2012 - 2013

First Grade Mathematics Curriculum Map

Volusia County Schools

Common Core State Standards

Common Core State Standards

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
   (MACC.K12.MP.1)

2. Reason abstractly and quantitatively.
   (MACC.K12.MP.2)

3. Construct viable arguments and critique the reasoning of others.
   (MACC.K12.MP.3)

4. Model with mathematics.
   (MACC.K12.MP.4)

5. Use appropriate tools strategically.
   (MACC.K12.MP.5)

6. Attend to precision.
   (MACC.K12.MP.6)

7. Look for and make use of structure.
   (MACC.K12.MP.7)

8. Look for and express regularity in repeated reasoning.
   (MACC.K12.MP.8)

Common Core State Standards

Grade 1 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.

Geometry

- Reason with shapes and their attributes.

Mathematics | Grade 1

In Grade 1, instructional time should focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

(1) Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. They use a variety of models, including discrete objects and length-based models (e.g., cubes connected to form lengths), to model add-to, take-from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., "making tens") to solve addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction.

(2) Students develop, discuss and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.

(3) Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal sized units) and the transitivity principle for indirect measurement.[1]

(4) Students compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral) and build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric attributes, and determine how they are alike and different, to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

[1] Students should apply the principle of transitivity of measurement to make indirect comparisons, but they need not use this technical term.

COMPONENTS OF THE CURRICULUM MAP

Unit/Organizing Principle: the overarching organizational structure used to group content and concepts within the curriculum map

Pacing: the recommended time period within the year for instruction related to the essential questions to occur

Essential Questions: the overarching question(s) that will serve to guide instruction and push students to higher levelsof thinking; essential questions should guide students to the heart of the content and should be in student -friendly language.

Measurement Topics: an organized grouping of learning targets – these will be evident as headings in Pinnacle Gradebook

Learning Targets/Skills: the content knowledge, processes and enabling skills that will ensure successful mastery of the essential questions (tied to Common Core State Standards and/or Next Generation Sunshine State Standards)

Standards: the Common Core State Standards for Mathematics

Academic Language: the content vocabulary and other key terms and phrases with which students should be familiar and that support mastery of the learning targets/skills and essential questions

Activities and Resources: a listing of available, appropriate materials, strategies, lessons, textbooks, videos and other media sources that are aligned with the learning targets, skills and essential questions; developed to save teachers time when planning for instruction

Assessment: a list of required assessments as well as suggested assessments that are available to use as formative or summative assessments

ACKNOWLEDGEMENTS

This version of the **Kindergarten** through **Grade Five Mathematics Curriculum Map** reflects the combined talent and hard work of many Volusia County teachers. We would like to take this opportunity to acknowledge their support, time and recommendations.

Jessica Aivazis	Enterprise	Andrea Hall	Indian River	Nancy Morris	DeBary
Shirley Anderson	Westside	Katrina Hall	Enterprise	Julie Murray	Blue Lake
Essie Austin	ESE Department	Linnette Hernandez	Sunrise	Shelly Osterman	Ortona
Anna Barsanti	Timbercrest	Jane Howe	Discovery	Tamara Powell	Palm Terrace
Laura Bechard	Pierson	Cassy Jurgensen	Read-Pattillo	Kourtini Rackard	Orange City
Linda Berner	Citrus Grove	Janna Kilgore	Chisholm	Laura Ramp	Discovery
Elizabeth Brinkerhoff	Starke	Teal Krall	Indian River	Heather Robinson	Longstreet
Elizabeth Burns	Sweetwater	Jeanine Langford	Turie T Small	Jacqueline Sadler	Sugar Mill
Tarell Butler	Read-Pattillo	Sonia Larrabee	McInnis	Stacy Sampson	Pathways
Diane Casella	Sugar Mill	Karen Lassiter	Manatee Cove	Melissa Shaw	Ortona
Shannon Churms	Osteen	Diane LeJeune	Pine Trail	Leslie Sparks	Cypress Creek
Cyndy Collins	Blue Lake	Bob Levings	Starke	Sandy Streitberger	Spirit
Cindy Crandall	Read-Pattillo	Terri Lubas	South Daytona	Sharon Tary	Pride
Barbara Doherty	Champion	Monica Luedecke	Forest lake	Kristie Taylor	South Daytona
Nicole Duchesneau	Starke	Kelly McCabe	Holly Hill	Kym Taylor	Pine Trail
Kim Fischer	Osceola	Michele McCoy	Manatee Cove	Feryl Tyner	Cypress Creek
Sherry Flaherty	Sugar Mill	Carol McKisson	Forest Lake	Pam Westmoreland	Freedom
Nancy Fruits	Holly Hill	Nicole Maynard	Palm Terrace	Sheri Wiggins	Citrus Grove
Joe Griffin	DeBary	Heather Mooney	Deltona Lakes	Dayna Williams	Spruce Creek

Teachers are <u>required</u> to administer Form A of each District Interim Assessment. The scores must be recorded on the blue Mathematics Progress Summary Card. Following remediation alternative assessments may be administered and may be recorded on the blue Mathematics Progress Summary Card. **Alternative assessments <u>must</u> be attached to the blue Mathematics Progress Summary Card. Please note: If any enVision Math Topic Test or Benchmark Test is used in its entirety to show student success on content, record the <u>topic and score</u> in the "other" column and do <u>not</u> attach.**

Pacing	Unit/Assessment
Weeks 1 - 6	Addition and Subtraction Strategies
Weeks 7 – 12	Addition and Subtraction Equations to 12
Weeks 13 – 18	Addition and Subtraction Equations to 20
Weeks 19 – 21	Measurement, Time and Data
Weeks 22 – 29	Understanding Place Value
Weeks 30 – 33	Addition and Subtraction of 2-Digit Numbers
Weeks 34 – 37	Geometry
Weeks 38-39	Review: Addition and Subtraction to 20

UNIT/ORGANIZING PRINCIPLE: **ADDITION AND SUBTRACTION STRATEGIES**			PACING: Weeks 1 – 6
ESSENTIAL QUESTIONS:	**What strategies can you use to add and subtract?** **How are addition and subtraction related?**		
MEASUREMENT TOPICS	**LEARNING TARGETS/SKILLS**	**STANDARDS**	**ACADEMIC LANGUAGE**
Inverse Relationship of Addition & Subtraction (T02)	• Demonstrate the relationship between addition and subtraction using the concept part-whole (as a foundation for missing addends).	MACC.1.OA.2.4	addend adding to comparing count back count on difference digit equality (=) equation (4 + 5 = 9) false manipulatives minus (-) plus (+) putting together related facts strategy subtract sum symbol taking apart taking from ten-frame tools true unknown whole-part zero
Understanding Addition & Subtraction to 12 (T01)	• Use a ten-frame to model* addition and subtraction. ***model: the student applies the math they have learned to solve problems.**	MACC.1.OA.3.6	
Understanding Addition & Subtraction to 12 (T01)	• Make sense of problems by acting them out, using manipulatives, drawing diagrams or pictures to solve word problems using **all** the situations from ***Table 1 Common addition and subtraction situations*** (page 88) of the Common Core State Standards for Mathematics	MACC.1.OA.1.1	
Understanding Addition & Subtraction to 12 (T01)	• Use appropriate tools (manipulatives, number lines, 100 chart, ten-frame) to solve word problems	MACC.1.OA.1.1	
Understanding Addition & Subtraction to 12 (T01)	• Use equations with a symbol for the unknown number to solve word problems from ***Table 1 Common addition and subtraction situations*** (page 88) of the Common Core State Standards for Mathematics	MACC.1.OA.1.1	
Understanding Addition & Subtraction to 12 (T01)	• Understand the meaning of the equality (=) sign. (Examples: 9 **=** 5 + 4, 10 **=** 10, 2 + 8 **=** 8 + 2)	MACC.1.OA.4.7	
Understanding Addition & Subtraction to 12 (T01)	• Identify, describe and use the pattern of adding or subtracting 0, 1, 2, or 3 to any number up to **10**.	MACC.1.OA.3.5	
Properties of Addition (T03)	• Apply properties of operations as strategies to add and subtract. (Example: 5 + 4 = 9 if known, then 4 + 5 = 9 is also known [Commutative Property of Addition]). Students need not use formal terms for these properties.	MACC.1.OA.2.3	
Inverse Relationship of Addition & Subtraction (T02)	• Use strategies such as the inverse relationship between addition and subtraction. (Example: 6 + 3 = 9 and 9 – 6 = 3)	MACC.1.OA.3.6	
Understanding Addition & Subtraction to 12 (T01)	• Use and explain strategies (to a partner, group or class) to identify and practice known equivalents for the sums up to and including 10. (Example: 9 = 8 + 1, 7 + 2, 6 + 3…)	MACC.1.OA.3.6	
Understanding Addition & Subtraction to 12 (T01)	• Determine if equations involving addition and subtraction are true or false. (Example: 7 = 8 – 1 is true, 6 + 3 = 8 + 1 is true, 4 + 1 = 5 + 2 is false.)	MACC.1.OA.4.7	

Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
MACC.K12.MP.1	MACC.K12.MP.2	MACC.K12.MP.3	MACC.K12.MP.4	MACC.K12.MP.5	MACC.K12.MP.6	MACC.K12.MP.7	MACC.K12.MP.8

ESSENTIAL QUESTIONS:	What strategies can you use to add and subtract? How are addition and subtraction related?

Activities and Resources	Assessment

Suggested Resources

Student Edition

Topic 1: Lessons 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7
Topic 2: Lessons 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10
Topic 3: Lessons 3-1, 3-2, 3-3, 3-4, 3-5

Daily Assessment and Reteaching workbook

Lessons: 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7
2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10
3-1, 3-2, 3-3, 3-4, 3-5

Safari Montage

Subtraction: Schlessinger Media
Addition: Schlessinger Media
Numbertime Addition and Subtraction: Plus and Minus: BBC
Numbertime Addition and Subtraction: Adding Two Numbers: BBC
Numbertime Numbers to 100: Counting On and Back: BBC
Addition & Subtraction: Schlessinger Media

Internet

CPALMS is a state wide project to build information systems and tools to support the implementation of the Common Core State Standards (CCSS). http://www.floridastandards.org/homepage/index.aspx

http://www.jmathpage.com – Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers

http://www.bbc.co.uk/schools/starship/maths/placethepenguin.shtml - Know what each digit represents in 2 and 3 digit numbers

Required Assessment

Addition and Subtraction Strategies Form A

Suggested Assessments

Topic 1 Florida Test
Topic 1 Free-Response Test
Topic 1 Performance Assessment
Topic 2 Florida Test
Topic 2 Free-Response
Topic 2 Performance Assessment
Topic 3 Florida Test
Topic 3 Free-Response Test
Topic 3 Performance Assessment

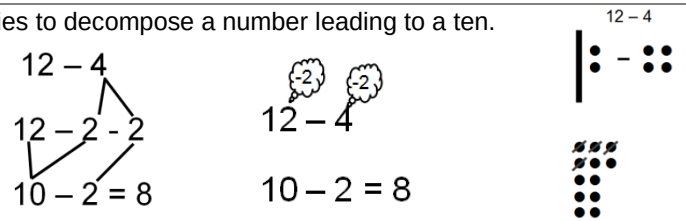
Mathematics Formative Assessment System (MFAS)

Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page.

http://www.floridastandards.org/Standards/FLStandardSearch.aspx

http://www.floridastandards.org/RESOURCES/URLresourcebar.aspx?ResourceID=4lw0QyjEbZQ=D – Lost Buttons, Lessons 5 & 6, Subtraction

UNIT/ORGANIZING PRINCIPLE: ADDITION AND SUBTRACTION EQUATIONS TO 12	PACING: Weeks 7 – 12
ESSENTIAL QUESTIONS:	**What strategies do I use to help me add and subtract?** **Why does knowing my addition and subtraction facts help me?**

MEASUREMENT TOPICS	LEARNING TARGETS/SKILLS	STANDARDS
Understanding Addition and Subtraction to 12 (T01)	• Identify, describe and use the pattern of adding or subtracting 0, 1, 2 or 3 to 12.	MACC.1.OA.3.5
Understanding Addition and Subtraction to 12 (T01)	• Use a number line to add and subtract within 12.	MACC.1.OA.3.6
Understanding Addition and Subtraction to 12 (T01)	• Use strategies to create equivalent but easier known sums. (Example: 6 + 5 = 5 + 5 + 1 [doubles, doubles plus one]).	MACC.1.OA.3.6
Properties of Addition (T03)	• Apply properties of operations as strategies to add and subtract. (Examples: if 3 + 8 = 11 then 8 + 3 = 11 [Commutative Property of Addition]	MACC.1.OA.2.3
Understanding Addition and Subtraction to 12 (T01)	• Solve addition and subtraction equations where the unknown number is represented by a geometric shape. (Example: 2 + ☐ = 9, △ - 9 = 7) to apply the concept of missing addends from ***Table 1 Common addition and subtraction situations*** (page 88) of the Common Core State Standards for Mathematics	MACC.1.OA.4.8
Understanding Addition and Subtraction to 12 (T01)	• Use strategies to decompose a number leading to a ten. Examples: 	MACC.1.OA.3.6
Inverse Relationship of Addition & Subtraction (T02)	• Use strategies such as the relationship between addition and subtraction. (Example: 7 + 5 = 12 so 12 – 7 = 5)	MACC.1.OA.3.6
Understanding Addition and Subtraction to 12 (T01)	• Solve word problems that call for the addition of three whole numbers whose sum is less than or equal to 12. (e.g., by using objects, drawings and equations for the unknown number to represent the problem)	MACC.1.OA.1.2
Fluency (T05)	• Demonstrate fluency***** for addition and subtraction within **10**. ***Fluency means fast and accurately.** Suggested fluency guideline: answers correctly, the first time, within 5 seconds.	MACC.1.OA.3.6
Understanding Addition and Subtraction to 12 (T01)	• Use and explain strategies (to a partner, group or class) to identify and practice known equivalents for the sums up to and including 12. (Example: 12 = 11 + 1, 10 + 2, 9 + 3…)	MACC.1.OA.3.6

ACADEMIC LANGUAGE

addend
adding to
comparing
count back
count on
decompose
difference
digit
doubles
doubles plus one
double ten frame
equals (=)
equation (4 + 5 = 9)
false
manipulatives
minus (-)
number line
plus (+)
putting together
fact family/ related facts
strategy
subtract
sum
symbol
taking apart
taking from
ten-frame
tools
true
unknown
whole-part
zero

Teacher Vocabulary:

Commutative Property
inverse operations

Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
MACC.K12.MP.1	MACC.K12.MP.2	MACC.K12.MP.3	MACC.K12.MP.4	MACC.K12.MP.5	MACC.K12.MP.6	MACC.K12.MP.7	MACC.K12.MP.8

ESSENTIAL QUESTIONS:	What strategies do I use to help me add and subtract? Why does knowing my addition and subtraction facts help me?

Activities and Resources	Assessment

Suggested Resources

Student Edition

Topic 4: Lessons 4-1, 4-2, 4-3, 4-4, 4-5, 4-6
Topic 5: Lessons 5-1, 5-2, 5-3, 5-4, 5-5

Daily Assessment and Reteaching workbook

Lessons: 4-1, 4-2, 4-3, 4-4, 4-5, 4-6
5-1, 5-2, 5-3, 5-4, 5-5

Safari Montage

Subtraction: Schlessinger Media
Addition: Schlessinger Media
Numbertime Addition and Subtraction: Plus and Minus: BBC
Numbertime Addition and Subtraction: Adding Two Numbers: BBC
Numbertime Numbers to 100: Counting On and Back: BBC
Subtraction: Schlessinger Media
Addition & Subtraction: Schlessinger Media

Internet

CPALMS is a state wide project to build information systems and tools to support the implementation of the Next Generation Sunshine State Standards (NGSSS). http://www.floridastandards.org/homepage/index.aspx

http://www.jmathpage.com (Number and Addition & Subtraction)– Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers

http://www.bbc.co.uk/schools/starship/maths/placethepenguin.shtml - Know what each digit represents in 2 and 3 digit numbers

http://learningbox.com/base10/baseten.html - The Learning Box: Thinking Tools for Little Hands

Required Assessment

Addition and Subtraction Equations to 12 Form A

Suggested Assessments

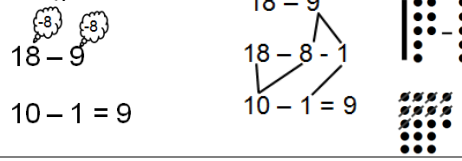
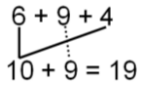
Topic 4 Florida Test
Topic 4 Free-Response Test
Topic 4 Performance Assessment
Topic 5 Florida Test
Topic 5 Free-Response Test
Topic 5 Performance Assessment

Mathematics Formative Assessment System (MFAS)

Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page.

http://www.floridastandards.org/Standards/FLStandardSearch.aspx

UNIT/ORGANIZING PRINCIPLE: ADDITION AND SUBTRACTION EQUATIONS TO 20	PACING: Weeks 13 – 18
ESSENTIAL QUESTIONS:	**How does knowing my math facts make math easier?** **What strategies do I use to solve addition and subtraction problems?**

MEASUREMENT TOPICS	LEARNING TARGETS/SKILLS	STANDARDS	ACADEMIC LANGUAGE
Addition and Subtraction to 20 (T04)	• Use appropriate tools (manipulatives, number lines, 100 chart, ten-frame) to solve word problems within 20	MACC.1.OA.3.6	0-99 chart 1-100 chart add addend compare count back count on difference digit doubles doubles plus one double ten frame equals (=) equation fact family/ related facts group inverse operation less minus (-) more number line plus (+) subtract strategy sum ten frame
Addition and Subtraction to 20 (T04)	• Identify, describe and use the pattern of adding or subtracting 0, 1, 2 or 3 to 20.	MACC.1.OA.3.5	
Addition and Subtraction to 20 (T04)	• Make sense of problems by acting them out, using manipulatives, drawing diagrams or pictures to solve word problems within 20 **using all** the situations from ***Table 1 Common addition and subtraction situations*** (page 88) of the Common Core State Standards for Mathematics	MACC.1.OA.3.6	
Addition and Subtraction to 20 (T04)	• Use a number line to add and subtract within 20.	MACC.1.OA.3.6	
Addition and Subtraction to 20 (T04)	• Solve addition and subtraction equations where the unknown number is represented by a geometric shape. (7 + ☐ = 13, △ - 7 = 13) to apply the concept of missing addends from Table 1 *Common addition and subtraction situations* (page 88) of the Common Core State Standards for Mathematics	MACC.1.OA.4.8	
Addition and Subtraction to 20 (T04)	• Write and identify combinations for sums to 20	MACC.1.OA.3.6	
T02 Inverse Relationship of Addition and Subtraction	• Use strategies such as the inverse relationship between addition and subtraction to solve problems. (Example: 15 = 9 + 6 and 15 – 6 = 9)	MACC.1.OA.3.6	
Addition and Subtraction to 20 (T04)	• Use strategies to create equivalent but easier known sums. (Example: 8 + 8 = 16 so 8 + 9 = 17 [doubles, doubles plus one]).	MACC.1.OA.3.6	
Addition and Subtraction to 20 (T04)	• Use strategies to decompose a number leading to a ten. Examples: 	MACC.1.OA.3.6	
Properties of Addition (T03)	• Apply properties of operations as strategies to add and subtract within 20. (Examples: if 8 + 9 = 17 then 9 + 8 = 17 [Commutative Property of Addition] and [Associative Property of Addition]) 	MACC.1.OA.2.3	
Addition and Subtraction to 20 (T04)	• Solve word problems that call for the addition of three whole numbers whose sum is less than or equal to 20, (Example: 8 + 5 = 13)	MACC.1.OA.1.2	
Addition and Subtraction to 20 (T04)	• Use and explain strategies (to a partner, group or class) to identify and practice known equivalents for the sums up to and including 20. (Example: 18 = 17 + 1, 16 + 2, 15 + 3…)	MACC.1.OA.3.6	
Fluency (T05)	• Demonstrate fluency* for addition and subtraction within 10. ***Fluency means fast and accurately.** Suggested fluency guideline: answers correctly, the first time, within 5 seconds.	MACC.1.OA.3.6	

Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
MACC.K12.MP.1	MACC.K12.MP.2	MACC.K12.MP.3	MACC.K12.MP.4	MACC.K12.MP.5	MACC.K12.MP.6	MACC.K12.MP.7	MACC.K12.MP.8

ESSENTIAL QUESTIONS:	How does knowing my math facts make math easier? What strategies do I use to solve addition and subtraction problems?

Activities and Resources	Assessment

Suggested Resources

Student Edition

Topic 6: Lessons 6-1, 6-2, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 6-9, 6-10, 6-11
Topic 6: Lesson 6-11A **(online)**
Topic 7: Lessons 7-1, 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, 7-8, 7-9, 7-10, 7-11

Daily Assessment and Reteaching workbook

Lessons: 6-1, 6-2, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 6-9, 6-10, 6-11
6-11A
7-1, 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, 7-8, 7-9, 7-10, 7-11

Safari Montage

Subtraction: Schlessinger Media
Addition: Schlessinger Media
Numbertime Addition and Subtraction: Plus and Minus: BBC
Numbertime Addition and Subtraction: Adding Two Numbers: BBC
Numbertime Numbers to 100: Counting On and Back: BBC
Subtraction: Schlessinger Media
Addition & Subtraction: Schlessinger Media

Internet

CPALMS is a state wide project to build information systems and tools to support the implementation of the Next Generation Sunshine State Standards (NGSSS). http://www.floridastandards.org/homepage/index.aspx

http://www.jmathpage.com (Number and Addition & Subtraction)– Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers

http://www.bbc.co.uk/schools/starship/maths/placethepenguin.shtml - Know what each digit represents in 2 and 3 digit numbers

http://learningbox.com/base10/baseten.html - The Learning Box: Thinking Tools for Little Hands

Required Assessment

Addition and Subtraction Equations to 20 Form A

Suggested Assessments

Topic 6 Florida Test
Topic 6 Free-Response Test
Topic 6 Performance Assessment
Topic 7 Florida Test
Topic 7 Free-Response Test
Topic 7 Performance Assessment

Mathematics Formative Assessment System (MFAS)

Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page.

http://www.floridastandards.org/Standards/FLStandardSearch.aspx

UNIT/ORGANIZING PRINCIPLE:	MEASUREMENT, TIME AND DATA	PACING: Weeks 19 – 21
ESSENTIAL QUESTIONS:	**What strategies can I use to measure and compare objects?** **Why is telling time important?** **How can I show and explain data?**	

MEASUREMENT TOPICS	LEARNING TARGETS/SKILLS	STANDARDS	ACADEMIC LANGUAGE
Compare and Order Objects (T09)	• Order three objects by length. (Example: length of 3 students' shoes, length of 3 shoes, length of 3 books.)	MACC.1.MD1.1	30 minutes analog biggest compare digital half-hour hands hour length long longer longest measurement non-standard unit order short shorter shortest time Teacher Vocabulary: categories data points interpret organize represent
Compare and Order Objects (T09)	• Compare the length of two objects, indirectly, by using a third object. (Example: compare the length of the chalkboard to a table using popsicle sticks.)	MACC.1.MD1.1	
Non-Standard Measurement (T07)	• Use *****non-standard units to express and understand length (paperclips, pencil, string) to measure objects found in the environment (desks, doors, books, etc.) *****All non-standard units must be the same size. (i.e., use small paper clips or large paper clips do not mix them.)	MACC.1.MD.1.2	
Time (T06)	• Tell and write time in hours and half-hours using analog **and** digital clocks.	MACC.1.MD.2.3	
Data (T08)	• Organize and represent up to three categories of data. (Should use concrete objects such as food, students, post-it notes, stuffed animals, tally marks and glyphs.)	MACC.1.MD.3.4	
Data (T08)	• Interpret data in up to three categories; ask and answer questions about the total number of data points. (Should use concrete objects such as food, students, post-it notes, stuffed animals, tally marks and glyphs**.** ***Students do not draw graphs; graphs would be done as a class.** Fruit We Got with Lunch in September: orange 𝍸	apple 𝍸 I	pear III *1. What fruit did we have the most often?* *2. How many days did we have pears?* *3. Did we have more oranges or pears?*	MACC.1.MD.3.4	

Make sense of problems and persevere in solving them. MACC.K12.MP.1	Reason abstractly and quantitatively. MACC.K12.MP.2	Construct viable arguments and critique the reasoning of others. MACC.K12.MP.3	Model with mathematics. MACC.K12.MP.4	Use appropriate tools strategically. MACC.K12.MP.5	Attend to precision. MACC.K12.MP.6	Look for and make use of structure. MACC.K12.MP.7	Look for and express regularity in repeated reasoning. MACC.K12.MP.8

ESSENTIAL QUESTIONS:	What strategies can I use to measure and compare objects? Why is telling time important? How can I show and explain data?

Activities and Resources	Assessment

Suggested Resources

Student Edition

Topic 16: Lessons 16-1, 16-3
Topic 16: Lessons 16-3A, 16-10A, 16-10B, 16-10C **(online)**
Topic 9: Lessons 9-6A, 9-6B, 9-6C **(online)**

Daily Assessment and Reteaching workbook

Topic 16: Lessons 16-1, 16-3
Topic 16: Lessons 16-3A, 16-10A, 16-10B, 16-10C **(online)**
Topic 9: Lessons 9-6A, 9-6B, 9-6C **(online)**

Internet

CPALMS is a state wide project to build information systems and tools to support the implementation of the Next Generation Sunshine State Standards (NGSSS). http://www.floridastandards.org/homepage/index.aspx

http://www.jmathpage.com Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers

Required Assessment

Measurement, Time and Data Form A

Suggested Assessments

Topic 8 Florida Test
Topic 8 Free-Response Test
Topic 8 Performance Assessment
Topic 9 Florida Test
Topic 9 Free-Response Test
Topic 9 Performance Assessment

Mathematics Formative Assessment System (MFAS)

Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page.

http://www.floridastandards.org/Standards/FLStandardSearch.aspx

UNIT/ORGANIZING PRINCIPLE: UNDERSTANDING PLACE VALUE	PACING: Weeks 22 – 29
ESSENTIAL QUESTIONS: **How does the position of a digit in a number affect its value?** **How are place value patterns repeated in large numbers?** **How can place value help you compare and order numbers?**	

MEASUREMENT TOPICS	LEARNING TARGETS/SKILLS	STANDARDS	ACADEMIC LANGUAGE
Count and Represent Numbers to 120 (T12)	• Count to **120** (starting at any number less than 120)	MACC.1.NBT.1.1	0-120 chart 1-120 chart after before between digit double ten frame equal to greater than greatest group hundreds least less than number number line ones order place value sequence sets tens tens frame
Count and Represent Numbers to 120 (T12)	• Read and write numerals to **120**	MACC.1.NBT.1.1	
Count and Represent Numbers to 120 (T12)	• Represent a number of objects with a written numeral to **120**	MACC.1.NBT.1.1	
Place Value (T10)	• Bundle objects in groups of ten and explain that ten ones can be called a "ten"	MACC.1.NBT.2.2a	
Compare and Order Numbers to 100 (T11)	• Compare the numbers from 11-19 as a "ten" and 1, 2, 3, 4, 5, 6, 7, 8, or 9 ones	MACC.1.NBT.2.2b	
Place Value (T10)	• Explain that the numbers 10, 20, 30, 40, 50, 60, 70, 80 and 90 are one, two, three, four, five, six, seven, eight, or nine tens and 0 ones. (Example: 70 = 7 tens and 0 ones)	MACC.1.NBT.2.2c	
Place Value (T10)	• Model and explain place value of ones and tens to **99** using appropriate tools (base-ten blocks, multi-link cubes, ten frames or double ten frames)	MACC.1.NBT.2.2	
Compare and Order Numbers to 100 (T11)	• Compare two-digit numbers based on value of the tens and ones digits	MACC.1.NBT.2.3	
Compare and Order Numbers to 100 (T11)	• Use symbols (=, <, >) to compare two-digit numbers	MACC.1.NBT.2.3	
Compare and Order Numbers to 100 (T11)	• Order sets of numbers (before, after, between; least to greatest, greatest to least) up to **99**	MACC.1.NBT.2.3	
Compare and Order Numbers to 100 (T11)	• Name missing numbers on a number line, 0-99 chart or 1-100 chart	MACC.1.NBT.2.3	
Place Value (T10)	• Understand that a number's place determines its value	MACC.1.NBT.2.2	

Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
MACC.K12.MP.1	MACC.K12.MP.2	MACC.K12.MP.3	MACC.K12.MP.4	MACC.K12.MP.5	MACC.K12.MP.6	MACC.K12.MP.7	MACC.K12.MP.8

ESSENTIAL QUESTIONS:	How does the position of a digit in a number affect its value? How are place value patterns repeated in large numbers? How can place value help you compare and order numbers?

Activities and Resources	Assessment

Suggested Resources

Student Edition

Topic 9 Lessons 9-1, 9-2, 9-3
Topic 10 Lessons 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, 10-8, 10-9, 10-11
Topic 11 Lessons 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 11-10

Daily Assessment and Reteaching workbook

Topic 9 Lessons 9-1, 9-2, 9-3
Topic 10 Lessons 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-7, 10-8, 10-9, 10-11
Topic 11 Lessons 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 11-10

Safari Montage

Number Sense: Schlessinger Media
Numbertime Numbers to 100: Counting On and Back: BBC

Internet

CPALMS is a state wide project to build information systems and tools to support the implementation of the Next Generation Sunshine State Standards (NGSSS). http://www.floridastandards.org/homepage/index.aspx

http://www.jmathpage.com (Number and Addition & Subtraction)– Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers

http://learningbox.com/base10/baseten.html - The Learning Box: Thinking Tools for Little Hands

Required Assessment

Understanding Place Value Form A

Suggested Assessments

Topic 10 Florida Test
Topic 10 Free-Response Test
Topic 10 Performance Assessment
Topic 11 Florida Test
Topic 11 Free-Response Test
Topic 11 Performance Assessment

Mathematics Formative Assessment System (MFAS)

Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page.

http://www.floridastandards.org/Standards/FLStandardSearch.aspx

UNIT/ORGANIZING PRINCIPLE: ADDITION AND SUBTRACTION OF 2-DIGIT NUMBERS	PACING: Weeks 30 – 33
ESSENTIAL QUESTIONS:	**Why does knowing my math facts make it easier to add and subtract large numbers?** **How can I use what I know about tens and ones to add and subtract two-digit numbers?**

MEASUREMENT TOPICS	LEARNING TARGETS/SKILLS	STANDARDS	ACADEMIC LANGUAGE
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• Count forward and backward by tens starting at any number within 100 (Examples: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93 - or - 79, 69, 59, 49, 39, 29, 19, 9)	MACC.1.NBT.3.5	0-99 chart 1-100 chart add base-ten compose decompose difference equal minus number line number pattern ones place value plus subtract sum tens two-digit
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• <u>introduce</u> and <u>explore</u> the concept of regrouping <u>with manipulatives</u> (not to mastery) by decomposing numbers. Examples: 25 + 7 = 12 (add the ones (5+7)) + 20 (add the tens (20+0)) = 32 (sum); 25 + 7 → 20 + 5 → 20 + 5 + 7 → 20 + 12 = 32 *Students should **<u>not</u>** be taught the traditional regrouping algorithm for addition or subtraction.	MACC.1.NBT.3.4	
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• Use base-ten blocks to show that in adding two-digit numbers, you should add the tens together and add the ones together, and sometimes it is necessary to make another ten. *Students should <u>not</u> be taught the traditional regrouping algorithm for addition or subtraction.	MACC.1.NBT.3.4	
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• Add a two-digit number to a one-digit number, within 100, using appropriate tools (concrete models or drawing) and strategies based on place value	MACC.1.NBT.3.4	
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• Add a two-digit number to a multiple of 10 using appropriate tools (concrete models or drawings) and strategies based on place value	MACC.1.NBT.3.4	
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• Use strategies to add a two digit number and a one-digit number and relate the strategy to a written method to explain the strategy used	MACC.1.NBT.3.4	
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• Subtract a multiple of 10 (10, 20, 30, 40…) from any two-digit number and explain the strategy used. (Examples: 42 – 20; 68 – 10; 95 – 50)	MACC.1.NBT.3.6	
Addition and Subtraction of 2-Digit Numbers without Regrouping (T13)	• Find 10 more or 10 less than a given two-digit number without having to count (mental math – 10 more than 35 is 45) and explain how you found the answer.	MACC.1.NBT.3.5	

Make sense of problems and persevere in solving them.	Reason abstractly and quantitatively.	Construct viable arguments and critique the reasoning of others.	Model with mathematics.	Use appropriate tools strategically.	Attend to precision.	Look for and make use of structure.	Look for and express regularity in repeated reasoning.
MACC.K12.MP.1	MACC.K12.MP.2	MACC.K12.MP.3	MACC.K12.MP.4	MACC.K12.MP.5	MACC.K12.MP.6	MACC.K12.MP.7	MACC.K12.MP.8

ESSENTIAL QUESTIONS:	Why does knowing my math facts make it easier to add and subtract large numbers? How can I use what I know about tens and ones to add and subtract two-digit numbers?

Activities and Resources	Assessment

Suggested Resources

Student Edition

Topic 12: Lessons 12-1, 12-2, 12-3, 12-4, 12-5, 12-9
(do not do lessons 12-6, 12-7 or 12-8)
Topic 13: Lessons 13-1, 13-2, 13-3, 13-4
Topic 13: Lesson 13-1A **(online)**

Daily Assessment and Reteaching workbook

Topic 12: Lessons 12-1, 12-2, 12-3, 12-4, 12-5, 12-9
(do not do lessons 12-6, 12-7 or 12-8)
Topic 13: Lessons 13-1, 13-2, 13-3, 13-4
Topic 13: Lesson 13-1A **(online)**

Safari Montage

Number Sense: Schlessinger Media
Numbertime Numbers to 100: Counting On and Back: BBC

Internet

CPALMS is a state wide project to build information systems and tools to support the implementation of the Next Generation Sunshine State Standards (NGSSS). http://www.floridastandards.org/homepage/index.aspx

http://www.jmathpage.com (Number and Addition & Subtraction)– Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers

http://learningbox.com/base10/baseten.html - The Learning Box: Thinking Tools for Little Hands

Required Assessment

Addition and Subtraction of 2-Digit Numbers Form A

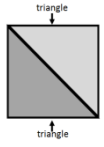
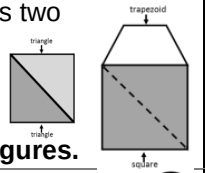
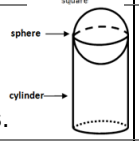
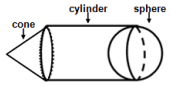
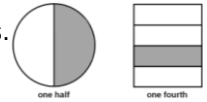
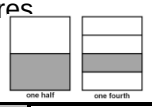
Mathematics Formative Assessment System (MFAS)

Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page.

http://www.floridastandards.org/Standards/FLStandardSearch.aspx

UNIT/ORGANIZING PRINCIPLE:	GEOMETRY	PACING: Weeks 34 – 37

ESSENTIAL QUESTIONS:
How does knowing the attributes of 2-diminsional and 3-dimensional shapes help me?
How can I use shapes I already know to make different shapes?
What happens to the number of pieces when I divide a shape into smaller, equal sized, pieces?

MEASUREMENT TOPICS	LEARNING TARGETS/SKILLS	STANDARDS	ACADEMIC LANGUAGE
Attributes (T14)	• Distinguish between defining attributes of two-dimensional shapes (e.g. closed and open, number of sides, number of vertices) verses non-defining attributes (e.g. color, size and orientation)	MACC.1.G.1.1	2-Dimensional 3-Dimensional attributes closed figure compare cone cube cylinder half circles open figure quarter circle sides sort sphere stack trapezoid vertex/vertices
Attributes (T14)	• Use defining attributes to build and define shapes (e.g. closed shape with 4 sides and 4 vertices)	MACC.1.G.1.1	
Composite Shapes (T15)	• Use two-dimensional shapes (rectangles, squares, circles, hexagons, trapezoids, triangles, half-circles, quarter-circles) to create a composite* shape. (E.g. Student uses two triangles to make a square; "My new shape has 4 sides and 4 vertices.") ***Composite Shape – a figure made from two or more geometric figures.** 	MACC.1.G.1.2	
Composite Shapes (T15)	• Compose new shapes from a composite* shape. (E.g. Student uses two triangles to make a square; "My new shape has 4 sides and 4 vertices. Student then adds a trapezoid to the top of the square to make a "house.") ***Composite Shape – a figure made from two or more geometric figures.** 	MACC.1.G.1.2	
Composite Shapes (T15)	• Use three-dimensional shapes (cubes, right rectangular prisms, right circular cones, right circular cylinders) to make a new composite* shape. ***Composite Shape – a figure made from two or more geometric figures**. 	MACC.1.G.1.2	
Composite Shapes (T15)	• Compose a new shape from a composite* shape. ***Composite Shape – a figure made from two or more geometric figures**. 	MACC.1.G.1.2	
Partitioning into Equal Shares (T16)	• Separate circles and rectangles into two and four equal parts. ➢ Describe the parts using the words halves, fourths, and quarters. ➢ Describe using the phrases half of, fourth of and quarter of ➢ Describe the whole as two of two or four of four of the parts 	MACC.1.G.1.3	Teacher Vocabulary: compose composite decompose rectangular prism
Partitioning into Equal Shares (T16)	• Explain that decomposing* into more equal shares creates smaller shares. (Example: One of two shares is larger than one of four shares.) ***Decomposing – breaking a shape into smaller shapes/pieces.** 	MACC.1.G.1.3	

Make sense of problems and persevere in solving them. MACC.K12.MP.1	Reason abstractly and quantitatively. MACC.K12.MP.2	Construct viable arguments and critique the reasoning of others. MACC.K12.MP.3	Model with mathematics. MACC.K12.MP.4	Use appropriate tools strategically. MACC.K12.MP.5	Attend to precision. MACC.K12.MP.6	Look for and make use of structure. MACC.K12.MP.7	Look for and express regularity in repeated reasoning. MACC.K12.MP.8

ESSENTIAL QUESTIONS:	**How does knowing the attributes of 2-diminsional and 3-dimensional shapes help me?** **How can I use shapes I already know to make different shapes?** **What happens to the number of pieces when I divide a shape into smaller, equal sized, pieces?**

Activities and Resources	Assessment

Suggested Resources

Student Edition

Topic 14: Lessons 14-1, 14-2, 14-3, 14-4, 14-5, 14-6, 14-7
Topic 14: Lessons 14-8A, 14-8B, 14-8C **(online)**
Topic 15: Lessons 15-1, 15-2, 15-3, 15-4, 15-5, 15-6

Daily Assessment and Reteaching workbook

Topic 14: Lessons 14-1, 14-2, 14-3, 14-4, 14-5, 14-6, 14-7
Topic 14: Lessons 14-8A, 14-8B, 14-8C **(online)**
Topic 15: Lessons 15-1, 15-2, 15-3, 15-4, 15-5, 15-6

Safari Montage

Shape and Form in Art – All About Art Series: VCS ITV
Geometry: Schlessinger Media

Internet

CPALMS is a state wide project to build information systems and tools to support the implementation of the Next Generation Sunshine State Standards (NGSSS). http://www.floridastandards.org/homepage/index.aspx

http://www.jmathpage.com (Pattern Blocks & Geoboards)– Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers

Required Assessment

Geometry Form A

Suggested Assessments

Topic 14 Florida Test
Topic 14 Free-Response Test
Topic 14 Performance Assessment
Topic 15 Florida Test
Topic 15 Free-Response Test
Topic 15 Performance Assessment

Mathematics Formative Assessment System (MFAS)

Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page.

http://www.floridastandards.org/Standards/FLStandardSearch.aspx

UNIT/ORGANIZING PRINCIPLE: REVIEW ADDITION AND SUBTRACTION TO 20			PACING: Weeks 38 – 39
ESSENTIAL QUESTIONS: **Why does knowing my addition and subtraction facts help me?**			
MEASUREMENT TOPICS	**LEARNING TARGETS/SKILLS**	**STANDARDS**	**ACADEMIC LANGUAGE**
Fluency (T05)	• Demonstrate fluency* for addition and subtraction within **10**. ***Fluency means fast and accurately.** Suggested fluency guideline: answers correctly, the first time, within 5 seconds.	MACC.1.OA.3.6	0-99 chart 1-100 chart add addend compare count back count on difference digit doubles doubles plus one double ten frame equals (=) equation fact family/ related facts group inverse operation less minus (-) more number line plus (+) subtract strategy sum ten frame
Addition & Subtraction to 20 (T04)	• Write and identify combinations for sums to 20.	MACC.1.OA.3.6	

Make sense of problems and persevere in solving them. MACC.K12.MP.1	Reason abstractly and quantitatively. MACC.K12.MP.2	Construct viable arguments and critique the reasoning of others. MACC.K12.MP.3	Model with mathematics. MACC.K12.MP.4	Use appropriate tools strategically. MACC.K12.MP.5	Attend to precision. MACC.K12.MP.6	Look for and make use of structure. MACC.K12.MP.7	Look for and express regularity in repeated reasoning. MACC.K12.MP.8

ESSENTIAL QUESTIONS: Why does knowing my addition and subtraction facts help me?

Activities and Resources	Assessment
Suggested Resources **Safari Montage** Subtraction: Schlessinger Media Addition: Schlessinger Media Numbertime Addition and Subtraction: Plus and Minus: BBC Numbertime Addition and Subtraction: Adding Two Numbers: BBC Numbertime Numbers to 100: Counting On and Back: BBC Subtraction: Schlessinger Media Addition & Subtraction: Schlessinger Media **Internet** CPALMS is a state wide project to build information systems and tools to support the implementation of the Next Generation Sunshine State Standards (NGSSS). http://www.floridastandards.org/homepage/index.aspx http://www.jmathpage.com (Number and Addition & Subtraction)– Johnnie's Math Page: Interactive math tools, math activities and math fun for kids and their teachers http://www.bbc.co.uk/schools/starship/maths/placethepenguin.shtml - Know what each digit represents in 2 and 3 digit numbers http://learningbox.com/base10/baseten.html - The Learning Box: Thinking Tools for Little Hands	**Required Assessment** **Suggested Assessments** Topic 4 Florida Test Topic 4 Free-Response Test Topic 4 Performance Assessment Topic 5 Florida Test Topic 5 Free-Response Test Topic 5 Performance Assessment Topic 6 Florida Test Topic 6 Free-Response Test Topic 6 Performance Assessment Topic 7 Florida Test Topic 7 Free-Response Test Topic 7 Performance Assessment **Mathematics Formative Assessment System (MFAS)** Available at the CPALMS site is MFAS for K-3 students. Select the "Standards Information System" link on the top menu and then browse to the particular benchmark. All the formative assessment tasks and other instructional resources can be found under the "Related Resources" section of the benchmark preview page. http://www.floridastandards.org/Standards/FLStandardSearch.aspx