California's

COMMON CORE

Content Standards

Curriculum Builder

Fourth Grade

Designed and Printed by Shoob Photography

California's

COMMON CORE

Content Standards Checklist for ELA and Mathematics Fourth Grade

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CALIFORNIA'S COMMON CORE CONTENT STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE AND TECHNICAL SUBJECTS

The History of Standards in California

Student content standards describe what students should know and be able to do in a subject matter for a particular grade. California ushered in the standards era in 1997, when the State Board of Education adopted contents standards, K-12, for both English Language Arts and mathematics, establishing for the first time in the State a consistent set of expectations for all students. Those standards have stood as the beacon for the development of curriculum frameworks, the creation of curricular materials, and the basis for State and local assessments.

While California established and utilized its own standards, every other state in the union did the same. Seeking uniformity of rigor and expectation for the entire nation, the National Governors Association Center for Best Practices and the Council of chief State School Officers coordinated efforts to write the Common core State Standards. Teachers, school administrators, and experts began the work with the end in mind and drafted "career and college ready" exit standards for graduated high school seniors. As such these anchor standards define what is required to be successful in entry-level, credit-bearing academic college courses and in the workforce training programs. With exit standards charting the way, the creators of the Common Core standards backward-mapped down through the grade levels to create a consistent format and strong linkages from grade level to grade level.

These new Common Core Standards, adopted for English language arts and mathematics only,:

- Are aligned with college and work expectations
- Are clear, understandable, and consistent
- Include rigorous content and application of knowledge through higher-order skills
- Build upon strengths and lessons of the current standards from many states
- Are informed by other top performing countries, so that all students are prepared to succeed in our global economy and society
- Are evidence-based

Transition to the Common Core Standards

The State Board of Education in California adopted the Common Core Standards in 2010 to ensure that California would be eligible as a state to submit an application for a Race to the Top grant. Even though that application was not selected for funding, the adoption of the Common Core Standards is in law. Currently, 47 states have adopted the standards. It is the advent of assessments tied to the Common Core, however, that will mark the true transition from the older California standards to the current Common

Core. California participates with over twenty other states in the SMARTER Balanced Assessment Consortium. Linking arms with other states in the consortium, California plans to usher in a totally new assessment system in the spring of the school year 2014-15. The implementation of a new assessment system will mark point in time when students, teachers, schools, districts and larger systems will be held accountable for the instruction of these new standards.

In order to create as smooth a transition as possible from the old standards and the current assessment system, teachers and administrators are working to understand and embrace the Common Core Standards. This publication is designed to assist with that process.

The new Common Core Standards for English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects

The title of the standards includes other fields of study responsible for student literacy. In the K-5 standards, references to history/social studies, science and technical subjects are embedded. In the upper grade level standards, these content areas have their own section of standards. The inclusion across traditional divisions of study reinforces the primacy of literacy and the need for its integration.

Reading standards are "stair-cased" and demand student reading of a diverse array of classic and contemporary literature, but likewise insist on a focus of challenging informational texts. There is no specified reading list, but the Common Core instead provide numerous sample texts. Various genre are delineated that include: myths, foundational documents from U. S. history, seminal works of American literature, and, of course, Shakespeare. States, local districts, and perhaps even schools will make the final decisions about what titles students will read.

The issue of text complexity reminds educators that the reading level of work place documents frequently exceeds the rigor of literature at the college level. Therefore, the measurement called the "lexile" gauges the text complexity of a document. Text complexity intertwines the issues of: qualitative dimensions (structure of language, knowledge demands, etc.), quantitative dimensions (word length, sentence length, etc.), and reader and task considerations (appropriateness of text to reader, reader motivation and experiences, etc.)

Writing standards are grounded in the ability to write logical arguments based on claims, sound reasoning, and relevant evidence. Even the earliest grades require the ability to argue through opinion writing. Additionally, students are expected to conduct research, both short- and long-term projects, throughout the grade levels. To establish a consistent expectation for rigor, annotated samples of student writing across the grade levels accompany the standards.

Speaking and Listening standards require the presentation of complex information through the acts of listening and speaking but also through media. Speaking is expected between individuals, in small groups and in larger groups.

Language standards describe vocabulary acquisition and the ability to appreciate nuances of words. In addition to the use of formal language, students are expected to navigate through a variety of contexts and choose the appropriate level of formality.

Media and Technology standards are integrated through these standards.

Implementation: We are launching into CCSS using the curriculum and the materials we have. Whether your district is using Open Court, MMH, or another program, we must begin CCSS implementation using our existing materials.

As you proceed through your pacing guide and current curriculum, compare each lesson to the standards found here. Use the notes column to document which parts of your current curriculum is relevant to each standard.

READING LITERATURE

Key Ideas and Details

Standard		Notes	Dates Taught					Mastery
RL 1.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.							
RL 2.	Determine a theme of a story, drama, or poem from details in the text; summarize the text.							
RL 3.	Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).							
Notes								

Craft and Structure

Standard		Notes	Dates Taught					Mastery
RL 4.	Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).							
RL 5.	Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.							
RL 6.	Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.							
Notes								

Integration of Knowledge and Ideas

Standard		Notes	Dates Taught					Mastery
RL 7.	Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.							
RL 8.	(Not applicable to literature)							
RL 9.	Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.							

Notes

Range of Reading and Complexity of Text

Standard		Notes	Dates Taught					Mastery
RL 10.	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.							

Notes

READING INFORMATIONAL TEXT

Key Ideas and Details

Standard		Notes	Dates Taught					Mastery
RI 1.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.							
RI 2.	Determine the main idea of a text and explain how it is supported by key details; summarize the text.							
RI 3.	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.							
Notes								

Craft and Structure

Standard		Notes	Dates Taught					Mastery
RI 4.	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.							
RI 5.	Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.							
RI 6.	Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.							
Notes								

Integration of Knowledge and Ideas

Standard		Notes	Dates Taught					Mastery
RI 7.	Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.							
RI 8.	Explain how an author uses reasons and evidence to support particular points in a text.							
RI 9.	Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.							
Notes								

Range of Reading and Level of Text Complexity

Standard		Notes	Dates Taught					Mastery
RI 10.	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.							
Notes								

READING FOUNDATIONAL SKILLS

Phonics and Word Recognition

Standard		Notes	Dates Taught					Mastery
RF 3.	Know and apply grade-level phonics and word analysis skills in decoding words.							
RF 3.a	Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.							

Notes

Fluency

Standard		Notes	Dates Taught					Mastery
RF 4.	Read with sufficient accuracy and fluency to support comprehension.							
RF 4.a	Read grade-level text with purpose and understanding.							
RF 4.b	Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.							
RF 4.c	Use context to confirm or self-correct word recognition and understanding, rereading as necessary.							

Notes

WRITING

Text Types and Purposes

Standard		Notes	Dates Taught					Mastery
W 1.	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.							
W 1.a	Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.							
W 1.b	Provide reasons that are supported by facts and details.							
W 1.c	Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).							
W 1.d	Provide a concluding statement or section related to the opinion presented.							
W 2.	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.							
W 2.a	Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.							
W 2.b	Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.							
W 2.c	Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).							
W 2.d	Use precise language and domain-specific vocabulary to inform about or explain the topic.							

Notes

Text Types and Purposes

Standard		Notes	Dates Taught					Mastery
W 2.e	Provide a concluding statement or section related to the information or explanation presented.							
W 3.	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.							
W 3.a	Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.							
W 3. b	Use dialogue and description to develop experiences and events or show the responses of characters to situations.							
W 3.c	Use a variety of transitional words and phrases to manage the sequence of events.							
W 3.d	Use concrete words and phrases and sensory details to convey experiences and events precisely.							
W 3.e	Provide a conclusion that follows from the narrated experiences or events.							

Notes

Production and Distribution of Writing

Standard	Notes	Dates Taught					Mastery
W 4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)							
W 5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.							
W 6. With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.							

Notes

Research to Build and Present Knowledge

Standard		Notes	Dates Taught					Mastery
W 7.	Conduct short research projects that build knowledge through investigation of different aspects of a topic.							
W 8.	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.							
W 9.	Draw evidence from literary or informational texts to support analysis, reflection, and research.							
W 9.a	Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions].").							
W 9.b	Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").							
Notes								

Range of Writing

Standard		Notes	Dates Taught					Mastery
W 10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.							
Notes								

SPEAKING & LISTENING

Comprehension and Collaboration

Standard		Notes	Dates Taught					Mastery
SL 1.	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.							
SL 1.a	Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.							
SL 1.b	Follow agreed-upon rules for discussions and carry out assigned roles.							
SL 1.c	Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.							
SL 1.d	Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.							
SL 2.	Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.							
SL 3.	Identify the reasons and evidence a speaker provides to support particular points.							

Notes

Presentation of Knowledge and Ideas

Standard		Notes	Dates Taught					Mastery
SL 4.	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.							
Notes								

Presentation of Knowledge and Ideas

Standard		Notes	Dates Taught					Mastery
SL 5.	Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.							
SL 6.	Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.							
Notes								

LANGUAGE STANDARDS

Conventions of Standard English

Standard		Notes	Dates Taught					Mastery
L 1.	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.							
L 1.a	Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why).							
L 1.b	Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses.							
L 1.c	Use modal auxiliaries (e.g., can, may, must) to convey various conditions.							
L 1.d	Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag).							
L 1.e	Form and use prepositional phrases.							
L 1.f	Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.*							

Notes

Conventions of Standard English

Standard		Notes	Dates Taught					Mastery
L 1.g	Correctly use frequently confused words (e.g., to, too, two; there, their).							
L 2.	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.							
L 2.a	Use correct capitalization.							
L 2.b	Use commas and quotation marks to mark direct speech and quotations from a text.							
L 2.c	Use a comma before a coordinating conjunction in a compound sentence.							
L 2.d	Spell grade-appropriate words correctly, consulting references as needed.							

Notes

Knowledge of Language

Standard		Notes	Dates Taught					Mastery
L 3.	Use knowledge of language and its conventions when writing, speaking, reading, or listening.							
L 3.a	Choose words and phrases to convey ideas precisely.							
L 3.b	Choose punctuation for effect.							
L 3.c	Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).							
Notes								

Vocabulary Acquisition and Use

Standard		Notes	Dates Taught					Mastery
L 4.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.							
L 4.a	Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.							
L 4.b	Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).							
Notes								

Vocabulary Acquisition and Use

Standard		Notes	Dates Taught					Mastery
L 4.c	Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.							
L 5.	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.							
L 5.a	Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.							
L 5.b	Recognize and explain the meaning of common idioms, adages, and proverbs.							
L 5.c	Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).							
L 6.	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).							

Notes

CALIFORNIA'S COMMON CORE CONTENT STANDARDS FOR MATHEMATICS

The K-5 standards provide students with a *solid foundation in whole numbers, addition, subtraction, multiplication, division, fractions and decimals*— which help young students build the foundation to successfully apply more demanding math concepts and procedures, and move into applications.

In kindergarten, the standards follow successful international models and recommendations from the National Research Council's Early Math Panel report, by focusing kindergarten work on the number core: learning how numbers correspond to quantities, and learning how to put numbers together and take them apart (the beginnings of addition and subtraction).

The K-5 standards build on the best state standards to provide detailed guidance to teachers on how to navigate their way through knotty topics such as *fractions, negative numbers, and geometry*, and do so by maintaining a continuous progression from grade to grade.

The standards stress not only procedural skill but also conceptual understanding, to make sure students are learning and absorbing the critical information they need to succeed at higher levels - rather than the current practices by which many students learn enough to get by on the next test, but forget it shortly thereafter, only to review again the following year.

Having built a strong foundation K-5, students can do hands on learning in geometry, algebra and probability and statistics. Students who have completed 7th grade and mastered the content and skills through the 7th grade will be *well-prepared for algebra* in grade 8.

OPERATIONS & ALGEBRAIC THINKING

Use the four operations with whole numbers to solve problems.

Standard		Notes	Dates Taught					Mastery
OA 1.	Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.							
OA 2.	Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.							
OA 3.	Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.							

Notes

Gain familiarity with factors and multiples.

Standard	Notes	Dates Taught					Mastery
OA 4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.							
Notes							

Generate and analyze patterns.

Standard	Notes	Dates Taught					Mastery
OA 5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.							
Notes							

NUMBER & OPERATIONS IN BASE TEN

Generalize place value understanding for multi-digit whole numbers.

Standard	Notes	Dates Taught					Mastery
NBT 1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 x 70 = 10 by applying concepts of place value and division.							
NBT 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.							
NBT 3. Use place value understanding to round multi-digit whole numbers to any place.							

Notes

Use place value understanding and properties of operations to perform multi-digit arithmetic.

Standard	Notes	Dates Taught					Mastery
NBT 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.							
NBT 5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.							
NBT 6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit diviwWsors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.							

Notes

NUMBER & OPERATIONS—FRACTIONS

Extend understanding of fraction equivalence and ordering.

Standard		Notes	Dates Taught					Mastery
NF 1.	Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.							
NF 2.	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.							

Notes

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Standard		Notes	Dates Taught					Mastery
NF 3.	Understand a fraction a/b with a > 1 as a sum of fractions 1/b.							
NF 3.a	Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.							
NF 3.b	Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.							
Notes								

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Standard		Notes	Dates Taught					Mastery
NF 3.c	Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.							
NF 3.d	Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.							
Notes								

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Standard		Notes	Dates Taught					Mastery
NF 4.	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.							
NF 4.a	Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to represent 5/4 as the product 5 x (1/4), recording the conclusion by the equation 5/4 = 5 x (1/4).							
NF 4.b	Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express 3 x (2/5) as 6 x (1/5), recognizing this product as 6/5. (In general, n x (a/b) = (n x a)/b.)							
NF 4.c	Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?							

Notes

Understand decimal notation for fractions, and compare decimal fractions.

Standard	Notes	Dates Taught					Mastery
NF 5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.							
NF 6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.							
NF 7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.							

Notes

MEASUREMENT & DATA

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Standard	Notes	Dates Taught					Mastery
MD 1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...							

Notes

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Standard	Notes	Dates Taught					Mastery
MD 2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.							
MD 3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.							
Notes							

Represent and interpret data.

Standard	Notes	Dates Taught					Mastery
MD 4. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.							
Notes							

Geometric measurement: understand concepts of angle and measure angles.

Standard		Notes	Dates Taught					Mastery
MD 5.	Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:							
MD 5.a	An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles.							
MD 5.b	An angle that turns through n one-degree angles is said to have an angle measure of n degrees.							
MD 6.	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.							
MD 7.	Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.							

Notes

GEOMETRY

Reason with shapes and their attributes.

Standard		Notes	Dates Taught					Mastery
G 1.	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.							
G 2.	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.							
G 3.	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.							

Notes