THIRD GRADE ENVISION MATH CURRICULUM MAP
CANYONS SCHOOL DISTRICT
2011 – 2012

Curriculum Mapping Purpose

Canyons School District's curriculum math maps are standards-based maps driven by the Common Core State Standards and implemented using Scott Foresman-Addison Wesley enVisionMATH ©2011. Student achievement is increased when both teachers and students know where they are going, why they are going there, and what is required of them to get there. To that end, curriculum maps answer these questions:

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
What do students know?	*What concepts and skills do students need to know?*	*How will students learn the standards?*	*What vocabulary is necessary for depth of understanding?*

Curriculum Maps are a tool for:

- **ALIGNMENT:** Provides support and coordination between concepts, skills, standards, curriculum, and assessments
- **COMMUNICATION:** Articulates expectations and learning goals for students
- **PLANNING:** Focuses instruction and targets critical information
- **COLLABORATION:** Promotes professionalism and fosters dialogue between colleagues about best practices pertaining to sequencing, unit emphasis and length, integration, and review strategies

These maps were collaboratively developed and refined by teacher committees using feedback from classroom teachers, achievement coaches, building administrators, and the office of Evidence-Based Learning. It is with much appreciation that we recognize the many educators that collaborated in the effort to provide these maps for the teachers and students of CSD. Specific individuals that have assisted in the writing and editing of this document include:

Tana	Allred	Karen	Davis	Sheila	McDonald
Marlene	Barbano	Celeste	Erickson	Julie	McFarland
Karen	Bentley	Julie	Fielding	Kimille	Moreton
Catherine	Bond	Barbara	Foltz	Debbie	Owens
Trish	Boswell	Patricia	French	Teresa	Ramey
Jen	Buttars	Melissa	Garber	Joani	Richardson
Rebekah	Callahan	LaNae	Goates	Piper	Riddle
Wendy	Casperson	Elizabeth	Gould	Amber	Roderick-Landward
Trudy	Cloward	Amanda	Hansen	Jan	Shreeve
Stephanie	Cobabe	Lisa	Hubbard	Cathy	Sunderland
Bethany	Cordes	Tanya	Johnson	Nancy	Swinyard
MaryLou	Damjanovich	Kimberly	Jones	Tara	Toraya
Tami	Dautel	Jones	Karlie	Jessica	Vidal
Steve	Davies	Emigh	Lo	LeeAnne	Walker

Canyons School District elementary math maps are created by CSD elementary teachers
and published by the CSD Office of Evidence-Based Learning.

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Third Grade Math Common Core At-a-Glance

Third Grade Overview

Operations and Algebraic Thinking (3.OA)

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations in Base Ten (3.NBT)

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

Number and Operations—Fractions (3.NF)

- Develop understanding of fractions as numbers.

Measurement and Data (3.MD)

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric measurement: understand concepts of area and related area to multiplication and to addition.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry (3.G)

- Reason with shapes and their attributes.

Four Critical Areas

In Grade 3, instructional time should focus on four critical areas:

- developing understanding of multiplication and division and strategies for multiplication and division within 100;
- developing understanding of fractions, especially unit fractions (fractions with numerator 1);
- developing understanding of the structure of rectangular arrays and of area; and
- describing and analyzing two-dimensional shapes.

Common Core Practice Standards

Overarching habits of mind of a productive mathematical thinker

1. Make sense of problems and persevere in solving them
6. Attend to precision

Reasoning and explaining

2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others

Modeling and using tools

4. Model with mathematics
5. Use appropriate tools strategically

Seeing structure and generalizing

7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

Common Core State Standards Initiative. (2010). Common Core State Standards for Mathematics. Washington, DC: National Governors Association Center for Best Practices and the

The Common Core Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important processes and proficiencies with longstanding importance in mathematics education.

1. Make sense of problems and persevere in solving them.

2. Reason abstractly and quantitatively.

3. Construct viable arguments and critique the reasoning of others.

4. Model with mathematics.

5. Use appropriate tools strategically.

6. Attend to precision.

7. Look for and make use of structure.

8. Look for and express regularity in repeated reasoning.

Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content

"The Standards for Mathematical Content are a balanced combination of procedure and understanding. Expectations that begin with the word "understand" are often especially good opportunities to connect the practices to the content. Students who lack understanding of a topic may rely on procedures too heavily. Without a flexible base from which to work, they may be less likely to consider analogous problems, represent problems coherently, justify conclusions, apply the mathematics to practical situations, use technology mindfully to work with the mathematics, explain the mathematics accurately to other students, step back for an overview, or deviate from a known procedure to find a shortcut. In short, a lack of understanding effectively prevents a student from engaging in the mathematical practices" (CCSS, 2010).

- Common Core State Standards Initiative, 2010: Mathematics>Introduction>Standards for Mathematical Practice @ Corestandards.org

Grade 3

General Instructions

Purpose

This map was created by 3rd grade teachers as a scope and sequence to guide and support math curriculum planning and instruction for the year. Please adjust as necessary to meet students' needs.

Topics

Topics identified as review are covered in a previous grade. After assessing your students re-teach as necessary.
Topics identified as core must be covered.
Topics identified as enrichment can be used as needed.

Assessment

Topic assessments will be digitally available on SuccessNet CFA accounts. Topic assessment will also be available in PDF form on the District web Math page and Math teacher wiki page.
Pre-Assessments can be a topic assessment, CFA, or of your own design.

Common Core Lessons (CC)

These lessons are part of the common core but not currently presented in enVision math. Each team will receive a paper copy of these lessons. They will also be available digitally on SuccessNet Teacher and CFA accounts.

Common Formative Assessment (CFA)

Be aware that there is a period of time (from a few days to 2 weeks) between the end of instruction and the deadline for completion of CFA's.

CFA #1 by November 11 covers Topics 2, 3, 4
CFA #2 by January 31 covers Topics 5, 6, 7, 8, 9
CFA #3 by March 30 covers Topics 10, 12, 14, 15, 16
CFA #4 by May 18 covers Topics 17, 20

MATH Year-at-a-Glance 2011-2012
3rd Grade

Month	MATH CONCEPTS	TOPICS from EnVision	CFA and CBM ASSESSMENT DATES
September 21 days	**Addition, Subtraction & Rounding** 1. Round to 10 and 100 2. Properties of operations 3. Add and Subtract to 1000 4. Patterns on a 100's chart 5. Solving problems using a number-line	Topic 2 Topic 3	**M-CBM** (M-COMP) Sept. 5 - 13
October 17 days	**Subtraction** 1. Properties of operations 2. Subtract to1000 3. Patterns on a 100's chart 4. Solving problems using a number-line	Topic 4	
November 16 days	**Multiplication--Meanings and Facts** 1. Repeated addition 2. Equal groups, arrays 3. Commutative, associative property 4. Know what each number in the equation represents e.g. 5 x 7 = 5 groups of 7 objects	Topic 5	**CFA #1** November 11 Topics 2-4
December 12 days	**Multiplication Fact Strategies** 1. Multiply one digit numbers by a multiple of 10 up to 100 2. Distributive property 3. Memorize facts 0-9	Topic 6	
January 20 days	**Division Meanings and Facts** 1. Opposite of multiplication 2. Unknown factor 32/8 is k x 8=32 3. Repeated subtraction **Patterns and Relationships** 4. In/Out Table 5. Find the Rule	Topic 7 Topic 8 Topic 9	**CFA #2** January 31 Topics 5-9 **M-CBM** (M-COMP) Jan. 9 - 27

MATH Year-at-a-Glance 2011-2012
3rd Grade

Month	MATH CONCEPTS	TOPICS from EnVision	CFA and CBM ASSESSMENT DATES
February 20 days	**Geometry-Solids and Shapes** 1. Quadrilateral attributes, e.g. rhombus, rectangles, squares **Fractions** 2. 1 part of the whole is portioned into equal parts 3. Fractions on a number line 4. Equivalent fractions with visual representations 5. Know that 4=4/1 and 4/4=1 6. Compare fractions with same denominator 7. 1/2,1/3,1/4,1/6,1/8	Topic 10 Topic 12	
March 18 days	**Measurement--Customary & Metric** **Perimeter, Area, Volume Measurement** 1. Units – grams, kilograms, liters (liquid and masses) **Measurement** 2. Length with ruler: 1/4,1/2, 1 inch **Geometric measurement** 3. Area, square units 4. Write answer in square inch, cm, m, ft, 5. Perimeter of a polygon	Topic 14 Topic 15 Topic 16	**CFA #3** March 30th Topics 10,12, 14, 15, 16
April 16 days	**Time, Data and Graphing** 1. Time to the nearest minute 2. Elapsed Time **Graph** 3. Picture graph 4. Bar graph 5. Line plot	Topic 17 Topic 20	
May 21 days	**Multiplying with Greater Numbers** **Dividing with 1-Digit Numbers**	Topic 18 Topic 19	**CFA #4** May 18 Topics 17, 20 **M-CBM** (M-COMP) May 7 - 25

AUGUST (7 Days)

TOPIC 1 – NUMERATION

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
ASSESS	Beginning of Year Testing/Placement Testing	"Placement Test Master" (from Topic 1 in printable resources)	
REVIEW	Number and Operations in Base Ten Place Value	**Topic 1** **1-1** Hundreds	compare digits expanded form order place value standard form word form
REVIEW	Place Value	**1-2** Thousands	
REVIEW	Place Value	**CC-1** Understanding Number Lines	
REVIEW		**CC-2** Counting on the Number Line * CC available digitally online (new common core lesson)	
REVIEW		**1-5** Comparing Numbers	
REVIEW		**1-6** Ordering Numbers	

SEPTEMBER (21 days)

TOPIC 2 – ADDING WHOLE NUMBERS

TOPIC 3 – SUBTRACTION NUMBER SENSE

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
ASSESS	M-CBM TESTING	M-COMP	SEPTEMBER 5-13
CORE	**Number and Operations in Base Ten:** **Use place value understanding and properties of operations to perform multi-digit arithmetic.** 3. 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.	**Topic 2** **2-1** Number Sense: Addition Meaning and Properties	addends sum commutative (order) property of addition identity (zero) property of addition associative property of addition (grouping) fact family difference round estimate equation
CORE	3. NBT. 2	**2-2** Number Sense: Adding on a Hundred Chart	
EXTEND	3. NBT. 2	**2-3** Number Sense: Using Mental Math to Add.	
CORE	3. NBT. 1. Use place value understanding to round whole numbers to the nearest 10 or 100	**2-4** Number Sense: Rounding	
EXTEND	3. NBT. 1	**2-5** Number Sense: Estimating Sums	
CORE	3. NBT. 2	**2-6** Addition: Adding Two Digit Numbers	
CORE		**CC-3** Adding with an Expanded Algorithm	

CORE	3. NBT. 2	**2-7** Addition: Models for adding two digit numbers	
CORE	3. NBT. 2	**2-8** Addition: Adding 3 digit numbers	
CORE	3. NBT. 2	**2-9** Addition: Adding 3 or more numbers	
CORE	3. NBT. 2	**Topic 3** **3-1** Number Sense: Subtraction Meanings	
EXTEND	3. NBT. 2	**3-2** Number Sense: Subtracting on a hundreds chart	
CORE	3. NBT. 2	**3-3** Number Sense: Using mental math to subtract	
REVIEW	2. NBT. 2	**3-4** Estimating Differences	
CORE	3.NBT.2, 3.OA.8	**3-5** Problem Solving: Reasonableness	
REVIEW	Differentiation Days	Reteach or extend as needed	Days for reteaching/differentiating either before or after assessment.

OCTOBER (17 days)

TOPIC 4 – SUBTRACTING WHOLE NUMBERS TO SOLVE PROBLEMS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE	**Number and operations in base ten: Use place value understanding and properties of operations to perform multi-digit arithmetic.** 3. 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.	**Topic 4** **CC-4** Making Sense of Addition and Subtraction Equations * CC available digitally online (new common core lesson)	difference
CORE	3. NBT. 2	**4-1** Subtraction: Models for subtracting 2-digit numbers	
CORE	3. NBT. 2	**4-2** Subtraction: Subtracting 2-digit number	
CORE	3. NBT. 2	**4-3** Subtraction: Models for subtracting 3-digit numbers	
CORE	3. NBT. 2	**4-4** Subtraction: Subtracting 3 Digit Numbers	
CORE	3. NBT. 2	**4-5** Subtraction: Subtracting Across Zero	
CORE	3. NBT. 2	**4-6** Problem Solving: Draw a Picture and Write a Number Sentence	
REVIEW		Reteach or extend as needed	Days for reteaching/differentiating either before or after testing.

NOVEMBER (16 days)

TOPIC 5 – MULTIPLICATION MEANING AND FACTS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
ASSESS	CFA #1	Topics 1-4	Completed by November 11
CORE	3.OA.1 **Operations and Algebraic Thinking**: **Represent and solve problems involving multiplication and division.** 3.OA.1 Interpret products of whole numbers, e.g., interpret 5x7 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 x 7.	**Topic 5** **5-1** Number Sense: Multiplication as Repeated Addition	multiplication factors product array commutative (order) property of multiplication multiples
CORE	3.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. 3.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 x ? = 48, 5 = □ ÷ 3, 6 x 6 = ? **Understand properties of multiplication and the relationship between multiplication and division.** 3.OA.5 Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.)	**5-2** Number Sense- Arrays and Multiplication	

	Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)	
CORE	3.OA.1, 3, 5	**CC-6** The Commutative Property * CC available digitally online (new common core lesson)
CORE	3.OA.1 3.OA.3	**5-3** Number Sense: Using Multiplication to Compare
CORE	3.OA.3	**5-4** Writing Multiplication Stories
CORE	3.OA.9 **Solve problems involving the four operations, and identify and explain patterns in arithmetic.** Identify arithmetic patterns (including patterns in the addition tabl multiplication table), and explain them using properties of operati For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equa addends. 3.OA.8 **Solve problems involving the four operations, and identify and explain patterns in arithmetic.** 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. 3.OA.7 **Multiply and divide within 100.** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8x5=40, one knows 40÷ 5=8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit	**5-6** Multiplication: 2 & 5 as Factors

	numbers.		
CORE	3.OA.9 3.OA.8 3.OA.7	**5-7** Multiplication: 10 as a Factor	
CORE	3.OA.9 3.OA.8 3.OA.7	**CC-7** Multiplying by Multiples of 10 * CC available digitally online (new common core lesson)	
CORE	3.OA.9 3.OA.8 3.OA.7	**5-8** Multiplication: 9 as a Factor	
CORE	3.OA.9 3.OA.8 3.OA.7	**5-9** Multiplying with 0 & 1	
CORE	3.OA.9 3.OA.8 3.OA.7	**5-10** Two-question problems	
REVIEW	Differentiation Days	Reteach or extend as needed	Days for reteaching/differentiating either before or after assessment.

DECEMBER (12 days)

TOPIC 6 – MULTIPLICATION FACT STRATEGIES: USE KNOWN FACTS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE	3.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.	**Topic 6** **CC-8** The Distributive Property * CC available digitally online (new common core lesson)	distributive property of multiplication associative (grouping) property of multiplication factor product array multiples
CORE	3.OA.9 3.OA.7	**6-1** Multiplication: 3 as a factor	
CORE	3.OA.9 3.OA.7	**6-2** Multiplication: 4 as a Factor	
CORE	3.OA.9 3.OA.7	**6-3** Multiplication: 6 & 7 as a Factor	
CORE	3.OA.9 3.OA.7	**6-4** Multiplication: 8 as a Factor	
CORE	3.OA.5 Associative Property	**6-6** Multiplication: Multiply with 3 factors	
CORE	3.OA.3	**CC-9** Multiplying to Find Combinations * CC available digitally online (new common core lesson)	
CORE	3.OA.8	**6-7** Problem Solving- Multiple Step Problems	
REVIEW	Differentiation Days	Reteach/Extend as needed	Days for reteaching/differentiating either before or after testing.

JANUARY (20 days)

TOPIC 7 – DIVISION MEANINGS
TOPIC 8 – DIVISION FACTS
TOPIC 9 - PATTERNS & RELATIONSHIPS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
ASSESS	M-CBM TESTING	M-COMP	January 9-27
CORE	3.OA.2 **Represent and solve problems involving multiplication and division.** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 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 ÷ 8. 3.OA.3 3.OA.4	**Topic 7** **7-1** Number Sense: Division As Sharing	division divisor dividend quotient
EXTEND	3.OA. 2; 3.OA.3	**7-2** Understanding Remainders	
CORE	3.OA.4; 3.OA.6	**CC-10** Finding Missing Numbers in a Multiplication Table * CC available digitally online (new common core lesson)	
CORE	3.OA.4; 3.OA.6	**CC-11** Problem Solving: Choose an Appropriate Equation * CC available digitally online	

		(new common core lesson)	
CORE	3.OA.3	**7-3** Number Sense: Division as Repeated Subtraction	
EXTEND	3.OA.2	**7-4** Writing Division Stories	
CORE	3.OA.4 3.OA.6 **Understand properties of multiplication and the relationship between multiplication and division.** Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. 3.OA.7	**Topic 8** **8-1** Division: Relating Multiplication and Division	dividend divisor quotient
CORE	3.OA.3 3.OA.4	**8-2** Division: Fact Families with 2,3,4, and 5	Use symbols for the unknown Divide to 100: same as multiplication (see 3.OA.7)
CORE	3.OA.3 3.OA.4	**8-3** Division: Fact Families with 6 & 7	
CORE	3.OA.3 3.OA.4	**8-4** Division: Fact Families with 8 & 9	
CORE	3.OA.3; 3.OA.4	**CC-12** Making Sense of Multiplication and Division Equations * CC available digitally online (new common core lesson)	

CORE	3.OA.3 3.OA.4	**8-5** Division: Fact Families with 0 & 1	
CORE	3.OA.3 3.OA.4	**8-6** Problem Solving- Draw A Picture and Write a Number Sentence	
CORE	3.OA.9 **Solve problems involving the four operations, and identify and explain patterns in arithmetic.** 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	**9-2** Number Sequences	
CORE	3.0A.9	**9-3** Extending Tables	
EXTEND	3.0A.9	**9-4** Writing Rules for Situations	
CORE	3.0A.9	**9-6** Geometric Patterns	
REVIEW	Differentiation Days	Reteach or extend as needed	Days for reteaching/differentiating either before or after testing.
ASSESS	CFA #2	Topics 5, 6, 7, 8, 9	Completed by January 31

FEBRUARY (20 days)

TOPIC 10 – SOLIDS AND SHAPES

TOPIC 12 – UNDERSTANDING FRACTIONS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
REVIEW		**Topic 10** **10-3** Lines and Line Segments	point line line segment intersecting lines parallel
REVIEW		**10-5** Polygons	polygon side vertex quadrilateral
CORE		**10-7** Quadrilaterals	rhombus rectangle square parallelogram trapezoid
CORE	3.G.1, 3.G.2	**CC-13** Combining and Separating Shapes * CC available digitally online (new common core lesson)	
CORE	3.G.1, 3.G.2	**CC-14** Making New Shapes	

		* CC available digitally online (new common core lesson)	
CORE	3. 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 equal parts with equal area, and describe the area of each part as 1/4 of the area of the shape. Third grade is limited to fractions with denominators 2, 3, 4, 6, 8.	**Topic 12** **12-1** Fractions: Dividing Regions into Equal Parts	halves (½) thirds (1/3) fourths (¼) sixths (1/6) eighths (⅛) fraction numerator denominator equivalent fractions equal parts
CORE		**CC-15** Unit Fractions and Regions * CC available digitally online (new common core lesson)	
CORE	**Number and operations-Fractions** **Develop understanding of fractions as numbers.** 3. NF. 1 Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b	**12-2** Fractions: Fractions and Regions	
CORE	3.NF.1	**12-3** Fractions: Fractions and sets	
CORE	3. NF. 2 Understand a Fraction as a number on the number line; represent fractions on a number line diagram. a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole	**12-4** Fractions: Benchmark Fractions	

	and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line. b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. 3.NF.2		
CORE	3.NF.3.d	**CC-16** Comparing Fractions Using Benchmarks * CC available digitally online (new common core lesson)	
CORE	3. NF. 3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	**12-5** Fractions: Finding Equivalent Fractions	
CORE	c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.	**12-6** Fractions: Using Models to Compare Fractions	

CORE	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.	**CC-17** Using Models to Compare Fractions: Same Numerator * CC available digitally online (new common core lesson)	
CORE/EXTEND		**12-7** Fractions: Fractions on the Number Line	
CORE	3.NF.2.a, 3.NF.3.d	**CC-18** Comparing Fractions on the Number Line * CC available digitally online (new common core lesson)	
CORE	3.NF.3.a, 3.NF.3.b, 3.NF.3.c	**CC-19** Equivalent Fractions and the Number Line * CC available digitally online (new common core lesson)	
CORE	3.NF.3.c	**CC-20** Whole Numbers and Fractions * CC available digitally online (new common core lesson)	
REVIEW	Differentiation Days	Reteach or extend as needed	Days for reteaching/differentiating either before or after testing.

MARCH (18 days)

TOPIC 14 – CUSTOMARY MEASUREMENT
TOPIC 15 – METRIC MEASUREMENT
TOPIC 16 – PERIMETER, AREA, VOLUME

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE	**Measurement and Data** **Represent and interpret data.** 3.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.	**Topic 14**	inch fractions of an inch line plot
CORE	3.MD.4	**14-1** Understanding Measurement	
CORE	3.MD.4	**14-2** Fractions of an Inch	
CORE	**Measurement and Data** **Solving Problems Involving Measurement and estimation of intervals of time, liquid volumes, and masses of objects.** 3.MD.2 Measure and estimate liquid volumes and masses of objects using standards units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems in the same units, e.g., by using drawings (such as beaker with a measurement scale) to represent the problem.	**Topic 15** **15-3** Metric Units of Capacity	(milliliters- not in common core) liter grams kilograms volume mass
CORE	3.MD.2	**15-4** Units of Mass	
CORE	3.MD.2	**CC-21** Problem Solving: Draw a Picture * CC available digitally online	

		(new common core lesson)	
CORE	**Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.** 3.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.	**Topic 16** **16-1** Understanding Perimeter	perimeter area square unit
CORE	3.MD.8	**CC-22** Tools and Units for Perimeter * CC available digitally online (new common core lesson)	
CORE	3.MD.8	**16-2** Perimeter of Common Shapes	
CORE	3.MD.8	**16-3** Measurement: Different Shapes with the Same Perimeter	
CORE	**Geometric Measurement: understand concepts of area and relate area to multiplication and to addition.** 3.MD.5 Recognize area as an attribute of plane figures and understands concepts of area measurement. 3.MD.5a 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. 3.MD.5b A plane figure that can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.	**16-5** Measurement: Understanding Area	
CORE	3.MD.5.a, 3.MD.6	**CC-23** Covering Regions * CC available digitally online (new common core lesson)	

CORE	3.MD.5.a, 3.MD.6	**CC-24** Area and Units * CC available digitally online (new common core lesson)	
CORE	3.MD.7.a, 3.MD.7.b	**CC-25** Area of Squares and Rectangles * CC available digitally online (new common core lesson)	
CORE	3.MD.7.c	**CC-26** Area and the Distributive Property * CC available digitally online (new common core lesson)	
CORE	3.MD.7.c	**CC-27** Area and Irregular Shapes * CC available digitally online (new common core lesson)	
CORE	3.G.2, 3.MD.5	**CC-28** Equal Areas and Fractions * CC available digitally online (new common core lesson)	
CORE	3.MD.7d	**16-8** Problem Solving--Solve a Simpler Problem	
REVIEW	Differentiation Days	Reteach or extend as needed	Days for reteaching/differentiating either before or after testing.
ASSESS	CFA #3	Topics 10, 12, 14, 15, 16	Completed by March 30

APRIL (16 days)

TOPIC 17 – TIME

TOPIC 20 – DATA, GRAPHS AND PROBABILITY

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE	**Measurement and Data:** **Solve Problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.** 3.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.	**Topic 17**	hour half hour quarter hour minute a.m. p.m. elapsed time
CORE	3.MD.1	**17-2** Time to the Minute	
CORE	3.MD.1	**17-4** Elapsed Time	
CORE	3.MD.1	**17-6** Problem-Solving: Work Backward--elapsed time	
CORE	**Represent and interpret data** 3.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.	**Topic 20** **20-2** Statistics: Reading pictographs and bar graphs	pictograph bar graph line plot key scale data

CORE	3.MD.3	**20-3** Making Pictographs	
CORE	3.MD.3	**20-4** Making bar graphs	
EXTEND	3.MD.4	**20-8** Line Plots and Probability	
CORE	3.MD.4	**CC-29** PS: Length and Line Plots * CC available digitally online (new common core lesson)	
CORE	3.MD.3	**20-9** Problem Solving--Use tables and graphs to draw conclusions	
REVIEW	Differentiation Days	Reteach or extend as needed	Days for reteaching/differentiating either before or after testing.

MAY (21 days)

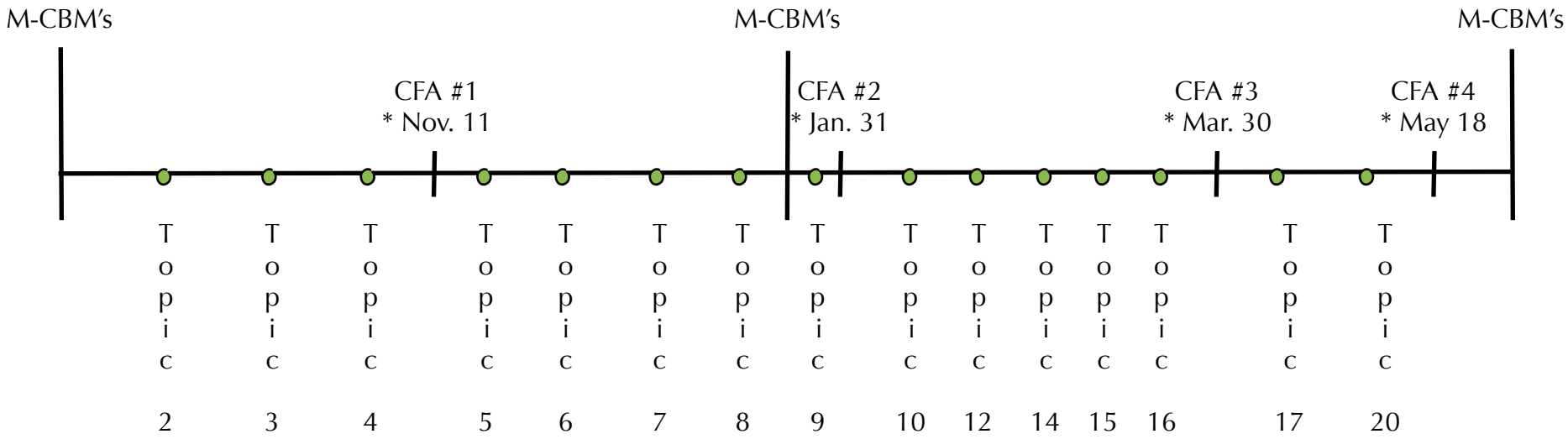
TOPIC 18 – MULTIPLYING WITH GREATER NUMBERS

TOPIC 19 – DIVIDING WITH 1-DIGIT NUMBERS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
ASSESS	M-CBM TESTING WINDOW	M-COMP	May 7 - 25
ASSESS	CFA #4	Topics 17, 20	Completed by May 18
REVIEW		Review & Assessment	CRT Testing Window
EXTEND	**Step up to 4th grade:** 4th grade Common Core	**18-2** Multiplication: Estimating Products	
EXTEND	4th grade Common Core	**18-3** Multiplication: Multiplication and Arrays	
EXTEND	4th grade Common Core	**18-4** Multiplication: Breaking Apart to Multiply	
EXTEND	4th grade Common Core	**18-5** Multiplication: Using an Expanded Algorithm	
EXTEND	4th grade Common Core	**18-6** Multiplication: Multiplying 2- and 3-Digit by 1-Digit Numbers	
EXTEND	4th grade Common Core	**19-1** Division: Mental Math	
EXTEND	4th grade Common Core	**19-2** Division: Estimating Quotients	
EXTEND	4th grade Common Core	**19-3** Division: Connecting Models and Symbols	
EXTEND	4th grade Common Core	**19-4** Division: Dividing 2-Digit Numbers	
EXTEND	4th grade Common Core	**19-5** Division: Dividing with Remainders	

EXTEND	3.OA.3	**19-6** Problem Solving: Multiple-Step Problems	
REVIEW	Differentiation Days	Reteach or extend as needed	Days for reteaching/differentiating either before or after testing.

3rd grade
CSD Math Assessment
Continuum
2011-12



= optional assessment

* Please submit quarterly CFA scores to your school principal by this date.

3rd Grade CCSS Vocabulary Word List

Revised 6/29/11

addend	equivalent fractions
algorithm	estimate
a.m.	evaluate
area	expression
area model	fact family
arithmetic patterns	factor
array	foot
Associative Property of Addition	fourths
Associative Property of Multiplication	fraction
attribute	gram
bar graph	greater than
centimeter	half hour
Commutative Property of Addition	halves
Commutative Property of Multiplication	hexagon
compare	hour
compose	Identity Property of Addition
congruent	Identity Property of Multiplication
customary system	inch
data	is not equal to
decompose	key
denominator	kilogram
digit	less than
difference	line
Distributive Property	line plot
divide	line segment
dividend	liter
divisor	mass
eighths	meter
elapsed time	metric system
endpoint	minute
equal	multiple
equal groups	multiply
equation	number line

3rd Grade CCSS Vocabulary Word List

Revised 6/29/11

numerator	parallel lines
Order of Operations	parallelogram
parentheses	sequence
pattern	side of a polygon
perimeter	sixths
picture graph	square
place value	square unit
plane figure	standard form
p.m.	subtract
Point	sum
polygon	thirds
product	tiling
quadrilateral	time interval
quarter hour	trapezoid
quotient	triangle
reasonableness	two-dimensional
rectangle	unit fraction
rectilinear figure	vertex (vertices)
related facts	volume (liquid)
remainder	whole numbers
rhombus	word form
round a whole number	yard
scale on a graph	Zero Property of Multiplication

The Core and MORE Instruction Checklist

The CCSS Standard:
The Envision Lesson:

EXPLICIT INSTRUCTION I do it, We do it, Y'all do it, You do it	ENGAGEMENT All Students Saying, Writing, Doing
PROACTIVE PLANNING	**VOCABULARY WORDS**
The following questions should be considered for each part of the lesson: - What are the predictable failures for this lesson? (conceptually and behaviorally) - How will you prevent these failures? - What will you do to maintain consistency? - How will you know if it is working?	

❒ cumulative review	❒ higher-order thinking, ask why	❒ have students visualize, draw, model	❒ real-world contexts
❒ math vocabulary	❒ milk the data	❒ incorporate measurement	❒ number sense

ANTICIPATORY SET	(5 MINUTES)
Choose from the many options: ❑ *Review What You Know* ❑ *Interactive Math Stories* ❑ Math Journaling ❑ *Spiral Review* ❑ *Problem of the Day*	❑ Choral Responses ❑ Partner Responses ❑ Written Responses ❑ Random call on students (No hand raising)

BUILDING A FOUNDATION	(5-10 MINUTES)
The Language of Math: Vocabulary instruction 1- How will you explicitly teach new vocabulary? 2- How will you provide multiple opportunities for vocabulary to be used in context?	❑ Choral Responses ❑ Partner Responses ❑ Written Responses ❑ Random call on students (No hand raising)
WHOLE GROUP INSTRUCTION: Concrete	(10-15 MINUTES)
Develop the Concept: Interactive Learning (Hands-on) 1- What materials/manipulatives will you need? 2- Will each student have enough materials to model the problems? -If they do not, will you have them pair up or adjust the problems? 3- Where will students record their work during this phase of the lesson? 4- How will you check for understanding during this phase of the lesson? 5- Will you use the *Extend?* 6- Will you use the *Link to Investigations*?	❑ Choral Responses ❑ Partner Responses ❑ Written Responses ❑ Paper ❑ Math Journal ❑ Individual Whiteboards ❑ Student page from the topic pouch ❑ Random call on students (No hand raising)
SCAFFOLDED INSTRUCTION: Representational	(15-20 MINUTES)
Develop the Concept: Visual The *Visual Learning* Bridge, at the top of each lesson, is critical to connecting the Concrete to the Representational and then to the Abstract. Look for *Prevent Misconceptions*. Choose one option: ❑ *Visual Learning Animation* (on-line or CD) ❑ Overhead Transparency ❑ *Visual Learning* Bridge in Student textbook ❑ Document camera 1- Check for understanding during the *Guided Practice*.	❑ Choral Responses ❑ Partner Responses ❑ Written Responses ❑ Random call on students (No hand raising)

2- Where will students record their work?
3- If most students are struggling during this phase of the lesson, what will you do?
   - ❑ Reteach explicitly with various problems from the *Guided* or *Independent Practice* or the *Reteaching* sets at the back of the *Topic Guide*.
   - ❑ Use lessons from *Meeting Individual Needs*.
   - ❑ Use the *Differentiated Instruction: Intervention* lesson.
4- Will some of the problems from the *Problem Solving* be included in your *Guided Practice* or *Independent Practice*?

INDEPENDENT PRACTICE: ABSTRACT (15-20 MINUTES)

Independent Practice and *Problem Solving*

1- Which problems will you assign?
2- Where will students record their work?
3- Will you collect, grade and record the independent practice?
4- How will you check for understanding?
5- If students do not finish the problems assigned for independent practice, will these problems be homework?

- ❑ Choral Responses
- ❑ Partner Responses
- ❑ Written Responses
- ❑ Random call on students (No hand raising)

FORMATIVE ASSESSMENT (5-10 MINUTES)

Concept Understanding

- ❑ PLC/Grade-Level common formative assessment
- ❑ *Quick Check* (in *Teacher Resource Masters)*
- ❑ *Writing to Explain*
- ❑ *Mind Game Quiz Show*
- ❑ Student buzzers or AverPens

Formative Assessment Tools

- ❑ *Topic tests* (online or in text)
- ❑ *Item Analysis for Diagnosis and Intervention*
- ❑ *Free-Response Test*
- ❑ *Performance Assessment*
- ❑ CBM-Math
- ❑ PLC/Grade-Level common formative assessment
- ❑ Other assessment tool

End of each Quarter:

- ❑ *District Common Formative Assessment* (CFA)

CENTER ACTIVITIES (15 - 45 MINUTES)

*This part of the lesson is beneficial for providing engaging activities while the teacher works with small groups of students who need supplemental instruction.

Choose from the many options:

- ❑ *Differentiated Instruction*
- ❑ *Math Project*
- ❑ *Meeting Individual Needs*
- ❑ Teacher-led interventions
- ❑ *Leveled Homework*
- ❑ Online games from *Envision Digital Premium*

1- Will you do these activities and if so, when?
2- When will you give directions on how to play?
3- What materials will be needed for the activities?
4- Will you work with the Intervention group?
5- How will you determine which activities will be assigned to each group of students?

HOMEWORK

Choose from the many options:

- ❑ Finish *Independent Practice* and/or *Problem Solving* assignment
- ❑ *Spiral Review*
- ❑ *Quick Check*
- ❑ *Leveled Homework*
- ❑ Online games from *Envision Digital Premium*
- ❑ Online tutorials from *Envision Digital Premium*

1- Will you collect and grade homework?
2- Will you discuss homework? Is so, when?