

California
COMMON CORE
Content Standards
Curriculum Builder
Third Grade

California's
COMMON CORE
Curriculum Builder for
ELA and Mathematics
Third Grade

TABLE OF CONTENTS

READING STANDARDS LITERATURE	2-7
WRITING STANDARDS	8-10
SPEAKING & LISTENING	10-11
LANGUAGE STANDARDS	11-14
MATHEMATICS STANDARDS OPERATIONS & ALGEBRAIC THINKING	15-18
NUMBER & OPERATIONS IN BASE TEN	19
NUMBER & OPERATIONS—FRACTIONS	19-20
MEASUREMENT & DATA	21-22
GEOMETRY	23

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. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.							
RL 2. Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.							
RL 3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.							
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, distinguishing literal from nonliteral language.							
RL 5. Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.							
RL 6. Distinguish their own point of view from that of the narrator or those of the characters.							
Notes							

Integration of Knowledge and Ideas

Standard	Notes	Dates Taught					Mastery
RL 7. Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).							
RL 8. (Not applicable to literature)							
Notes							

Integration of Knowledge and Ideas

Standard	Notes	Dates Taught					Mastery
RL 9. Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).							
Notes							

Range of Reading and Level of Text Complexity

Standard	Notes	Dates Taught					Mastery
RL 10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.							
Notes							

READING INFORMATIONAL TEXT

Key Ideas and Details

Standard	Notes	Dates Taught					Mastery
RI 1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.							
RI 2. Determine the main idea of a text; recount the key details and explain how they support the main idea.							
RI 3. Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.							
Notes							

Craft and Structure

Standard	Notes	Dates Taught					Mastery
RI 4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.							
Notes							

Craft and Structure

Standard	Notes	Dates Taught					Mastery
RI 5. Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.							
RI 6. Distinguish their own point of view from that of the author of a text.							
Notes							

Integration of Knowledge and Ideas

Standard	Notes	Dates Taught					Mastery
RI 7. Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).							
RI 8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).							
RI 9. Compare and contrast the most important points and key details presented in two texts on the same topic.							
Notes							

Range of Reading and Level of Text Complexity

Standard	Notes	Dates Taught					Mastery
RI 10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.							
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 Identify and know the meaning of the most common prefixes and derivational suffixes.							
RF 3.b Decode words with common Latin suffixes.							
RF 3.c Decode multisyllable words.							
RF 3.d Read grade-appropriate irregularly spelled words.							
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

Standard		Notes	Dates Taught					Mastery
W 1.	Write opinion pieces on topics or texts, supporting a point of view with reasons.							
W 1.a	Provide reasons that support the opinion.							
W 1.b	Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.							
W 1.c	Provide a concluding statement or section.							
W 2.	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.							
W 2.a	Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.							
W 2.b	Develop the topic with facts, definitions, and details.							
W 2.c	Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.							
W 2.d	Provide a concluding statement or section.							
W 3.	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.							

Notes

Text Types and Purposes

Standard		Notes	Dates Taught					Mastery
W 3.a	Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.							
W 3.b	Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.							
Notes								

Text Types and Purposes

Standard		Notes	Dates Taught					Mastery
W 3.c	Use temporal words and phrases to signal event order.							
W 3.d	Provide a sense of closure.							
Notes								

Production and Distribution of Writing

Standard	Notes	Dates Taught					Mastery
W 4. With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (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 guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.							
Notes							

Research to Build and Present Knowledge

Standard	Notes	Dates Taught					Mastery
W 7. Conduct short research projects that build knowledge about a topic.							
W 8. Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.							
W 9. (Begins in grade 4)							
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 3 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 (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).							
SL 1.c Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.							
Notes							

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 3 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 (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).							
SL 1.c	Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.							
SL 1.d	Explain their own ideas and understanding in light of the discussion.							
SL 2.	Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.							
SL 3.	Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.							

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 with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.							
SL 5. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.							
SL 6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.							
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 Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.							
L 1.b Form and use regular and irregular plural nouns.							
L 1.c Use abstract nouns (e.g., childhood).							
Notes							

Conventions of Standard English

Standard		Notes	Dates Taught					Mastery
L 1.d	Form and use regular and irregular verbs.							
L 1.e	Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses.							
L 1.f	Ensure subject-verb and pronoun-antecedent agreement.							
L 1.g	Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.							
L 1.h	Use coordinating and subordinating conjunctions.							
L 1.i	Produce simple, compound, and complex sentences.							
L 2.	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.							
L 2.a	Capitalize appropriate words in titles.							
L 2.b	Use commas in addresses.							
L 2.c	Use commas and quotation marks in dialogue.							
Notes								

Conventions of Standard English

Standard	Notes	Dates Taught					Mastery
L 2.d Form and use possessives.							
L 2.e Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).							
L 2.f Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.							
L 2.g Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.							
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 for effect.							
L 3.b Recognize and observe differences between the conventions of spoken and written standard English.							
Notes							

Vocabulary Acquisition and Use

Standard		Notes	Dates Taught					Mastery
L 4.	Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.							
L 4.a	Use sentence-level context as a clue to the meaning of a word or phrase.							
L 4.b	Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).							
L 4.c	Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).							
L 4.d	Use glossaries or beginning dictionaries, both print and digital, to 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	Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps).							

Notes

Vocabulary Acquisition and Use

Standard		Notes	Dates Taught					Mastery
L 5.b	Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).							
L 5.c	Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).							
L 6.	Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).							

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

Represent and solve problems involving multiplication and division.

Standard	Notes	Dates Taught					Mastery
OA 1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .							
OA 2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.							
OA 3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.							
OA 4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$							
Notes							

Understand properties of multiplication and the relationship between multiplication and division.

Standard	Notes	Dates Taught					Mastery
OA 5. Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative 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 $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)							
OA 6. Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.							
Notes							

Multiply and divide within 100.

Standard	Notes	Dates Taught					Mastery
OA 7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.							
Notes							

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Standard	Notes	Dates Taught					Mastery
OA 8. Solve two-step word problems using the four operations. 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. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order.)							
OA 9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.							
Notes							

NUMBER & OPERATIONS IN BASE TEN

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

Standard	Notes	Dates Taught					Mastery
NBT 1. Use place value understanding to round whole numbers to the nearest 10 or 100.							
NBT 2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.							
NBT 3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.							
Notes							

NUMBER & OPERATIONS—FRACTIONS

Develop understanding of fractions as numbers.

Standard	Notes	Dates Taught					Mastery
NF 1. Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.							
NF 2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.							
Notes							

Develop understanding of fractions as numbers.

Standard		Notes	Dates Taught					Mastery
NF 2.a	Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line.							
NF 2.b.	Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.							
NF 3.	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.							
NF 3.a	Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.							
NF 3.b	Recognize and generate simple equivalent fractions, e.g., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.							
NF 3.c	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.							
NF 3.d	Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.							
Notes								

MEASUREMENT & DATA

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Standard		Notes	Dates Taught					Mastery
MD 1.	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.							
MD 2.	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.							

Notes

Represent and interpret data.

Standard	Notes	Dates Taught					Mastery
MD 3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.							
MD 4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.							
Notes							

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Standard	Notes	Dates Taught					Mastery
MD 5. Recognize area as an attribute of plane figures and understand concepts of area measurement.							
MD 5.a A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.							
MD 5.b A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.							
MD 6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).							
Notes							

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Standard		Notes	Dates Taught					Mastery
MD 7.	Relate area to the operations of multiplication and addition.							
MD 7.a	Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.							
MD 7.b	Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.							
MD 7.c	Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.							
MD 7.d	Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.							
MD 8.	Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.							

Notes

Standard		Notes	Dates Taught					Mastery
G 1.	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.							
G 2.	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.							

Notes

