs, digital content located on a website, and other technological tools)
- Be precise.
 - Communicate precisely to others
 - Use clear definitions, state the meaning of symbols and are careful about specifying units of measure and labeling axes
 - Calculate accurately and efficiently
- Look for and make use of structure.
 - Discern patterns and structures
 - Can step back for an overview and shift perspective
 - See complicated things as single objects or as being composed of several objects
- Look for and identify ways to create shortcuts when doing problems.
 - When calculations are repeated, look for general methods, patterns and shortcuts
 - Be able to evaluate whether an answer makes sense

Grade K Overview | Mathematics

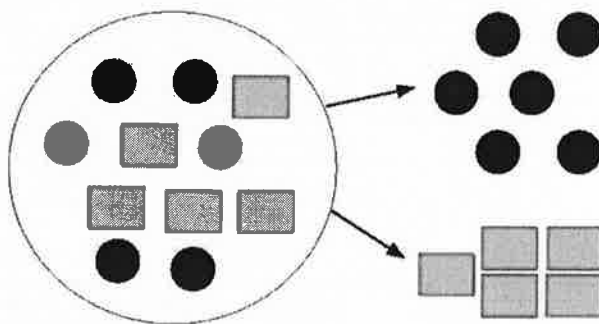
Kindergarten students learn to count to 100 and write numbers to 20. Attention is given to numbers 11-20 where emphasis is placed on tens and ones building a foundation for place value understanding. Beginning addition and subtraction starts in kindergarten. Students sort and classify groups of objects and identify basic shapes.

- Know number names and be able to count to 100
- Write numbers 0 – 20
- Learn about numbers 11-20, with tens and ones
- Count objects to tell the number of things in a group up to 20
- Compare numbers and groups

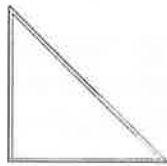


Which group has more? Which group has less?
Are these groups equal?

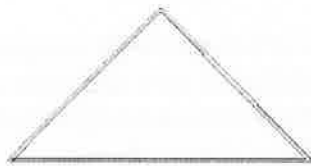
- Understand that addition is putting together groups and adding to groups
- Understand that subtraction is taking apart groups and taking from groups
- Fluently add and subtract within 5
- Understand concepts of time (morning, afternoon, evening, etc.)
- Know about the tools that measure time (clock, calendar, etc.)
- Sort objects into groups



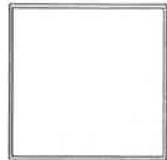
- Identify and describe shapes



(a)



(b)



(c)



(d)

How many sides and “corners” do these shapes have?

Which shape has sides of equal length?

Grade K Overview | English Language Arts

Kindergarten students work with prompting and support to interact with literature or informational text by asking and answering questions and identifying details and main events. Students know and can name all letters, and they can print many letters. They can read common words and draw, tell or write about a book.

Reading

With prompting and support:

- Ask and answer questions about a reading selection
- Identify characters, setting, and main events in a story
- Retell stories, including details



Reading: Foundational Skills

- Understand basic print features
 - Left to right
 - Top to bottom
 - Page by page
- Recognize and name all uppercase and lowercase letters
- Recognize that spoken words are made up of syllables and sounds
- Recognize and produce rhyming words
- Blend two or three sounds together to make a recognizable word
- Use phonics when reading words
- Say the most frequent sounds for each consonant and vowel
- Read common high-frequency words by sight
 - The, of, to, you, is

Writing

- Draw, tell, or write about a book
- Draw, tell, or write about events in the order they happened

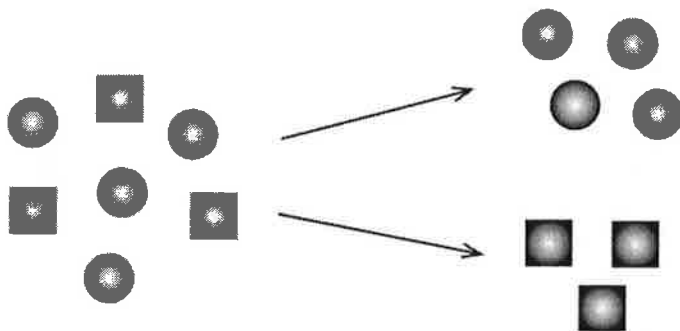
Speaking and Listening

- Participate in discussions
 - Listen to others
 - Take turns speaking
- Follow oral directions
- Ask and answer questions
- Describe people, places, things, and events, providing detail

Language

- Print many uppercase and lowercase letters
- Use capitalization, punctuation, and spelling
- Identify new meanings for familiar words
 - Knowing *duck* is a bird, and learning the verb form of *to duck*

- Sort common objects into categories
 - Shapes, food



California's
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First Grade
Parent Handbook



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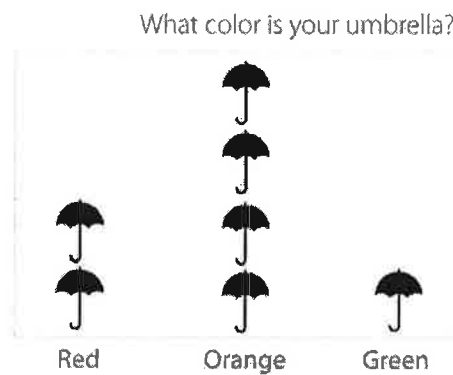
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Grade 1 Overview | Mathematics

First grade students extend their understanding of addition and subtraction by learning to use adding and subtracting to solve word problems within 20. They understand the meaning of the equal sign and are expected to count to 120. Place value knowledge is deepened and students use this knowledge to compare two-digit numbers within 100. Students practice their measurement skills with linear measurement and begin to organize data from surveys. Students also tell and write time in hours and half-hours using analog and digital clocks.

- Solve addition and subtraction word problems within 20
- Understand the relationship between addition and subtraction
- Apply the properties of operations
 - Commutative property of addition:
If you know $8 + 3 = 11$, then you know $3 + 8 = 11$.
 - Associative property of addition:
To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$.
- Add and subtract within 20
- Count to 120, starting at any number
- Understand the meaning of the equal sign
- Understand place value: ones, tens
- Use place value to add and subtract within 100
- Measure lengths and tell the measurement in units
- Tell and write time
- Relate time to events (before/after, shorter/longer, etc.)

- Build and talk about a graph



What is the most popular color of umbrella? What is the least popular color of umbrella?

- Build, describe, extend, and explain a simple pattern.
- Compare shapes by talking about sides, vertices, etc.
- Compare two-dimensional shapes to three-dimensional shapes

Grade 1 Overview | English Language Arts

First grade students independently interact with literature or informational text by asking and answering questions and identifying details and main events. They can read aloud accurately and with expression. First grade students can print all letters and can write about events, topics, and opinions.

Reading

- Ask and answer questions about details in a reading selection
- Retell stories, including details
- Explain the differences between books that tell stories and books that give information
- With prompting and support, read first grade informational texts

Reading: Foundational Skills

- Understand the organization and basic features of print
 - Left to right
 - Top to bottom
 - Page by page
- Recognize features of a sentence
 - Capitalization
 - Ending punctuation
- Understand spoken words, syllables, and sounds
- Understand phonics and word analysis
 - Know that every syllable must have a vowel sound
- Read regularly spelled one- and two-syllable words
- Read aloud with accuracy and expression

Writing

- Write opinion pieces that include an opinion and the reason for the opinion
- Write informative pieces that name a topic, supply facts, and provide closure
- Write narratives about two or more events in the correct order; include details

Speaking and Listening

- Follow rules for discussions by building on what others are saying and by asking questions
- Follow simple two-step directions
- Speak in complete sentences

Language

- Use correct grammar
- Print all uppercase and lowercase letters
- Use correct capitalization, punctuation, and spelling
- Determine meaning of unknown words by looking at parts of the word and other words in the sentence
- Sort words into categories and define words by key attributes
 - A tiger is a large cat with stripes



**California's
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Second Grade
Parent Handbook**



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Grade 2 Overview | Mathematics

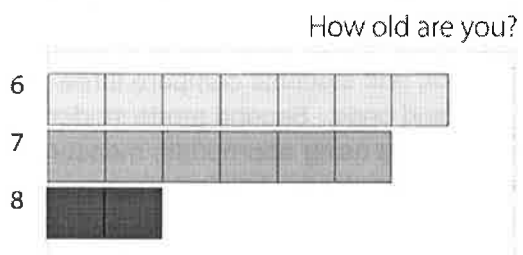
Second grade students use addition and subtraction within 100 to solve word problems and are expected to know from memory all sums of two one-digit numbers by the end of second grade. Place value understanding is extended to 1000 and students compare three digit numbers based on their knowledge of hundreds, tens and ones. Second grade students compute with money and learn to estimate and compare lengths using appropriate measurement tools. Second graders refine their understanding of geometry by drawing shapes based on the number of faces and angles.

- Solve addition and subtraction word problems within 100
- Fluently add and subtract within 20
- Know all sums of two one-digit numbers
- Work with equal groups and repeated addition to understand multiplication



- Work with equal groups and repeated subtraction to understand division
- Understand place value: ones, tens, and hundreds
- Use place value to add and subtract within 1000
- Make reasonable estimates using place value knowledge
- Measure, estimate, and compare lengths in standard units
- Represent whole number lengths on a number line
- Work with time and money
- Know relationships of time (minutes in an hour, days in a month, etc.)
- Solve word problems using combinations of dollar bills and coins

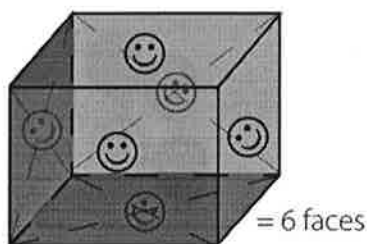
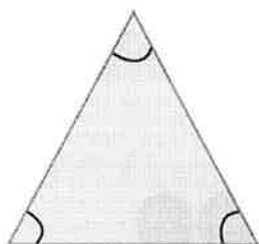
- Collect data, build a graph, and answer questions about the data presented



What is the most common age in our class?

What is the least common age in our class?

- Recognize shapes, triangles, quadrilaterals, pentagons, hexagons, and cubes
- Draw shapes by size of the angles or by the number of equal faces



Grade 2 Overview | English Language Arts

Second grade students accurately read and understand literature and informational text. They use correct grammar, capitalization, punctuation, and spelling. They can plan and deliver a presentation about a story or experience.

Reading

- Retell folktales, including a central lesson
- Explain how the author uses reasons to support specific points in a text
- Identify the main topic and focus
- Read and understand literature and informational texts

Reading: Foundational Skills

- Know and use phonics and word analysis skills
 - Read words with common prefixes and suffixes (e.g., *re_*, *un_*, *_less*)
- Distinguish long and short vowels
- Read regularly spelled two-syllable words with long vowels
- Read accurately and with understanding

Writing

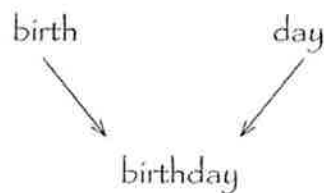
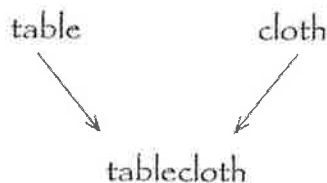
- Write opinion pieces that connect the opinion and reasons using linking words
 - Because, and, also
- Write informative pieces that provide a topic, facts, definitions, and a conclusion
- Write narrative pieces that include details to describe actions, thoughts, and feelings
- Produce writing that is developed, focused, and organized
- Write routinely over extended time frames and shorter time frames

Speaking and Listening

- Participate in conversations with peers and adults in small and larger groups
- Recall and describe key ideas and details from something read aloud
- Give and follow three- and four-step oral directions
- Plan and deliver a presentation about a story or experience

Language

- Use correct grammar
- Create readable documents with legible print
- Use correct capitalization, punctuation, and spelling
- Use a variety of methods to determine word meaning
- Use individual words to determine the meaning of compound words, which are two words joined to form a new word



California's
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Third Grade
Parent Handbook



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Grade 3 Overview | Mathematics

Third grade students develop an understanding of multiplication and division and learn to fluently multiply and divide within 100. Students are expected to know from memory all products of two one-digit numbers by the end of third grade. Place value understanding is used for multi-digit computation and estimation. Fractions are introduced in the third grade with an emphasis on understanding fractions as numbers and their relative size and placement on the number line. In third grade students understand concepts of area and perimeter and solve problems using liquid volume and mass.

- Solve multiplication and division word problems
- Understand the properties of multiplication

- Commutative property of multiplication:

If you know $6 \times 4 = 24$, then you know $4 \times 6 = 24$.

- Associative property of multiplication:

$3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$,

or by $5 \times 2 = 10$, then $3 \times 10 = 30$.

- Distributive property of multiplication:

If $8 \times 5 = 40$

and $8 \times 2 = 16$,

then 8×7 is:

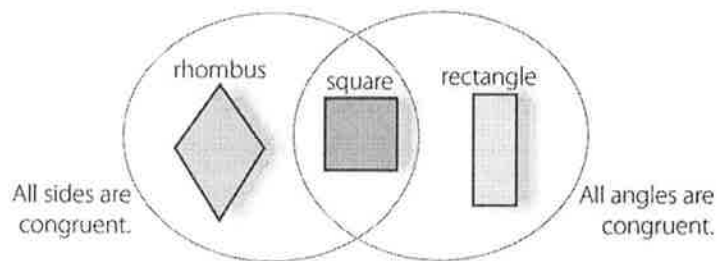
$8 \times (5 + 2)$

$(8 \times 5) + (8 \times 2)$

$40 + 16 = 56$.

- Fluently multiply and divide within 100
- Know all products of two one-digit numbers
- Solve word problems with addition, subtraction, multiplication, and division
- Understand that multiplication and division are related
- Use place value to round numbers and know the value of each digit in a four-digit number
- Use place value understanding to solve multi-digit arithmetic

- Estimate reasonable answers using place value knowledge
- Understand fractions as numbers
- Recognize simple equivalent fractions
- Compare two fractions with the same numerator or the same denominator
- Know that 25 cents is $\frac{1}{4}$ of a dollar, 50 cents is $\frac{1}{2}$ of a dollar and 75 cents is $\frac{3}{4}$ of a dollar
- Tell and write time to the nearest minute
- Estimate and measure time, volume, and weight
- Understand area and perimeter
- Understand that shapes in different categories can also be in a larger category



Grade 3 Overview | English Language Arts

Third grade students interact with literature and informational text by comparing and contrasting stories, discussing a point of view and comparing it with the author's, and describing a series of events, ideas, or concepts. Along with their reading, third grade writing is more sophisticated. Students produce developed, focused, organized, and edited work. In writing informational pieces, they include charts or graphs and supply facts.

Reading

- Describe how characters' actions contribute to the events
- Compare and contrast stories
- Independently read and understand grade-level literature
- Describe a series of events, ideas, or concepts
- Discuss a point of view and compare it to that of the author

Reading: Foundational Skills

- Use grade-level phonics and word analysis skills
 - Read words with multiple syllables, e.g., mosquito, puppeteer
- Know the meanings of most common prefixes and suffixes
- Read accurately and with understanding

Writing

- Write opinion pieces that include a chart or graph and list reasons that support the opinion
- Write informative pieces that name the topic, supply facts, and use linking words and phrases
- Write narrative pieces that introduce a narrator and characters, and write about what the characters say, think, and feel
- Produce writing that is developed, focused, organized, and edited

Speaking and Listening

- Follow rules for discussions by building on what others are saying
- Recall ideas and details from something read aloud
- Plan and deliver an informative presentation
- Speak clearly and in complete sentences

Language

- Use correct grammar
- Write legibly in cursive or joined italics; use margins and spacing
- Choose words and phrases for effect
- Use a variety of sentence types
- Capitalize appropriate words
- Correctly add suffixes to base words
 - Sitting, smiled, cries
- Recognize the differences between spoken and written standard English

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The Standards for Mathematical Practice describe behaviors that all students will develop in the Common Core Standards. These practices rest on important “processes and proficiencies” including problem solving, reasoning and proof, communication, representation, and making connections. These practices will allow students to understand and apply mathematics with confidence.

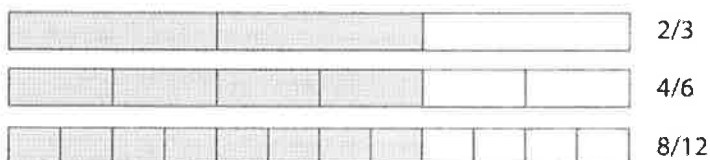
- **Make sense of problems and persevere in solving them.**
 - Find meaning in problems
 - Analyze, predict and plan solution pathways
 - Verify answers
 - Ask themselves the question: “Does this make sense?”
- **Reason abstractly and quantitatively.**
 - Make sense of quantities and their relationships in problems
 - Create coherent representations of problems
- **Construct viable arguments and critique the reasoning of others.**
 - Understand and use information to construct arguments
 - Make and explore the truth of conjectures
 - Justify conclusions and respond to arguments of others
- **Model with mathematics.**
 - Apply mathematics to problems in everyday life
 - Identify quantities in a practical situation
 - Interpret results in the context of the situation and reflect on whether the results make sense
- **Use appropriate tools strategically.**
 - Consider the available tools when solving problems

- Are familiar with tools appropriate for their grade or course (pencil and paper, concrete models, ruler, protractor, calculator, spreadsheet, computer programs, digital content located on a website, and other technological tools)
- Be precise.
 - Communicate precisely to others
 - Use clear definitions, state the meaning of symbols and are careful about specifying units of measure and labeling axes
 - Calculate accurately and efficiently
- Look for and make use of structure.
 - Discern patterns and structures
 - Can step back for an overview and shift perspective
 - See complicated things as single objects or as being composed of several objects
- Look for and identify ways to create shortcuts when doing problems.
 - When calculations are repeated, look for general methods, patterns and shortcuts
 - Be able to evaluate whether an answer makes sense

Grade 4 Overview | Mathematics

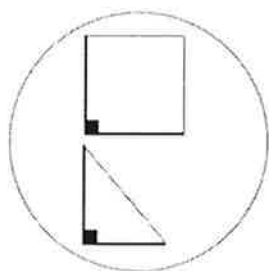
Fourth graders use their knowledge of place value to generalize to 1,000,000 and learn to round multi-digit whole numbers to any place. They fluently add and subtract using the standard algorithm and multiply and divide with multi-digit numbers. Fourth graders extend understanding of fractions to include equivalence, ordering and simple decimal notation. Students measure angles and classify geometric shapes by lines (parallel, perpendicular, etc.) and angles (right, acute, obtuse, etc.).

- Use addition, subtraction, multiplication, and division with whole numbers to solve word problems
- Learn about factors and multiples
 - Factors of 24: 1, 2, 3, 4, 6, 8, 12
 - Multiples of 4: 4, 8, 12, 16, 20
- Make and describe patterns with objects and numbers
- Understand and use place value to generalize to 1,000,000
 - Expanded form: $6783 = 6000 + 700 + 80 + 3$
- Compute with multi-digit numbers
- Solve problems involving using multiplication of multi-digit by two-digit numbers
- Divide multi-digit numbers by one-digit divisor
- Round multi-digit numbers to any place
- Build understanding of equivalent fractions and ordering fractions

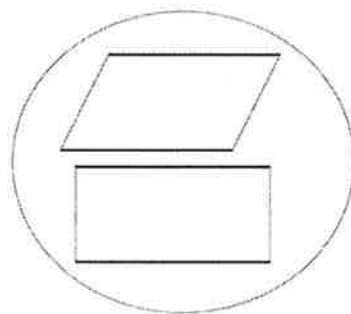


- Compare two fractions with different numerators and different denominators by making common denominators
- Add and subtract fractions and mixed numbers with like denominators
- Understand the decimal notation for fractions
- Compare decimals
- Solve problems using measurement conversions
- Apply area and perimeter formulas for rectangles
- Organize and explain data using a line plot

- Understand and measure angles
- Draw and identify lines and angles
- Describe and sort shapes by their lines and angles



Right Angles



Parallel Lines

- Recognize lines of symmetry

Grade 4 Overview | English Language Arts

Fourth grade students read longer words and use roots, prefixes, and suffixes to determine the meanings of unknown words. They use details and examples in the text to determine the main idea and describe a character, setting, or event. Students produce writing that is developed, focused, organized, and edited. They group related ideas in paragraphs and sections, and provide a conclusion. Fourth grade students know when to use formal English, and when informal English is appropriate.

Reading

- Use details and examples in the text to determine the main idea and describe a character, setting, or event
- Use first person (e.g., *I said*) and third person (e.g., *She said*) narrative styles
- Read and understand literature and informational texts

Reading: Foundational Skills

- Use grade-level phonics and word analysis skills
 - Roots, prefixes, and suffixes
- Read words with multiple syllables
- Read with accuracy and understanding

Writing

- Write opinion pieces that include a conclusion related to the opinion
- Write informative pieces that group related ideas in paragraphs and sections, and provide a conclusion
- Write narratives that introduce a narrator and characters; write about what the characters say, feel, and think; use sensory details
 - Sight, sound, scent
- Produce writing that is developed, focused, organized, and edited
- Write a short research piece

Speaking and Listening

- Participate in discussions, carrying out assigned roles
- Paraphrase portions of information presented aloud
- Plan and deliver a presentation based on a personal experience
- Speak clearly, in complete sentences, and at an appropriate pace

Language

- Use correct grammar
- Use complete sentences
- Correctly use frequently confused words
 - To, two, too
 - There, their, they're
- Use correct capitalization, punctuation, and spelling
- Spell grade-level words correctly
- Know when to use formal English and when informal English is appropriate

California's
Common Core Standards
Fifth Grade
Parent Handbook



Introduction

This handbook gives parents an introduction to California's Common Core Standards and a summary of what students are expected to learn as they advance from kindergarten through grade 8. The standards are designed to reflect the knowledge and skills that our young people need for success in college and careers. A common set of learning goals helps teachers and parents ensure students are challenged and making appropriate progress.

Why Common Core Standards?

California educators have joined a national movement to adopt common standards and assessments for English language arts and mathematics. Currently, standards for what students should know and be able to do vary among states, as does the difficulty of the assessments used to determine whether students are meeting those standards. Common standards allow for collaboration among states on best practices and professional development.

Common learning goals provide a clear vision of what educators and parents in all states should aim for. These learning goals help ensure that students meet college and work expectations, are prepared to succeed in a global economy and society, and are provided with rigorous content and application of higher knowledge thinking. Benchmarked against international standards, the Common Core Standards assist students in their preparation to complete the requirements for enrollment at a California public university.

California's Adoption of Common Core Standards

Adopted in California in August 2010, the K-12 Common Core State Standards were developed through a state-led effort to establish consistent and clear education standards for English language arts and mathematics. The initiative was launched by and supported by the Council of Chief State School Officers and the National Governors Association. In the Common Core Standard adoption process, California added supporting standards to complete the unique picture necessary for California students.

The Common Core also added strength to the existing California standards by including additional standards for vocabulary and new standards for collaborative discussions. Literacy standards that focus on reading and writing instruction during history/social studies, science, and technology also were included. In mathematics, standards were added to demonstrate a stronger emphasis on number sense and algebraic thinking. Implementation of the Common Core in California's schools will occur in stages over the next few years.

Mathematics | Standards for Mathematical Practice

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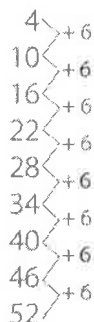
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Grade 5 Overview | Mathematics

Fifth grade students finalize fluency with multi-digit addition, subtraction, multiplication, and division. They apply their understanding of fractions to the addition and subtraction of fractions with unlike denominators, the concept of fraction multiplication and division, and decimal addition and subtraction. They analyze numeric patterns and relationships and graph ordered pairs on a coordinate plane. Students build on their understanding of geometry by recognizing attributes of geometrical shapes and calculating inside angle measurement and area of triangles and parallelograms.

- Write and interpret numerical expressions using parentheses, brackets, or braces
 - “Add 8 and 7, then multiply by 2” is $2(8 + 7)$
- Express a whole number (2 – 50) as a product of its prime factors
- Describe more complex patterns by seeing the change



- Understand the place value system from thousandths to millions
- Fluently multiply multi-digit numbers using the standard algorithm
- Divide multi-digit numbers by two-digit divisors
- Read, write, and compare decimals to the thousandths
- Round decimals to any place
- Compute with multi-digit whole numbers and numbers with decimals to the hundredths

$$\begin{array}{r} 423.12 \\ \times 8 \\ \hline \end{array}$$

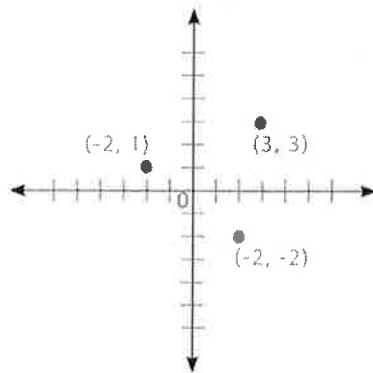
$$\begin{array}{r} 8943.43 \\ + 17.50 \\ \hline \end{array}$$

$$5 \overline{) 25.75}$$

$$100 - 42.11 =$$

- Add and subtract fractions with unlike denominators
- Multiply fractions and mixed numbers

- Divide unit fractions by whole numbers and whole numbers by unit fractions
- Convert measurements and use in problem solving
 - $0.05 \text{ m} = 5 \text{ cm}$ or $2.5 \text{ feet} = 30 \text{ inches}$
- Organize and explain data using a line plot
- Understand and find the volume of rectangular prisms
- Analyze number patterns
- Graph points on a coordinate graph



- Show a graph with an x and y axis with several points labeled by their coordinates
- Sort two-dimensional shapes into categories based on their properties
- Know what makes rectangles, parallelograms, and trapezoids different
- Know the inside sum of the angles of a triangle (180 degrees) and a quadrilateral (360 degrees)
- Be able to find the area of a triangle and parallelogram by knowing and understanding the formula for area of these shapes

Grade 5 Overview | English Language Arts

Fifth grade students build on their ability to read longer words, using roots, prefixes, and suffixes to determine the meaning of unknown words. Students explain how an author supports points in a text. They use quotes accurately when referring to the text. Students keep the audience in mind and include a clear sequence of events when writing. Students listen to a speaker or media source and identify reasons and evidence provided to support particular points. They identify and discuss misleading ideas.

Reading

- Quote accurately when referring to text
- Determine the main ideas and summarize the text
- Compare and contrast texts
- Explain how an author uses reason or evidence to support points in a text

Reading: Foundational Skills

- Use grade-level phonics and word analysis skills
 - Roots, prefixes, and suffixes
- Read with accuracy and fluency

Writing

- Write opinion pieces that support a point of view with reasons and information
- Write informative texts that share ideas and information
- Write narratives that use related descriptive details and a clear sequences of events
- Write clearly and with a purpose; keep the audience in mind
- Use technology to publish writing; type two pages in a single sitting

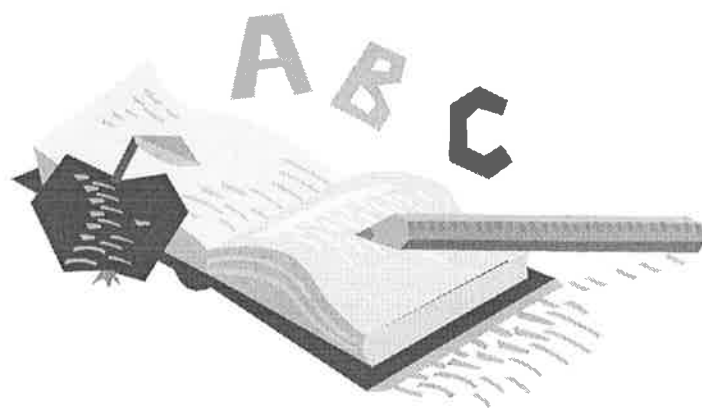
Speaking and Listening

- Summarize information presented
- Identify reasons and evidence a speaker or media source provides to support particular points
- Identify and discuss misleading ideas
- Plan and deliver a speech
- Deliver a memorized poem or section of a speech
- Use expression and gestures

Language

- Use correct grammar
- Use verb tenses correctly
 - Yesterday I *walked*
 - Today I *walk*
 - Tomorrow I *will walk*
- Use correct capitalization, punctuation, and spelling
- Use punctuation to separate items in a series/list
- Use underlining, quotation marks, or italics in a title
- Vary sentence length and style
- Compare and contrast styles used in literature
- Use a variety of methods to determine the meaning of an unknown word

California's
Common Core Standards
Sixth Grade
Parent Handbook



Introduction

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Grade 6 Overview | Mathematics

Sixth grade students use their knowledge of multiplication and division to solve ratio and rate problems. They finalize their understanding of division of fractions and begin the study of negative integers. They understand the use of variables in mathematical expressions, write expressions and equations that correspond to situations, and use expressions and equations to solve problems. Students begin the study of probability and statistics and use their geometrical foundations to solve problems involving area, surface area, and volume.

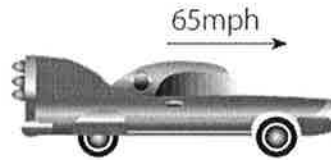
- Understand ratio concepts and use ratio reasoning to solve problems
- Understand unit rate
- Find a percent of a quantity
- Divide fractions by fractions
- Fluently compute with multi-digit numbers and multi-digit decimals
- Find common factors and multiples of numbers
- Find the greatest common factor and least common multiple of two whole numbers
- Use understanding of positive numbers to understand rational numbers
- Understand positive and negative integers and be able to locate on a four-quadrant coordinate plane
- Order rational numbers
- Understand absolute value
- Add and subtract integers
- Apply properties of operations to add and subtract rational numbers
- Use understanding of arithmetic to solve one variable equations and inequalities
- Write expressions and equations to describe real world situations using variables
- Write and solve equations with whole number exponents
- Write an inequality to describe a real world or mathematical problem

- Represent and explain relationships between dependent and independent variables

For example, a car travels at a constant speed of 65 mph. List and graph ordered pairs of distances and times. Write the equation $d = 65t$ to show distance travelled (d) depends on the constant speed (65) multiplied by the time travelled.

$$d = 65t$$

| t=hours | distance |
|---------|----------|
| 1 | 65 |
| 2 | 130 |
| 1/2 | 32.5 |



- Solve real world problems involving area, surface area, and volume
- Draw (freehand, with ruler and protractor and with technology) geometric shapes when given specific conditions
- Know the formulas for area and circumference of a circle
- Ask a statistical question (How old are the students in my school?), collect and organize the data on a line plot, graph, histogram, dot plot, box plot, etc.
- Describe and summarize data by noticing the center, spread, and overall shape
- Display numerical data on a number line including dot plots, histograms, and box plots

Grade 6 Overview | English Language Arts

Sixth grade students provide a summary of reading without personal opinions or judgments. They write a variety of pieces, including research projects, and use technology to publish the work. When presenting, students place descriptions, facts, and details in a logical order.

Reading

- Determine main idea and supporting details
- Provide a summary without personal opinions or judgments
- Determine how the structure of a text contributes to the main idea
- Determine an author's point of view
- Explain how the point of view of the narrator or speaker is developed
- Distinguish among fact, opinion, reasoned judgment, and speculation in a text
- Read and understand grade-level literary and nonfiction texts

Writing

- Write arguments to support claims with clear reasons and relevant evidence
- Write informative texts that examine a topic and convey ideas
- Write narratives that include relevant descriptive details and well-structured event sequences
- Conduct short research projects and refocus the inquiry as needed
- Use technology to produce and publish writing; type three pages in a single sitting

Speaking and Listening

- Participate in discussions, both one-on-one and with a group
- Find claims supported by reasons and evidence in a speaker's argument
- Plan and deliver an informative presentation
- Place descriptions, facts, and details in a logical order when presenting

Language

- Use correct grammar and language
- Use correct capitalization, punctuation, and spelling
- Use a variety of methods to determine the meaning of unknown words
- Distinguish among words with similar meanings
 - Stingy, economical, thrifty

