

MATH CURRICULUM MAP 2013-14

with enVisionMath

2nd Grade



CANYONS
School District

SECOND GRADE ENVISION MATH CURRICULUM MAP
CANYONS SCHOOL DISTRICT
2013 – 2014

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
<i>What do students know?</i>	<i>What concepts and skills do students need to know?</i>	<i>How will students learn the standards?</i>	<i>What vocabulary is necessary for depth of understanding?</i>

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:

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General Information

2nd Grade

Purpose

This map was created by grade level teachers as a scope and sequence to guide and support math curriculum planning and instruction for the year.

Topics

Topics identified as review are covered in a previous grade and may be used as necessary. Topics identified as core must be covered. Topics identified as not in grade-level core should be used sparingly and only if the grade-level core has been sufficiently taught and mastered.

Common Core Lessons (CC)

Common Core lessons have been added to better align enVision 2011 to the Common Core State Standards. CC lessons can be accessed through SuccessNet's "Teacher Resources" by clicking on "Transitioning to Common Core with envision Math."

SuccessNet

SuccessNet is the digital platform for enVisionMATH. Each teacher has 2 SuccessNet accounts:

- Teaching Account—this account houses the 2011 enVisionMATH digital resources adopted by Canyons School District. This account is used for math instruction, lesson planning, lesson videos, topic or weekly tests, etc. This account can also be used to customize assessments for classroom use. Teachers are responsible for setting up their own SuccessNet accounts so that they can choose their log-in and passwords.
- Team CFA Account—this account is used for quarterly CFA administration and reports. Though this account houses the 2012 enVisionMATH resources, we have not adopted these materials and only have permission from Pearson to use this account for assessment purposes. The log-in is: SchoolNameGrade. The password is: CSDcfa.

Common Formative Assessment (CFA)

CFA's are an informational assessment for you as a teacher. The data should be used to help guide and inform your instruction. *For example:* Which problem(s) did all students get correct? Which problem(s) did a lot of students miss? What concepts need to be re-taught? 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. These assessments may be taken any time before the date specified.

CFA #1 by early November covers Topics 1, 2, 3, 4

CFA #2 by end of January covers Topics 5, 6, 7, 8

CFA #3 by end of March covers Topics 9, 10, 11, 12, 13

CFA #4 by middle of May covers Topics 15, 16, 17

Cumulative Review

It is critical to provide an ongoing review of previously taught concepts and skills. Teacher-directed, interactive reviews daily are ideal. EnVision includes a Daily Spiral Review that should be utilized for this purpose.

Homework

The struggle to develop new concepts should occur while the teacher is available to support and scaffold the learning and correct students' errors in thinking. Work that is sent home for students to complete should consist of concepts that have already been taught in class, been practiced, and the student can already do independently. Math homework should be for ***practice of learned skills*** and not for development of new skills. Practicing concepts incorrectly at home can reinforce errors in thinking and cause frustration for students and families. Practicing the skill to automaticity with homework assignments is appropriate ***after*** students have acquired the skill.

Canyons School District Academic Framework to Support Effective Instruction

Response to Intervention (RtI): Multi-Tiered System of Supports (MTSS) for Academics and Behavior			
RtI	(1) providing high quality core instruction (and intervention) matched to students' needs	(2) using data over time (i.e. rate of learning, level of performance, fidelity of implementation)	(3) to make important educational decisions.
CSD Student Achievement Principles	<ul style="list-style-type: none"> ALL CSD students and educators are part of ONE proactive educational system. Evidence-based instruction and interventions are aligned with rigorous content standards. 	<ul style="list-style-type: none"> Data are used to guide instructional decisions, align curriculum horizontally and vertically, and allocate resources. CSD educators use instructionally relevant assessments that are reliable and valid. 	<ul style="list-style-type: none"> CSD educators problem solve collaboratively to meet student needs.
	<ul style="list-style-type: none"> Quality professional development supports effective instruction for ALL students. Leadership at all levels is vital. 		

Core Expectations for ALL students in the General Education Classrooms and Common Areas					
Curriculum (Standards and Materials)	Evidence-Based Instructional Priorities	Time Allocation	Data Collection and Use	Fidelity of Implementation	Data-based Decision Making
<ul style="list-style-type: none"> Big ideas, bodies of knowledge Content standards and expectations aligned with the Utah Core Standards World-Class Instructional Design and Assessment (WIDA) Schoolwide Positive Behavioral Interventions and Supports Prioritized Curriculum Maps and Scientific, research-based programs National Educational Technology Standards (NETS) 	<ul style="list-style-type: none"> Explicit instruction (I, We, Ya'll, You) Maximizing opportunities to respond Feedback Vocabulary Scaffolded instruction & grouping structures Acquisition, automaticity, then application Classroom Positive Behavioral Interventions and Supports 	<ul style="list-style-type: none"> Daily maximization of instructional time English Language Development (ELD) time Building Leadership Team (BLT) meetings Protected time for grade level and/or department team learning & planning Establish rules, routines, and arrangements to increase efficiency for adults and students Working smarter, not harder 	<ul style="list-style-type: none"> Consistent evaluation of Core instruction Districtwide screening of key academic and behavior skills Benchmark assessments Progress monitoring Formative assessment practices (CFAs) Summative assessment practices Early warning system for identification of risk (academic, social, and performance) Timely and consistent review of relevant data 	<ul style="list-style-type: none"> Monitoring and evaluating effectiveness of implementation using formalized protocols (e.g. Walk-Throughs, fidelity checks) Instructional and Peer Coaching supports Products to demonstrate evidence of implementation 	<p>Use problem solving protocol to:</p> <ul style="list-style-type: none"> Evaluate the effectiveness of Core/ Initial instruction (>80% proficiency) for all subgroups and maintain or adjust Analyze trends to inform decisions Evaluate and adjust CSIP Determine needs for supplemental instruction
On-going, targeted professional development					

Evidence-Based Instructional Priorities
Applied to Math Instruction

Explicit Instruction I Do - We Do - Y'all Do - You Do Model - Guide Practice – Partner - Independent			
Systematic <ul style="list-style-type: none"> <input type="checkbox"/> Focused on critical content <input type="checkbox"/> Skills, strategies, and concepts are sequenced logically <input type="checkbox"/> Break down complex skills <input type="checkbox"/> Lessons are organized and focused <input type="checkbox"/> Instructional routines are used <input type="checkbox"/> Examples and non-examples <input type="checkbox"/> Step-by-step demonstrations <input type="checkbox"/> C-R-A Model 	Relentless <ul style="list-style-type: none"> <input type="checkbox"/> Adequate initial practice NOTE: Students who struggle may require 10-30 more times as many practice opportunities than their peers. <input type="checkbox"/> Distributed practice--frequent exposure to content/skill over time <input type="checkbox"/> Daily review <input type="checkbox"/> Daily focus on number sense and problem solving <input type="checkbox"/> Teach to mastery <input type="checkbox"/> Cumulative review periodically 	Engaging <ul style="list-style-type: none"> <input type="checkbox"/> Increasing Opportunities to Respond <input type="checkbox"/> Explicit Vocabulary Instruction <input type="checkbox"/> Feedback <input type="checkbox"/> Instructional Grouping <input type="checkbox"/> Acquire – Auto – Apply <input type="checkbox"/> Classroom PBIS <input type="checkbox"/> Create various contexts for problem solving that students can relate to <input type="checkbox"/> Pacing 	
Increasing Opportunities to Respond <i>Saying, Writing, Doing</i>		Explicit Vocabulary Instruction	
<ul style="list-style-type: none"> <input type="checkbox"/> Choral Responses: give think time, use a signal for response, repeat if all students don't respond <input type="checkbox"/> Partner Sharing: Look-Lean-Whisper; Think-Pair-Share; Study-Tell-Help-Check <input type="checkbox"/> Individual Responses: give wait time, individual shares after partner discussion, Cold Call, random calling pattern <input type="checkbox"/> Math Journals: Quick Writes, vocabulary practice, draw visuals of math concepts <input type="checkbox"/> Individual White Boards: use a signal for displaying, establish a routine, provide feedback <input type="checkbox"/> Manipulatives: establish a routine, explain expectations, all students interact with materials, provide visual bridge to concept <input type="checkbox"/> Response Cards: yes/no; odd/even; +/-; $</>/=$; etc. <input type="checkbox"/> Action Responses: thumbs up/down; modeling operations, angles, or other math concepts, act it out, hand signals 		<ul style="list-style-type: none"> <input type="checkbox"/> Introduce the word <ul style="list-style-type: none"> • Teacher says the word and posts the word • All students repeat the word • Teacher gives a child-friendly definition • All students repeat the definition (with teacher guidance) • Repeat above steps as necessary <input type="checkbox"/> Demonstrate <ul style="list-style-type: none"> • Provide an example • Provide a non-example • Repeat above steps as necessary <input type="checkbox"/> Apply <ul style="list-style-type: none"> • Students turn to a partner and use the word in a sentence • Teacher shares a sentence using the word <input type="checkbox"/> Vocabulary Cards: Grade-level vocabulary cards available on the math website; posted on Word Wall 	
Feedback <ul style="list-style-type: none"> <input type="checkbox"/> Corrective and Affirmative <input type="checkbox"/> Timely and Frequent <input type="checkbox"/> Specific and Reinforcing 	Instructional Grouping <ul style="list-style-type: none"> <input type="checkbox"/> Whole group, Small groups, Partners <input type="checkbox"/> Fluid and flexible <input type="checkbox"/> Skill-Based Small Group Instruction for identified skill gaps or extension 	Acquire – Auto – Apply <ul style="list-style-type: none"> <input type="checkbox"/> Learn (acquire) the skill <input type="checkbox"/> Build the skill to automaticity <input type="checkbox"/> Attend to fluency standards in the core <input type="checkbox"/> Apply the skill 	Classroom PBIS <ul style="list-style-type: none"> <input type="checkbox"/> Forming clear behavior expectations <input type="checkbox"/> Explicitly teaching expectations to students <input type="checkbox"/> Reinforcing expectations with students <input type="checkbox"/> Correcting of problem behaviors in a systematic manner

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

Second Grade Overview

Operations and Algebraic Thinking (2.OA)

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

Number and Operations in Base Ten (2.NBT)

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data (2.MD)

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

Geometry (2.G)

- Reason with shapes and their attributes..

Four Critical Areas

In Grade 2, instructional time should focus on four critical areas:

- extending understanding of base-ten notation;
- building fluency with addition and subtraction;
- using standard units of measure; and
- describing and analyzing 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

I- Canyons Report Card Standards Second Grade

Academic Standards

M = Mastered

NYM = Not Yet Mastered

* = Not Assessed

Mathematics



Term1 Term2 Term3

Operation and Algebraic Thinking: I can...

- Add and subtract word problems within 100
- Fluently add within 20
- Fluently subtract within 20
- Determine if a group of objects is odd or even

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*	*	*
*	*	*
*	*	*

Numbers and Operations Base Ten: I can...

- Understand place value to the hundreds place
- Skip count by 5's, 10's and 100's
- Read and write numbers to the 1000's place
- Compare numbers using the <, >, and = signs
- Add or subtract to 1000 using models
- Mentally add and subtract 10 or 100 to a given number
- Add 2 digit numbers with and without regrouping
- Subtract 2 digit numbers with and without grouping

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Measurement and Data: I can...

- Estimate and measure lengths using customary and metric units
- Use addition and subtraction to identify and measure length
- Tell and write time to the nearest 5 minutes using analog and digital clocks
- Solve problems involving money using the correct symbols
- Collect and plot measurement data on a line
- Draw picture graphs and bar graphs to represent data

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Geometry: I can...

- Recognize and draw shapes having specific characteristics
- Divide a circle and rectangle into two, three and four equal parts

*	*	*
*	*	*

CSD Math Block 90 Minutes Daily

Math Practices			
<ul style="list-style-type: none"> ✓ Provide realistic problems and real-world contexts ✓ Create Language-rich classroom routines ✓ Incorporate high-order thinking through questioning ✓ Increase the use of measurement 		<ul style="list-style-type: none"> ✓ Build from graphs, charts, and tables – Milk the data ✓ Develop number sense at every opportunity ✓ Have students visualize, draw, and model concepts ✓ Increase opportunities to respond and feedback 	
Numeracy Component	Range of Time	Focus of Instruction	Instructional Materials
Review or Preteach	10-25 minutes	<ul style="list-style-type: none"> • Review • Pre-teach upcoming concepts 	<ul style="list-style-type: none"> • Problem of the Day • Daily Spiral Review
Vocabulary and Fluency Practice	5-10 minutes	<ul style="list-style-type: none"> • Teach Appropriate Vocabulary • Build Fluency with math facts and computation 	<ul style="list-style-type: none"> • Vocabulary Word Cards • Computation Fluency Masters
Concept/Skill Development and Application	30-45 minutes	<p>Develop the Concept:</p> <p><u>Concrete:</u> Hands-on <u>Representational:</u> Visual <u>Abstract:</u> Symbolic</p>	<ul style="list-style-type: none"> • Interactive Learning • Visual Learning Bridge • Guided Practice
Independent Practice and/or Small Group: Reteach or Extend	15-20 minutes	<ul style="list-style-type: none"> • Students practice concept independently as appropriate • Reteach with small groups of students who need extra support/scaffolding • Provide extension opportunities based on that concept/skill for students who have shown mastery of the concept/skill 	<ul style="list-style-type: none"> • Problems from Independent Practice and Problem Solving • Practice, Reteach, and Enrichment pages • Differentiated Center materials • Math Diagnosis and Intervention System
Assessment	Time Varies	<ul style="list-style-type: none"> • Monitor progress towards mastery of grade-level core standards 	<ul style="list-style-type: none"> • Teacher Observation • Independent Assignments • District and School CFAs • Topic Tests • Progress Monitoring

(**Bolded** items should be part of a daily math lesson.)



MATH Year-at-a-Glance 2013 - 2014

2nd Grade

Month	MATH CONCEPTS	TOPICS from EnVision	CFA and CBM ASSESSMENT DATES
August & September Days: 30	Understanding Addition and Subtraction Addition Strategies Subtraction Strategies	Topic 1 Topic 2 Topic 3	M-CBM (M-Comp & M-CAP)
October Days: 21	Place Value: Numbers to 100 1. Models for tens and ones 2. Comparing and ordering numbers 3. Number patterns on hundred chart	Topic 4	
November & December Days: 31	Counting Money Mental Addition Mental Subtraction 1. Dollar bill, quarter, dime, nickel, penny 2. Counting collections of coins 3. Adding and subtracting tens and ones 4. Adding and subtracting on the hundreds board	Topic 5 Topic 6 Topic 7	CFA #1 November 8 (Topics 1-4)
January Days: 19	Adding Two-Digit Numbers Subtracting Two-Digit Numbers 1. Regrouping tens and ones 2. Models to add and subtract 3. Using number lines to add and subtract	Topic 8 Topic 9	CFA #2 January 31 (Topics 5-8)
February Days: 18	Using Addition and Subtraction Geometry Fractions 1. Adding and subtracting money 2. Estimating sums and differences 3. Vocabulary - flat surfaces, vertices, edges, plane and solid figures 4. Whole and equal parts 5. Unit fractions and regions	Topic 10 Topic 11 Topic 12	M-CBM (M-Comp & M-CAP)

Month	MATH CONCEPTS	TOPICS from EnVision	CFA and CBM ASSESSMENT DATES
March Days: 20	Measurement Time 1. Inches, feet, yards and centimeters and meters 2. Lengths 3. Telling time to 5 minutes 4. Before and after the hour	Topic 13 Topic 15	CFA #3 March 28 (Topics 9-13)
April Days: 18	Graphs Numbers and Patterns to 1,000 1. Organizing data - pictographs and bar graphs 2. Working within 1 000 to skip count, compare numbers, look for patterns	Topic 16 Topic 17	
May & June Days: 23	Three-Digit Addition and Subtraction Multiplication Concepts 1. Mental math, estimating sums and differences 2. Models for addition and subtraction 3. Adding and subtracting 3-digit numbers	Topic 18 Topic 19	CFA #4 May 16 (Topics 15-17) M-CBM (M-Comp & M-CAP)

Utah Core State Standards can be located at:

<http://www.schools.utah.gov/isp/College-and-Career-Ready/Meetings/2012-Spring-Directors/Utah-Math-Core-Standards.aspx>

AUGUST/SEPTEMBER (30 days)

TOPIC 1 – UNDERSTANDING ADDITION AND SUBTRACTION

TOPIC 2 – ADDITION STRATEGIES

TOPIC 3 – SUBTRACTION STRATEGIES

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES																						
ASSESS & REVIEW			This is the time for establishing routines, reviewing math concepts from first grade, and assessing students’ needs.																						
CORE	Operations and Algebraic Thinking: Represent and solve problems involving addition and subtraction. 2.OA.1. Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Topic 1 1-0 Topic Opener and Interactive Math Story	<p>*Topic 1 introduces the part- part-whole model. This model will be referred to frequently throughout future topics. Please see Table 1- <i>Common addition and subtraction situations</i> from the Common Core.</p> <p>*It is recommended that money, time, odd/even, expanded form, math symbols, graphs, and place value be addressed daily.</p> <p>Vocabulary:</p> <table><tr><td>part</td><td>plus</td></tr><tr><td>sum</td><td>add</td></tr><tr><td>addition sentence</td><td>equals</td></tr><tr><td>whole</td><td>join</td></tr><tr><td>difference</td><td>minus</td></tr><tr><td>subtraction sentence</td><td></td></tr><tr><td>subtract</td><td>separate</td></tr><tr><td>more</td><td>fewer</td></tr><tr><td>related</td><td>doubles</td></tr><tr><td>near doubles</td><td>addend</td></tr><tr><td>number sentence</td><td></td></tr></table>	part	plus	sum	add	addition sentence	equals	whole	join	difference	minus	subtraction sentence		subtract	separate	more	fewer	related	doubles	near doubles	addend	number sentence	
part	plus																								
sum	add																								
addition sentence	equals																								
whole	join																								
difference	minus																								
subtraction sentence																									
subtract	separate																								
more	fewer																								
related	doubles																								
near doubles	addend																								
number sentence																									
CORE	2.OA.1	1-1 Addition: Writing Addition																							

Canyons School District elementary math maps are created by CSD elementary teachers and published by the CSD Office of Curriculum and Professional Development.

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Second Grade Math Map

		Number Sentences	
CORE	2.OA.1	1-2 Addition: Stories About Joining	
CORE	2.OA.1	1-3 Subtraction: Writing Subtraction Number Sentences	
CORE	2.OA.1	1-4 Subtraction: Stories About Separating	
CORE	2.OA.1	1-5 Subtraction: Stories About Comparing	
CORE	Number and Operations in Base Ten: Use place value understanding and properties of operations to add and subtract. 2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	1-6 Subtraction: Connecting Addition and Subtraction	
CORE	2.NBT.5	1-7 Problem Solving: Using Objects	
ASSESS	M-CBM	M-CAP & M-Comp	
CORE	2.OA.1	Topic 2 2-0 Topic Opener and Interactive Math Story	
CORE	2.OA.1	2-1 Addition: Adding 0,1,2	

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	2.OA.2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.		
CORE	2.OA.2	2-2 Addition: Doubles	
CORE	2.OA.2	2-3 Addition: Near Doubles	
CORE	2.NBT.5 2.NBT.9. Explain why additions and subtraction strategies work, using place value and the properties of operations.	2-4 Addition: Adding in Any Order	
CORE	2.NBT.5 2.NBT.9	2-5 Addition: Adding Three Numbers	
CORE	2.OA.2	2-6 Addition: Making 10 to Add 9	
CORE	2.OA.2	2-7 Addition: Making 10 to Add 8	
CORE	2.OA.1	2-8 Problem Solving: Draw a Picture and Write a Number Sentence	
CORE		Topic 3 3-0 Topic Opener and Interactive Story	
CORE	Operations and Algebraic Thinking: Add and subtract within 20. 2.OA.2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2,	3-1 Subtraction: Subtracting 0,1,2	

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Second Grade Math Map

	know from memory all sums of two and one-digit numbers.		
CORE	Number and Operations in Base Ten: Use place value understanding and properties of operations to add and subtract. 2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	3-2 Subtraction: Thinking Addition to Subtract Doubles	
CORE	2.NBT.5	3-3 Subtraction: Thinking Addition to 10 to Subtract	
CORE	2.NBT.5	3-4 Subtraction: Thinking Addition to 18 to Subtract	
CORE	2.OA.2	3-5 Subtraction: Finding the Missing Part	
CORE	2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	3-6 Problem Solving: Two-Question Problems	

OCTOBER (21 days)

TOPIC 4 – PLACE VALUE

(GRAY highlight indicates lesson is not in 2nd grade core)

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE		Topic 4 4-0 Topic Opener and Interactive Story	Vocabulary: digits number word greater than less than equal to after before between least greatest even odd skip counting ones tens
REVIEW		4-1 Number: Models for Tens	
CORE	Number and Operations in Base Ten: Understand place value. 2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the special cases. 2.NBT.3	4-2 Number: Models for Tens and Ones	
CORE	2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	4-3 Number: Reading and Writing Numbers	
REVIEW		4-4 Number: Using Models to Compare Numbers	
REVIEW		4-5 Number: Using Symbols to Compare Numbers	
REVIEW		4-6 Number: Before, After, and Between	
CORE	2.NBT.1	4-7 Number: Order Numbers	

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Second Grade Math Map

REVIEW	2.NBT.2. Count within 1000; skip-count by 5s, 10s, and 100s.	4-8 Patterns: Number Patterns on a Hundred Chart	
CORE	<p>Operations and Algebraic Thinking: Work with equal groups of objects to gain foundations for multiplication.</p> <p>2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p>	4-9 Patterns: Even and Odd Numbers	
REVIEW		4-10 Problem Solving: Use Data from a Chart	

NOVEMBER/DECEMBER (31 days)

TOPIC 5 – COUNTING MONEY

TOPIC 6 – MENTAL ADDITION

TOPIC 7 -- MENTAL SUBTRACTION

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
ASSESS	CFA #1	Topics 1, 2, 3, and 4	Complete by November 8
CORE		Topic 5 5-0 Topic Opener and Interactive Story	*Money was introduced as part of daily review Vocabulary: penny nickel dime quarter cents coins dollar half-dollar greatest value least value dollar coin tally mark decimal point mental math ten digit next ten
CORE	Measurement and Data: Work with time and money. 2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i>	5-1 Money: Dime, Nickel, and Penny	
CORE	2.MD.8	5-2 Money: Quarter and Half-Dollar	*Half Dollar is an extension
CORE	2.MD.8	5-3: Money: Counting Collections of Coins	
CORE	2.MD.8	5-4: Money: Ways to Show the Same Amount	
CORE	2.MD.8	5-5: Money: One Dollar	
CORE	2.MD.8	5-6: Problem Solving: Make an Organized List	

CORE		Topic 6 6-0 Topic Opener and Interactive Math Story	
CORE	Numbers and Operations in Base Ten: Use Place Value Understanding and Properties of Operations to Add and Subtract 2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction	6-1 Addition: Adding Tens	
CORE	2.NBT.5	6-2 Addition: Adding Ones	
CORE	2.NBT.5	6-3 Addition: Adding Tens and Ones	
CORE	2.NBT.7 Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	6-4 Addition: Adding on a Hundred Chart	
CORE	2.NBT.5, 2.NBT.9 Numbers and Operations in Base Ten: Use place value understanding and properties of operations to add and subtract. 2.NBT.8. Mentally add 10 and 100 to a given	CC 6-5A Adding Multiples of 10	

	number 100-900, and mentally subtract 10 or 100 from a given number 100-900.		
CORE	Operations and Algebraic Thinking: Represent and solve problems involving additions and subtractions. 2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions e.g. by using drawings and equations with a symbol for the unknown number to represent the problem.	6-5 Problem Solving: Look for a Pattern	
CORE		Topic 7 7-0 Topic Opener and Interactive Math Story	
CORE	2.NBT.5	7-1 Subtraction: Subtracting Tens	
CORE	2.OA.1	7-2 Subtraction: Finding Parts of 100	
CORE	2.NBT.5, 2.NBT.8, 2.NBT.9	CC 7-3A Subtracting Multiples of 10	
CORE	2.NBT.7	7-3 Subtraction: Subtracting on a Hundred Chart	
CORE	2.NBT.5	7-4 Subtraction: Adding On to Subtract	
CORE	2.OA.1	7-5 Problem Solving: Missing or Extra Information	

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JANUARY (19 days)

TOPIC 8 – ADDING 2-DIGIT NUMBERS

TOPIC 9 – SUBTRACTING 2-DIGIT NUMBERS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
ASSESS	M-CBM	M-CAP & M-Comp	
CORE		Topic 8 8-0 Topic Opener and Interactive Math Story	Vocabulary: regroup
CORE	Number and Operations in Base Ten: Use place value understanding and properties of operations to add and subtract. 2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.	8-1 Addition: Regrouping 10 Ones for 1 Ten	
CORE	2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	8-2 Addition: Models to Add Two and One-Digit Numbers	
CORE	2.NBT.6	8-3 Addition: Adding Two- and One-Digit Numbers	
CORE	2.NBT.7	8-4 Addition: Models to Add Two-Digit Numbers	

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CORE	2.NBT.6	8-5 Addition: Adding Two-Digit Numbers	
CORE	2.NBT.6, 2.NBT.9, Measurement and Data: Relate addition and subtraction to length 2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	CC 8-6A Adding on a Number Line	
CORE	2.NBT.6	8-6 Addition: Adding Three Numbers	
CORE	Operations and Algebraic Thinking: Represent and solve problems involving addition and subtraction. 2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	8-7 Problem Solving: Draw a Picture and Write a Number Sentence	
CORE		Topic 9 9-0 Topic Opener and Interactive Math Story	

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CORE	2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	9-1 Subtraction: Regrouping 1 Ten for 10 Ones	
CORE	2.NBT.5	9-2 Subtraction: Models to Subtract Two-and One-Digit Numbers	
CORE	Number and Operations in Base Ten: Use place value understanding and properties of operations to add and subtract. 2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	9-3 Subtraction: Subtracting	
CORE	2.NBT.5	9-4 Subtraction: Models to Subtract Two-Digit Numbers	
CORE	2.NBT.5	9-5 Subtraction: Subtracting Two-Digit Numbers	
CORE	2.NBT.6, 2.NBT.9. 2.MD.6	CC 9-6A Subtracting on a number line	
CORE	2.NBT.5	9-6 Subtraction: Using Addition to Check Subtraction	
	Operations and Algebraic Thinking: Represent and solve problems involving addition and subtraction.	9-7 Problem Solving: Two-Question Problems	*Addition and Subtraction with regrouping will be revisited in Topic 10.

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	2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.		
ASSESS	CFA #2	Topics 5, 6, 7, and 8	Complete by January 31

FEBRUARY (18 days)

TOPIC 10 – USING ADDITION AND SUBTRACTION

TOPIC 11 – GEOMETRY

TOPIC 12 - FRACTIONS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE		Topic 10 10-0 Topic Opener and Interactive Math Story	Vocabulary: cone cube cylinder edge face flat surface pyramid sphere rectangular prism solid figure vertex circle rectangle plane shapes square triangle polygon hexagon side parallelogram trapezoid angle pentagon equal halves fourths thirds unequal
CORE	Measurement and Data: Work with time and money. 2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? 2.NBT.5	10-1 Addition: Adding money	
CORE	2.MD.8	10-2 Addition: Estimating sums	
CORE	Operations and Algebraic Thinking: Represent and solve problems involving addition and subtraction. 2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 2.NBT.5	10-3 Addition: Ways to Add	

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CORE	2.MD.8 2.NBT.5	10-4 Addition: Subtracting money	
CORE	2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	10-5 Addition: Estimating differences	
CORE	2.NBT.5	10-6 Subtraction: Ways to subtract	
CORE	2.MD.8	10-7 Problem Solving: Try, Check, and Revise	
CORE		Topic 11 11-0 Topic Opener and Interactive Math Story	
CORE	Geometry: Reason with shapes and their attributes. 2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	11-1 Flat Surfaces, Vertices, and Edges	
CORE	2.G.1.	11-2 Relating Plane Shapes to Solid	

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Second Grade Math Map

		Figures	
CORE	2.G.1	CC- 11-3A Polygons and Angles	
CORE	2.G.1	11-3 Making New Shapes	
	2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	11-4 Cutting Shapes Apart	
	2.G.2. Partition a rectangle into rows and columns of same-size squares and count them to find the total number of them.	CC 11-5A Dividing Rectangles into Equal Squares	
	2.G.1.	11-8 Problem Solving. Use Reasoning	
CORE		Topic 12 12-0 Topic Opener and Interactive Math Story	
CORE	2.G.3.	12-1 Fractions: Wholes and Equal Parts	
CORE	2.G.3.	12-2 Fractions: Unit Fractions and Regions	
CORE	2.G.3	12-3 Polygons and Angles	

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MARCH (20days)
 TOPIC 13 – MEASUREMENT
 TOPIC 15 – TIME

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE		Topic 13 13-0 Topic Opener and Interactive Math Story	Vocabulary: unit length inch height centimeter foot (feet) yard meter hour minute half hour hour hand minute hand quarter past half past quarter to
CORE	Measurement and Data: Measure and estimate lengths in standard units. 2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters.	CC 13-4A Inches	
CORE	2.MD.1, 2.MD.3	CC 13-5A Centimeters	
CORE	2.MD.1. 2.MD. 3 Measurement and Data: Represent and Interpret Data 2.MD.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	13-4 Measurement: Inches, Feet, and Yards	
CORE	2.MD.1.	13-5 Measurement: Centimeters and	

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		Meters	
CORE	2.MD.2	CC 13-6A Measuring Lengths	
CORE	Measurement and Data: Relate addition and subtraction to length 2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	CC 13-6B Adding and Subtracting in Measurement	
CORE	Measurement and Data: Measure and estimate lengths in standard units 2.MD.4 Measure to determine how much longer one object is than another, than expressing the length difference in terms of a standard length unit.	CC 13-6C Comparing Lengths	
CORE	2.MD.9	CC 16-2A Graphing Lengths	
CORE		Topic 15 15-0 Topic Opener and Interactive Math Story	*Time was introduced as a part of daily review.
CORE	Measurement and Data: Work with time and money. 2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	15-1 Time: Telling Time to Five Minutes	
CORE	2.MD.7.	15-2 Time: Telling Time Before and After the Hour	

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CORE	<p>2.MD.7.</p> <p>Operations and Algebraic Thinking: Represent and solve problems involving addition and subtraction.</p> <p>2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	15-6 Time: Multiple-Step problems	
ASSESS	CFA #3	Topics 9, 10, 11, 12, and 13	Complete by March 28

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Second Grade Math Map

APRIL (18 days)**TOPIC 16 – GRAPHS****TOPIC 17 – NUMBERS AND PATTERNS TO 1,000**

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE		Topic 16 16-0 Topic Opener and Interactive Math Story	*Graphs were introduced as a part of daily review
CORE	Measurement and Data: Represent and interpret data. 2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	16-1 Graphs: Organizing Data	Vocabulary: data symbol bar graph pictograph hundreds thousands expanded form compare standard form order number word
CORE	2.MD.10.	16-2 Graphs: Pictographs	
CORE	2.MD.10.	16-3 Graphs: Bar Graphs	
CORE	2.MD.10.	16-7 Graphs: Use a Graph	
CORE	Numbers and Operations in Base Ten: Use place value understanding and properties of operations to add and subtract. 2.NBT.8. Mentally add 10 and 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.	Topic 17 17-0 Topic Opener and Interactive Math Story 17-1 Number: Building 1,000	
CORE	Understand place value.	17-2 Number: Counting Hundreds,	

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	2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases.	Tens, and Ones	
CORE	2.NBT.1. 2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. 2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	17-3 Number: Reading and Writing Numbers to 1,000	
CORE	2.NBT.7.	17-4 Number: Changing Numbers by Hundreds and Tens	
CORE	2.NBT.8.	17-5 Number: Patterns with Numbers on Hundreds Chart	
CORE	2.NBT.2	CC 17-6A Skip counting by 5, 10, 100, to 1,000	
CORE	2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.	17-6 Number: Comparing Numbers	
CORE	2.NBT.4	17-8 Number: Ordering Numbers	

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Second Grade Math Map

MAY/JUNE (21 days)**TOPIC 18 – THREE-DIGIT ADDITION AND SUBTRACTION****TOPIC 19 – MULTIPLICATION CONCEPTS**

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
CORE		Topic 18 18-0 Topic Opener and Interactive Math Story	Vocabulary: three-digit numbers hundreds digit array multiply product times
CORE	2.NBT.7, 2.NBT.8	CC 18-1A Exploring Adding Three-Digit Numbers	
CORE	2.NBT.7. 2.NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.	18-1 Addition: Mental Math	Page 549 G-H Interactive Math Story Games associated with each lesson introduced and made available for students' use.
CORE	2.NBT.7 2.NBT.8.	18-2 Addition: Estimating Sums	
CORE	2.NBT.7. 2 NBT.9.	18-3 Addition: Models for Adding with Three-digit Numbers	
CORE	2.NBT.7. 2 NBT.9.	18-4 Addition: Adding Three-Digit Numbers	
CORE	2. NBT. 7	CC 18-5A Exploring Subtracting Three-Digit Numbers	
CORE	2.NBT.7. 2 NBT.9.	18-5 Addition: Mental Math: Ways to Find Missing Parts	
CORE	2.NBT.7. 2 NBT.9.	18-6 Addition: Estimating Differences	

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CORE	2.NBT.7. 2 NBT.9.	18-7 Addition: Models for Subtracting with Three-Digit Numbers	
CORE	2.NBT.7. 2 NBT.9.	18-8 Addition: Subtracting Three-Digit Numbers	
CORE	Measurement and Data: Represent and interpret data. 2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	18-9 Addition: Make a Graph	
ASSESS	CFA #4	Topics 15, 16, 17, and 18	Complete by May 16
ASSESS	M-CBM	M-CAP & M-Comp	
CORE	Operations and Algebraic Thinking: Work with equal groups of objects to gain foundations for multiplication 2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	Topic 19 19-0 Topic Opener and Interactive Math Story 19-1 Multiplication: Repeated Addition and Multiplication	
CORE	2.OA.4	19-2 Multiplication: Building Arrays	
CORE	2.OA.4	19-3 Multiplication: Writing Multiplication Stories	
CORE	2.OA.4	19-5 Multiplication: Multiplying in Any Order	
CORE	2.OA.4	19-6 Problem Solving: Draw a Picture and Write a Number Sentence	

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: <ul style="list-style-type: none"> - 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? 	
<input type="checkbox"/> cumulative review <input type="checkbox"/> higher-order thinking, ask why <input type="checkbox"/> have students visualize, draw, model <input type="checkbox"/> real-world contexts <input type="checkbox"/> math vocabulary <input type="checkbox"/> milk the data <input type="checkbox"/> incorporate measurement <input type="checkbox"/> number sense	
ANTICIPATORY SET (5 MINUTES)	
Choose from the many options: <ul style="list-style-type: none"> <input type="checkbox"/> Review What You Know <input type="checkbox"/> Interactive Math Stories <input type="checkbox"/> Math Journaling <input type="checkbox"/> Spiral Review <input type="checkbox"/> Problem of the Day 	<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <input type="checkbox"/> Random call on students (No hand raising)
BUILDING A FOUNDATION (5-10 MINUTES)	
<i>The Language of Math:</i> Vocabulary instruction 1- How will you explicitly teach new vocabulary?	<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses

Canyons School District's Evidence-Based Learning (EBL) Office ensures a proactive educational system for all students by supporting educators with proven practices in instruction, assessment, curriculum and problem-solving for improving academic and social competencies.

2- How will you provide multiple opportunities for vocabulary to be used in context?	<input type="checkbox"/> Random call on students (No hand raising)
WHOLE GROUP INSTRUCTION: Concrete (10-15 MINUTES)	
<p><i>Develop the Concept: Interactive Learning (Hands-on)</i></p> <ol style="list-style-type: none"> 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 <i>Extend</i>? 6- Will you use the <i>Link to Investigations</i>? 	<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <ul style="list-style-type: none"> <input type="checkbox"/> Paper <input type="checkbox"/> Math Journal <input type="checkbox"/> Individual Whiteboards <input type="checkbox"/> Student page from the topic pouch <input type="checkbox"/> Random call on students (No hand raising)
SCAFFOLDED INSTRUCTION: Representational (15-20 MINUTES)	
<p><i>Develop the Concept: Visual</i></p> <p>The <i>Visual Learning Bridge</i>, at the top of each lesson, is critical to connecting the Concrete to the Representational and then to the Abstract. Look for <i>Prevent Misconceptions</i>.</p> <p>Choose one option:</p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>Visual Learning Animation</i> (on-line or CD) <input type="checkbox"/> Overhead Transparency <input type="checkbox"/> <i>Visual Learning Bridge</i> in Student textbook <input type="checkbox"/> Document camera <ol style="list-style-type: none"> 1- Check for understanding during the <i>Guided Practice</i>. 2- Where will students record their work? 3- If most students are struggling during this phase of the lesson, what will you do? <ul style="list-style-type: none"> <input type="checkbox"/> Reteach explicitly with various problems from the <i>Guided or Independent Practice</i> or the <i>Reteaching</i> sets at the back of the <i>Topic Guide</i>. <input type="checkbox"/> Use lessons from <i>Meeting Individual Needs</i>. <input type="checkbox"/> Use the <i>Differentiated Instruction: Intervention</i> lesson. 	<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <input type="checkbox"/> Random call on students (No hand raising)

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4- Will some of the problems from the <i>Problem Solving</i> be included in your <i>Guided Practice</i> or <i>Independent Practice</i> ?	
INDEPENDENT PRACTICE: ABSTRACT	(15-20 MINUTES)
<i>Independent Practice and Problem Solving</i> 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?	<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <input type="checkbox"/> Random call on students (No hand raising)
FORMATIVE ASSESSMENT	(5-10 MINUTES)
Concept Understanding <ul style="list-style-type: none"> <input type="checkbox"/> PLC/Grade-Level common formative assessment <input type="checkbox"/> <i>Quick Check</i> (in <i>Teacher Resource Masters</i>) <input type="checkbox"/> <i>Writing to Explain</i> <input type="checkbox"/> <i>Mind Game Quiz Show</i> <input type="checkbox"/> Student buzzers or AverPens Formative Assessment Tools <ul style="list-style-type: none"> <input type="checkbox"/> <i>Topic tests</i> (online or in text) <input type="checkbox"/> <i>Item Analysis for Diagnosis and Intervention</i> <input type="checkbox"/> <i>Free-Response Test</i> <input type="checkbox"/> <i>Performance Assessment</i> <input type="checkbox"/> CBM-Math <input type="checkbox"/> PLC/Grade-Level common formative assessment <input type="checkbox"/> Other assessment tool End of each Quarter: <ul style="list-style-type: none"> <input type="checkbox"/> <i>District Common Formative Assessment</i> (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:	

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- ☐ *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?

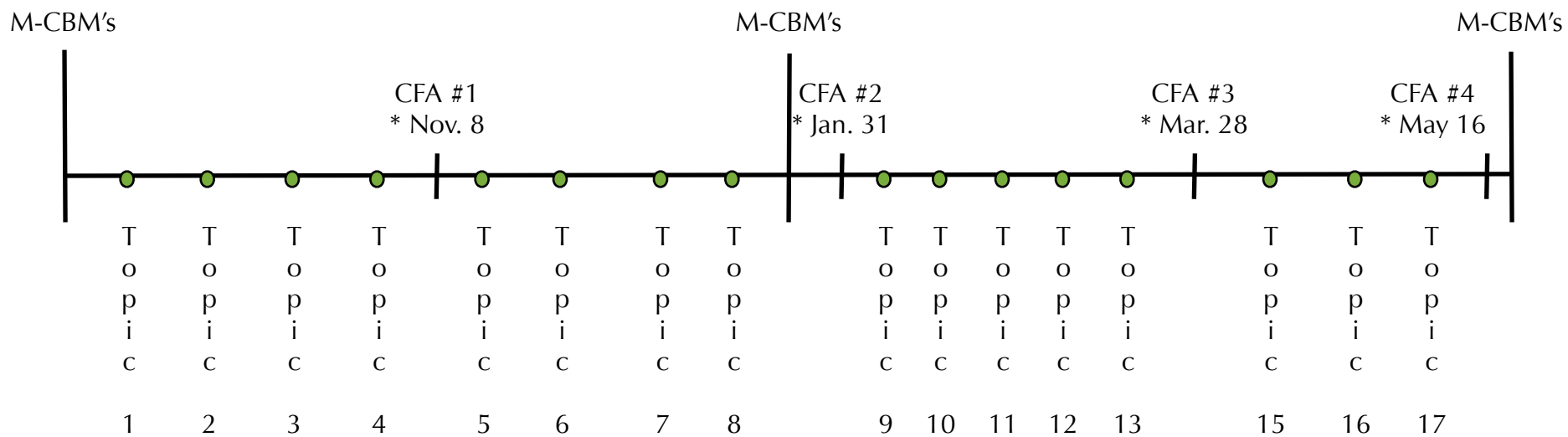
HOMEWORK

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?

Second Grade Math Assessment Continuum



● = optional assessment

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

Grade 2 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

Number and Operations in Base Ten

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.
-

Measurement and Data

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

MATHEMATICAL PRACTICES

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.

Operations and Algebraic Thinking**2.OA****Represent and solve problems involving addition and subtraction.**

1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.⁸

Add and subtract within 20.

2. Fluently add and subtract within 20 using mental strategies.⁹ By end of Grade 2, know from memory all sums of two one-digit numbers.

Work with equal groups of objects to gain foundations for multiplication.

3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Number and Operations in Base Ten**2.NBT****Understand place value.**

1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
 - a. 100 can be thought of as a bundle of ten tens—called a “hundred.”
 - b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
2. Count within 1000; skip-count by 5s, 10s, and 100s.
3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Use place value understanding and properties of operations to add and subtract.

5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
6. Add up to four two-digit numbers using strategies based on place value and properties of operations.
7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
9. Explain why addition and subtraction strategies work, using place value and the properties of operations.¹⁰

⁸ See Glossary, Table 1.

⁹ See standard 1.OA.6 for a list of mental strategies.

¹⁰ Explanations may be supported by drawings or objects.

Measurement and Data**2.MD****Measure and estimate lengths in standard units.**

1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
3. Estimate lengths using units of inches, feet, centimeters, and meters.
4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Relate addition and subtraction to length.

5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Work with time and money.

7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

Represent and interpret data.

9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹¹ using information presented in a bar graph.

Geometry**2.G****Reason with shapes and their attributes.**

1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹² Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves*, *thirds*, *half of*, *a third of*, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

¹¹ See Glossary, Table 1.

¹² Sizes are compared directly or visually, not compared by measuring.