



# TCSS Common Core Curriculum

Katie Brown – Elementary Math Academic Coach

# State provides us with the following:

## Common Core Georgia Performance Standard

MCC2.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.

## Resources That Support the Standards

- Frameworks
- Learning Village
- Wikis
- Grade Level Overviews

Troup County provides teachers with the following:

[Instructional Resource Website](#)

- Curriculum Maps (includes standards and when to teach them)
- Resource Ideas
- Professional Development
- TCSS Teacher Videos
- Assessment Ideas
- 121 Pages and 10,532 Files



# Let's Take a Quick Glance

**Math** [Year At A Glance](#) [2nd Grade Yearly Calendar Updated 2014 -2015](#) [Standards/EQ Posters](#) [Exemplar Page](#) [2nd Grade Math Page](#)



[Word Problem of the Day PPT](#) [Word Problem of the Day Flipchart](#)

[NY Modules with Lessons](#) **NEW!**

Assessment Tasks for the whole year: [student manual](#) [teacher manual](#)

[NY Learning Module Alignment Document](#) - Thank you Joanie Henderson/Bonnie Humphries **NEW**

*Look at differentiation section of curriculum maps for differentiation examples*

## 1st Quarter

[Curriculum Map Updated 2014 - 2015](#)  
[Teacher Checklist Updated 2014 - 2015](#)

[What's My Place What's My Value](#)  
[Number Talks](#)  
[Number Talks Poster](#) **NEW!**

## 2nd Quarter

[Curriculum Map Updated 2014 - 2015](#)  
[Teacher Checklist Updated 2014 - 2015](#)  
[Benchmark Map](#)

[What's My Place What's My Value](#)  
[Number Talks](#)

## 3rd Quarter

[Curriculum Map Updated 2014 - 2015](#)  
[Teacher Checklist Updated 2014 - 2015](#)

[What's My Place What's My Value](#)  
[Number Talks](#)

## 4th Quarter

[Curriculum Map Updated 2014 - 2015](#)  
[Teacher Checklist Updated 2014 - 2015](#)

[What's My Place What's My Value](#)  
[Number Talks](#)



# Curriculum Map

	CCGPS	Example/Vocabulary	System Resources
Standard →	<b><u>MCC2.OA.2</u></b> <b><u>Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</u></b>	<b><u>MCC2.OA.2</u></b> In this standard fluently means accurately (correct answer), efficiently (within 4 – 5 seconds), and with flexibility (using strategies such as making 10 or breaking apart numbers). Research indicates that teachers can best support students' memorization of sums and differences through varied experience making ten, breaking numbers apart and working on mental strategies rather than repetitive timed tests. It is appropriate to assess these facts with a timed test.	<b><u>MCC2.OA.2</u></b> <i>The Hands On Standards lessons can also be used in whole group as introductory lessons.</i>
Prior Learning →	<b>In first grade students learned to add and subtract within 20 using strategies such as counting on, making ten, decomposing a number leading to a ten, using the relationship between addition and subtraction, and creating equivalent but easier of known sums. Students had to demonstrate fluency for addition and subtraction within 10.</b>		<b>Whole Group</b> <a href="#">Addition Strategy Notebook</a> <a href="#">Subtraction Strategy Notebook</a> ←
Questions →	<b><u>Essential Questions</u></b> What mental math strategies can I use to help me add quickly and accurately?  What mental math strategies can I use to help me subtract quickly and accurately?  What are some strategies for learning my addition facts?  What are some strategies for learning my subtraction facts?	Mental strategies help students make sense of number relationships as they are adding and subtracting within 20. Some strategies are as follows: <b><u>Examples of Addition Strategies:</u></b> • Doubles: Adding two of the same number together, such as 5+5 or 7+7. • Doubles plus one: Finding hidden doubles in expressions where one addend is one more than the other, such as 5 + 6 (thinking 5 + 5 + 1). • Doubles plus two: Finding hidden doubles in expressions where one addend is two more than the other, such as 5 + 7 (thinking 5 + 5 + 2). • Doubles minus one: Locating doubles in expressions where one addend is one more than the other, such as 5 + 6 (but thinking 6 + 6 – 1). • Doubles minus two: Locating doubles in expressions where one addend is two more than the other, such as 5 + 7 (but thinking 7 + 7 – 2). • Combinations of Ten: Students learn to recognize expressions equaling ten such as 6 + 4 and 7 + 3 for use in other strategies. • Counting Up: This is only used when adding 1 or 2 to a given number; 9 + 2 would be "9....10, 11". • Making Tens: (9 + 7 = 10 + 6)	On Grade Level Resources  BBY: • <a href="#">Dots</a> • <a href="#">What's My Place, What's My Value?</a>  <i>Harcourt Math:</i> • 4.1 (using properties of operations) • 4.2 (using counting on) • 4.3 (using double & doubles + 1) • 4.4 (using making ten) • 5.1 (using counting back) • 5.2 (using fact families) • 5.3 (using relating + and -)  <i>Think Math:</i> • Chapter 1: Lessons 4, 5, and 9 • Chapter 2: Lessons 1, 3, 4, 5, 6 and 7  <i>Learning Village:</i> • <a href="#">Order is Important</a> pg. 35 • <a href="#">Incredible Equations</a> pg. 31  <b><u>Fluency Kit:</u></b> • Strategies Section  <a href="#">Building Towards Fluency Hitting the Target Number</a>



# Curriculum Map Continued

CCGPS	Example/Vocabulary	System Resources				
	<p align="center"><b>MCC2.OA.2</b></p> <p align="center"><u>Examples of Subtraction Strategies</u></p> <ul style="list-style-type: none"> <li>• Counting Back: Beginning with the minuend, count back the number you are subtracting.</li> <li>• Counting Up: Begin with the number you are subtracting and count up to the other number; 12 - 9 could be, "9....10, 11, 12". The answer would be three because we counted up three numbers.</li> <li>• Think Addition/Fact Families: Think of related addition problems when confronted with subtraction facts; if you see 7 - 5 you would think 5 + 2 = 7.</li> <li>• Decomposing a Number Leading to a Ten: (14 - 6 = 14 - 4 - 2 = 10 - 2 = 8)</li> </ul> <p>Developing Fluency for Addition &amp; Subtraction within 20:  <b>Example:</b> 9 + 5 = __</p> <table border="1" data-bbox="568 811 1271 968"> <tr> <td data-bbox="568 811 807 968"> <p align="center"><b>Student A</b></p> <p align="center"><i>Counting On</i></p> <p>I started at 9 and then counted 5 more. I landed on 14.</p> </td> <td data-bbox="807 811 1271 968"> <p align="center"><b>Student B</b></p> <p align="center"><i>Decomposing a Number-Leading to a Ten</i></p> <p>I know that 9 and 1 is 10, so I broke 5 into 1 and 4. 9 plus 1 is 10. Then I have to add 4 more, which is 14.</p> </td> </tr> </table> <p><b>Example:</b> 13 - 9</p> <table border="1" data-bbox="568 1042 1271 1225"> <tr> <td data-bbox="568 1042 846 1225"> <p align="center"><b>Student A</b></p> <p align="center"><i>Using the Relationship between Addition and Subtraction</i></p> <p>I know 9 plus 4 equals 13. So 13 minus 9 is 4.</p> </td> <td data-bbox="846 1042 1271 1225"> <p align="center"><b>Student B</b></p> <p align="center"><i>Creating an Easier Problem</i></p> <p>Instead of 13 minus 9, I added 1 to each of the numbers to make the problem 14 minus 10. I know the answer is 4. So 13 minus 9 is also 4.</p> </td> </tr> </table> <p align="center"><b>Vocabulary</b></p> <p>mental strategies                      fact families</p>	<p align="center"><b>Student A</b></p> <p align="center"><i>Counting On</i></p> <p>I started at 9 and then counted 5 more. I landed on 14.</p>	<p align="center"><b>Student B</b></p> <p align="center"><i>Decomposing a Number-Leading to a Ten</i></p> <p>I know that 9 and 1 is 10, so I broke 5 into 1 and 4. 9 plus 1 is 10. Then I have to add 4 more, which is 14.</p>	<p align="center"><b>Student A</b></p> <p align="center"><i>Using the Relationship between Addition and Subtraction</i></p> <p>I know 9 plus 4 equals 13. So 13 minus 9 is 4.</p>	<p align="center"><b>Student B</b></p> <p align="center"><i>Creating an Easier Problem</i></p> <p>Instead of 13 minus 9, I added 1 to each of the numbers to make the problem 14 minus 10. I know the answer is 4. So 13 minus 9 is also 4.</p>	<p align="center"><b>MCC2.OA.2</b></p> <p align="center"><u>Differentiation Activities</u></p> <p><u>Fluency Kit</u></p> <ul style="list-style-type: none"> <li>• Games Section - students practice using strategies</li> </ul> <p>Other Lessons:</p> <ul style="list-style-type: none"> <li>• <u>Nine Plus</u></li> <li>• <u>Fact Family House</u></li> <li>• <u>Eleven More</u></li> <li>• <u>4 In a Row - Game 1</u></li> <li>• <u>4 In a Row - Game 2</u></li> <li>• <u>Subtraction Table</u></li> <li>• <u>Addition Table</u></li> <li>• <u>Pair Share</u></li> <li>• <u>Doubles Bump</u></li> <li>• <u>Near 20</u></li> <li>• <u>Magic Star</u></li> <li>• <u>Magic Triangle</u></li> <li>• <u>Magic Square</u></li> <li>• <u>Fact Family Sheet</u> (thanks Jennifer Snellgrove)</li> </ul> <p><u>Rekenrek</u> Activities (these activities come from the red book that came with rekenreks)</p> <ul style="list-style-type: none"> <li>• Lesson 5, 6, 7, 8, 9, 10, 11, 12</li> </ul> <p><u>Fluency Fun</u> (scroll to pg.5)  <u>Doubles Fun</u> (scroll to pg.8)</p> <p><u>Number Relationships and Addition Facts</u> (scroll to pg.11)  <a href="#">Click here for other lessons and assessments</a></p>
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Differentiated Resources

# Curriculum Map Continued

Standard	Additional Resources for Professional Development
MCC2.NBT.1	<a href="#">Thinking about place value in 2<sup>nd</sup> Grade</a> <a href="#">BLAST Professional Development Video 2.NBT.1-4</a> <a href="#">Math Misconceptions 2.NBT.1-4</a> <i>Teaching Student Centered Mathematics K-3</i> , John Van de Walle and LouAnn Lovin, pages 122-156
MCC2.NBT.2	<a href="#">BLAST Professional Development Video 2.NBT.1-4</a> <a href="#">Math Misconceptions 2.NBT.1-4</a> <i>Teaching Student Centered Mathematics K-3</i> , John Van de Walle and LouAnn Lovin, pages 122-156
MCC2.NBT.3	<a href="#">Thinking about place value in 2<sup>nd</sup> Grade</a> <a href="#">BLAST Professional Development Video 2.NBT.1-4</a> <a href="#">Math Misconceptions 2.NBT.1-4</a> <i>Teaching Student Centered Mathematics K-3</i> , John Van de Walle and LouAnn Lovin, pages 122-156
MCC2.NBT.4	<a href="#">BLAST Professional Development Video 2.NBT.1-4</a> <a href="#">Math Misconceptions 2.NBT.1-4</a> <a href="#">Thinking about place value in 2<sup>nd</sup> Grade</a>
MCC2.OA.2	<i>Teaching Student Centered Mathematics K-3</i> , John Van de Walle and LouAnn Lovin, pages 65-76; 94-111  <a href="#">How to Use a Rekenrek Video</a>

# 2<sup>nd</sup> Grade Math Page

## Operations and Algebraic Thinking (2.OA)

### Resources

#### 2.OA.1

- Teaching Student Centered Mathematics K-3, Van de Walle and Lovin:
  - Chapter 3: Developing Meaning for the Operations and Solving Story Problems, p. 65-80; p. 86-91
  - Chapter 6: Strategies for Whole Number Computation, p.163-169
- Illustrative Mathematics: [A Pencil and a Sticker](#)
- NCTM Illuminations Lessons: [Comparing Connecting Cubes](#)  
[How Many More Fish](#)      [Take Away](#)
- Lessons / Activities: [Antelope Addend](#)
- Interactive activities: [Grand Slam Math](#)
- One- and Two-Step Word Problems: [1](#)   [2](#)   [3](#)   [4](#)   [5](#)   *Thanks Jennifer Snellgrove*

#### 2.OA.2

- Teaching Student Centered Mathematics K-3, Van de Walle and Lovin
  - Activity 3.2 Missing Part Subtraction, page 74
  - Activity 3.3 More Than Two Addends, pages 76-77
  - Activity 4.7 Double Dice Plus One, page 102
  - Activity 4.8 Make Ten on the Ten-Frame, pages 103
  - Activity 4.11 Say the Ten Fact, page 106
  - Activity 4.15 Missing-Number Worksheets, pages 110-111
- [Finding Fact Families](#)
- Lessons / Activities: [Number Relationship Mat](#)   [Fact Family Unifix Trains](#)  
[Make Ten Dot Cards](#)   [Doubles Plus One](#)   [Doubles Minus One](#)   [Addition Snap](#)  
[Go Fish For Doubles](#)
- Interactive Activities: [Alien Addition](#)      [Addition Machine](#)

#### 2.OA.3

- Teaching Student Centered Mathematics K-3, Van de Walle and Lovin:
  - Fair Shares for Two, p. 292

### Assessment Tasks

#### CC Tasks from NC

##### OA.1

- [formative](#)
- [task](#)
- [classroom assessment questions](#)
- [Open Ended](#)

##### OA.2

- [Fact Fluency Test 1](#)
- [Fact Fluency Test 2](#)
- [Fact Fluency Test 3](#)
- [Fact Fluency Test 4](#)
- [Fact Fluency Test 5](#)
- [task 1](#)
- [directions](#)
- [Assessment Task 1](#)
- [Assessment Task 2](#)
- [Assessment Task 3](#)
- [Open Ended](#)

##### OA.3

- [classroom assessment questions](#)
- [Open Ended](#)

##### OA.4

- [classroom assessment questions](#)





# Pacing Calendar

~ September 2014 ~						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 Labor Day	2	3 MCC2. NBT.3 Base-ten numerals, number names, and expanded form to 1,000	4	5 MCC2. NBT.4 Compare two three-digit numbers	6
7	8	9	10 MCC2. NBT.4 Compare two three-digit numbers	11	12 MCC2.OA.3 Even and Odd	13
14	15	16	17 MCC2.OA.3 Even and Odd	18	19 MCC2.OA.2 and MCC2.MD.6 Fluently add and subtract within 20; use a number line to add and subtract up to 20	20
21	22	23	24	25	26	27
	MCC2.OA.2 and MCC2.MD.6 Fluently add and subtract within 20; use a number line to add and subtract up to 20					
28	29 MCC2.OA.2 and MCC2.MD.6	30	Notes:			

# In Closing

## **State provides us with:**

- Common Core Georgia Performance Standards  
(WHAT students need to learn)
- Support resources

## **As a system we:**

- take standards and create a curriculum that works for our system
- help teachers better understand the standards and what the students need to learn within a grade level and beyond
- provide a wealth of resources on our website that allows them to have autonomy when choosing HOW they are going to teach the standards