

Grade: 2 Unit: 2	Number and Operations in Base Ten	10 Weeks
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Progression	
1 st Grade	Students learned to add and subtract, gaining mental fluency within 10. Students learned to use groups of “tens” as a strategy for adding and subtracting numbers within 100.
2 nd Grade	This unit extends the work of Unit 1 to 3 digit numbers. By the end of the year, students should gain mental fluency within 20, paper fluency within 100, and be able to add and subtract within 1000 using concrete or representational models. Students are not required to master the standard algorithm in 2nd Grade.
3 rd Grade	Students will extend their work from 2 nd grade by rounding whole numbers to the nearest 10 or 100, and by adding and subtracting numbers within 1000 without concrete or representational models. Students will build toward mastery of the standard algorithm by the end of 4 th grade.

STUDENT LEARNING GOALS

Mathematics Standards (Appendices A & B)

[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.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.NBT.2](#): Count within 1000; skip-count by 5s, 10s, and 100s.

[2.NBT.3](#): Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

[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.

[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.

[2.NBT.6](#): Add up to four two-digit numbers using strategies based on place value and properties of operations.

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.

2.NBT.8: Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.

2.NBT.9: Explain why addition and subtraction strategies work, using place value and the properties of operations. *(Explanations may be supported by concrete or representational models)*

MP1: Make sense of problems and persevere in solving them.

MP6: Attend to Precision

Interdisciplinary Standards		Key Vocabulary	
Technology Integration <i>(Appendix C)</i>	21st Century Skills <i>(Appendix D)</i>	Addend	Fact Family
IS1. Information Strategies IS2. Information Use	TCS1. Use of Information TCS5. Problem Solving	Array	One-Step Problem
		Column	Odd Number
		Difference	Row
		Digit	Sum
		Even Number	Two-Step Problem
			Value
Enduring Understandings		Essential Questions	
<ul style="list-style-type: none"> I can regroup a ten I can add and subtract two-digit numbers I can add more than two two-digit numbers I can solve a one-step word problem by adding or subtracting two-digit numbers I can add and subtract three-digit numbers 		<ul style="list-style-type: none"> How can I add and subtract numbers with more than one digit? How can I solve word-problems with addition and subtraction? How can I add more than two numbers together? 	
Assessment Plan			
Summative Assessment(s)/Performance Based Assessments including 21st Century Learning		Formative and Diagnostic Assessment(s)	
RCC Interim Assessment, Student p.134-135 RCC Performance Task, Student p. 136		STAR Math Assessment (Fall) RCC Embedded Tasks and Assessments	
Learning Plan Components			
Text	Ready Common Core Mathematics Instruction 2, 2014, Curriculum Associates, ISBN: 978-0-7609-8637-0		
Print	Ready Common Core Mathematics Teacher Resource Book 2, 2014, Curriculum Associates, ISBN: 978-0-7609-8644-8		
Electronic	www.teacher-toolbox.com www.stratfordmath.wikispaces.com www.xtramath.org		

Week 1	Students will: <ul style="list-style-type: none"> • Break apart two-digit numbers as a strategy for adding place values • Recognize that in adding, tens are added to tens and ones to ones • Determine when regrouping a ten is necessary and carry out the regrouping to find a sum 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 7: Add Two-Digit Numbers</u>	Regrouping a Ten (p.69) Hands-On (p.70, 73) Formative (p.10) Differentiated (p.78)	CC Practice (p.77) SF 4-1, 4-3 SF 5-1, 5-2, 5-3	Teacher-Toolbox (4 Tutorials, 4 Tools for Instruction)
Week 2	Students will: <ul style="list-style-type: none"> • Decompose a ten as a strategy for subtracting place values • Recognize that since addition is the inverse operation of subtraction, addition can be used to solve a subtraction problem • Evaluate mental strategies for subtracting a number from a two-digit number 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 8: Subtract Two-Digit Numbers</u>	Explore Subtraction Strategies (p.80) Hands-On (p.81) Visual Support (p.84) Differentiated (p.89)	CC Practice (p. 88) SF 4-5, 4-6 SF 6-1, 6-2, 6-3, 6-4 SF 11-1 to 11-12	Teacher-Toolbox (4 Tutorials, 4 Tools for Instruction)
Week 3	Students will: <ul style="list-style-type: none"> • Analyze word problems to determine the operation needed to solve • Apply the use of fact families as a strategy to solve one-step problems and build numbers sense • Interpret models that represent a one-step problem with two-digit numbers. 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 9: Solve One-Step Word Problems with Two-Digit Numbers</u>	Explore One-Step Problems (p.91) Hands-On (p.93) Differentiated (p.100) GA "Addition Strategies" NC "Solving Story Problems" GA "Subtraction: Modeling with Regrouping"	CC Practice (p. 99) GA "Ant Collections" GA "Subtraction Story Problems" GA "I Have a Story, You Have a Story" GA "Story Problems: Part 2" GA "Multi-Digit Addition Strategies Revisited" SF 6-5	Teacher-Toolbox (2Tools for Instruction)
Week 4	Students will: <ul style="list-style-type: none"> • Identify ones, tens and hundreds in a three-digit number • Interpret models to determine the combinations of hundreds, tens, and ones in a number • Write a three-digit number in terms of varied combinations of hundreds, tens, and ones 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 10: Understand Three-Digit Numbers</u>	Tens and Hundreds (p.102) Hands-On (p.104) Visual (p.106) Formative (p. 108) Differentiated (p.109)	SF 10-2	Teacher-Toolbox (3 Tutorials, 2 Tools for Instruction)

Week 5	Students will: <ul style="list-style-type: none"> Identify place values: ones, tens, hundreds Model three-digit numbers Interpret a model and write the number value 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 11</u> : Read and Write Three-Digit Numbers	Put Together (p.111) Hands-On (p.114, 115) Differentiated (p.118) GA “Base Ten Pictures Revisited” *Take 100 Game *Perfect 500	CC Practice (p. 117) SF 10-3	Teacher-Toolbox (3 Tutorials, 1 Tool for Instruction)
Week 6	Students will: <ul style="list-style-type: none"> Evaluate models of three-digit numbers to determine whether numbers are greater than, less than, or equal to each other Express equalities and inequalities in number sentences using proper notation Solve problems and justify solutions involving inequalities 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 12</u> : Compare Three-Digit Numbers	Compare Two-Digit Numbers (p.51) Hands-On (p. 121) Visual (p.124) Differentiated (p.129)	CC Practice (p. 128) SF 10-5	Teacher-Toolbox (3 Tutorials, 1 Tool for Instruction)
Week 7	Students will: <ul style="list-style-type: none"> Break apart three-digit numbers as a strategy for adding place values Recognize that in adding, hundreds are added to hundreds, tens to tens, and ones to ones Determine when regrouping is necessary to add and carry out the regrouping to find a sum 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 13</u> : Add Three-Digit Numbers	Explore Addition (p.131) Hands-On (p. 133, 135) Differentiated (p.140)	CC Practice (p. 139) *Adding Three Digit Numbers *Adding Two and Three Digit Numbers *Adding Three Digit Numbers with Regrouping SF 11-1, 11-3, 11-4	Teacher-Toolbox (3 Tutorials, 3 Tools for Instruction)
Week 8	Students will: <ul style="list-style-type: none"> Determine when regrouping is necessary to subtract and carry out the regrouping to find a difference Recognize that in subtracting, hundreds are subtracted from hundreds, tens from tens, and ones from ones Explore subtraction as a process of “taking away” or “counting on” 		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 14</u> : Subtract Three-Digit Numbers	Explore Subtraction (p.142) Hands-On (p.145) Differentiated (p.151)	CC Practice (p. 150) *Subtracting Three Digit Numbers with Regrouping SF 10-4	Teacher-Toolbox (3 Tutorials, 3 Tools for Instruction)

Week 9	Students will: <ul style="list-style-type: none"> • Break apart three or more 2-digit numbers as a strategy for adding place values • Develop strategies for adding more than two numbers • Apply the commutative and associative properties of addition 		
Lessons	Tasks / Activities	Worksheets	Technology
RCC Lesson 15: Add Several Two-Digit Numbers	Making Hundreds (p.153) Hands-On (p.157) Differentiated (p.160)	CC Practice (p. 159) SF 5-6	Teacher-Toolbox (2 Tutorials, 2 Tools for Instruction)
Week 10	Students will: <ul style="list-style-type: none"> • Demonstrate mastery of objectives 		
Summative Assessment		Performance Task	
RCC Unit 2 Interim Assessment -Student p. 134-135 -Scoring Guide (p. 161)		RCC Unit 1 Performance Task -Student p. 136 -Rubric (p. 162-163)	