Unit 10 Reveal Grade 2

Content Area:	Math
Course(s):	Math
Time Period:	May
Length:	3 weeks
Status:	Published

Unit Overview

UNIT 10 PLANNER Strategies to Subtract 3-Digit Numbers

PACING: 15 days

	MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULAR
wite Greates	est and Least Differences Student	is apply their understanding of subtraction and place	value to tackle subtraction challenges.		
ntal Math to t 10 or 100	o Students mentally subtra 100 from a 3-digit numbe		Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.	10-1	Math Terms hundreds tens
ent Subtracti ligit Number			Students use prior knowledge and new understanding of mathematical concepts to complete a task.	10-2	place value
to Count Ba	· · ·	place value to count back to	Students collaborate with peers and contribute to group effort to achieve a collective mathematical goal.	10-3	decompose
In to Subtrac Numbers	act Students count on to subl 3-digit numbers.	tract Students explain how to count on to subtract 3-digit numbers using con and con't.	Students exchange ideas for mathematical problem-solving with a peer.	10-4	related facts
Tens	Students represent and s 3-digit subtraction equati require regrouping a ten.	tions that and solving 3-digit subtraction	Students set learning goals and initiate work on tasks to accomplish their goals.	10-5	regroup
Tens adreds	Students represent and s 3-digit subtraction equal that require regrouping a a hundred.	ions solving 3-digit subtraction equations	Students identify a problem, use s creativity to execute problem- solving steps, and identify multiple solutions.	10-6	regroup
lumbers to t 3-Digit Nun	,	, , ,	Students reflect on and describe s the logic and reasoning used to make a mathematical decision.	10-7	adjust friendly numbers
Subtraction	n Students explain the strategies they use to subtract 3-digit numbers.	Students talk about the strategies they use to subtract 3-digit numbers with use, best, and useful.	Students collaborate with peers to complete a mathematical task and offer constructive feedback.	10-8	adjust decompose
oblems Invo and Subtra			Students identify and discuss the emotions experienced during math learning.	10-9	adjust decompose
idition and s	Subtraction Problems Students	s solve a problem using a strategy of their choice.			
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nt					

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Enduring Understandings

Essential Questions What strategies can I use to subtract 3-digit numbers?

Instructional Strategies and Learning Activities

LESSON 10-1 Use Mental Math to Subtract 10 or 100		
Learning Target		
I can mentally subtract 10 and 10	10 from a 3-digit number.	
Standards • Major	A Supporting Additional	
Content © 2.NBT.B.8 Mentally add 10 or 1 given number 100–900.	00 to a given number 100–900, and	mentally subtract 10 or 100 from a
Math Practices and Processo		
MPP Look for and make use of str MPP Look for and express regular		
, , ,	, , , , , ,	
Focus		
	Language Objectives	SEI Objective
Content Objective	Language Objectives	SEL Objective
	Language Objectives • Students talk about mentally subtracting 10 or 100 from a	-
Content Objective • Students mentally subtract 10	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stoy the	 Students who can regulate their impulses and reactions are better able to navigate and
Content Objective - Students mentally subtract 10	 Students talk about mentally subtracting 10 or 100 from a 	 Students who can regulate their impulses and reactions are
Content Objective - Students mentally subtract 10	 Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive 	 Students who can regulate their impulses and reactions are better able to navigate and
Content Objective • Students mentally subtract 10	 Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, 	 Students who can regulate their impulses and reactions are better able to navigate and
Content Objective - Students mentally subtract 10	 Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive 	 Students who can regulate their impulses and reactions are better able to navigate and
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number.	 Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the same and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: 	 Students who can regulate their impulses and reactions are better able to navigate and
Content Objective - Students mentally subtract 10	 Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the same and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: 	 Students who can regulate their impulses and reactions are better able to navigate and
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number.	 Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the same and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: 	 Students who can regulate their impulses and reactions are better able to navigate and
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence	 Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. 	 Students who can regulate their impulses and reactions are better able to navigate and solve problems.
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1).	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1). • Students mentally added 10 or	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10).
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1).	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two step word
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1). • Students mentally added 10 or	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10).
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1). • Students mentally added 10 or 100 to a 3-digit number (Unit 9).	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two step word problems with four operations
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1). • Students mentally added 10 or 100 to a 3-digit number (Unit 9). Rigor	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stoy the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in NLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10 or 100 from a 3-digit number.	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two step word problems with four operations (Grade 3).
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1). • Students mentally added 10 or 100 to a 3-digit number (Unit 9). Rigor Conceptual Understanding	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. Io support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10 or 100 from a 3-digit number. Procedural Skill & Fluency	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two-step word problems with four operations (Grade 3). Application
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 10, • Students mentally added 10 or 100 to a 3-digit number (Unit 9). Rigor Conceptual Understanding • Students build on their	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10 or 100 from a 3-digit number. Procedural Skill & Fluency Students develop fluency with	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two-step word problems with four operations (Grade 3). Application Students apply understanding
Content Objective Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous Students mentally added 10 to a 2-digit number (Grade 1). Students mentally added 10 or 100 to a 3-digit number (Unit 9). Rigor Conceptual Understanding Students build on their understanding of place value and	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. Io support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10 or 100 from a 3-digit number. Procedural Skill & Fluency Students develop fluency with using subtraction patterns to	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two step word problems with four operations (Grade 3). Application Students apply understanding of subtraction patterns to solve
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 10, • Students mentally added 10 or 100 to a 3-digit number (Unit 9). Rigor Conceptual Understanding • Students build on their	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. To support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10 or 100 from a 3-digit number. Procedural Skill & Fluency Students develop fluency with	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two-step word problems with four operations (Grade 3). Application Students apply understanding
Content Objective - Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous - Students mentally added 10 to a 2-digit number (Grade 1). - Students mentally added 10 or 100 to a 3-digit number (Unit 9). Rigor Conceptual Understanding - Students build on their understanding of place value and subtraction patterns to subtract	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. Io support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10 or 100 from a 3-digit number. Procedural Skill & Fluency Students develop fluency with using subtraction patterns to mentally subtract 10 or 100 from	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two-step word problems with four operations (Grade 3). Application Students apply understanding of subtraction patterns to solve real-world problems involving
Content Objective • Students mentally subtract 10 or 100 from a 3-digit number. Coherence Previous • Students mentally added 10 to a 2-digit number (Grade 1). • Students mentally added 10 or 100 to a 3-digit number (Unit 9). Rigor Conceptual Understanding • Students build on their understanding of place value and subtraction patterns to subtract	Students talk about mentally subtracting 10 or 100 from a 3-digit number using stay the some and change. Io support maximizing cognitive and linguistic meta-awareness, ELs participate in MLR8: Discussion Supports. Now Students use place value patterns to mentally subtract 10 or 100 from a 3-digit number. Procedural Skill & Fluency Students develop fluency with using subtraction patterns to mentally subtract 10 or 100 from	Students who can regulate their impulses and reactions are better able to navigate and solve problems. Next Students represent and solve 3-digit subtraction equations (Unit 10). Students solve two-step word problems with four operations (Grade 3). Students apply understanding of subtraction patterns to solve real-world problems involving subtraction potents involving subtraction patterns to solve

LESSON 10-2 Represent Subtraction with 3-Digit Number

Learning Target

- I can subtract 3-digit numbers without regrouping.

Standards • Major A Supporting • Additional

Content

♦ 2.NBT.B.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.

Math Practices and Processes

MPP Model with mathematics.

MPP Look for and make use of structure.

Focus

Content Objective	Language Objectives	SEL Objective	
 Students represent and solve 3-digit subtraction equations that require no regrouping. 	Students explain how to represent and solve 3-digit subtraction equations using similar and different. To support optimizing output, ELs participate in MLRt: Stronger and Clearer Each Time.	 Students use prior knowledge and new understanding of mathematical concepts to complete a tack, building stronger self-efficacy. 	
Coherence			
Previous	Now	Next	
 Students used strategies to subtract within 100 (Grade 1). Students used mental math to subtract 10 or 100 from a 3-digit number (Unit 10). 	 Students apply understanding of place value to subtract 3-digit numbers without regrouping. 	 Students decompose and adjust numbers to subtract 3-digit numbers (Unit 10). Students solve two step word problems with four operations 	
/		(Grade 3).	
Rigor			
Conceptual Understanding	Procedural Skill & Fluency	Application	
 Students build on their understanding of place value and subtraction by solving 3-digit subtraction equations using 	 Students develop fluency with subtracting 3 digit numbers using place-value representations. Procedural skill & fluency is 	 Students write and solve subtraction equations to solve real-world problems involving 3-digit numbers. 	
place-value representations.	not a targeted element of rigor for this standard.	Application is not a targeted element of rigor for this standard.	

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LESSON 10-3 Decompose One 3-Digit Number to Count B

Learning Target

- I can decompose one 3-digit number to count back.

Standards • Major A Supporting • Additional

Content

C 2.NBT.B.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.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Use appropriate tools strategically.

Focus

number by place value to count back to subtract 3-digit numbers. by place value to count back to subtract 3-digit numbers. and contribute 1 achieve a collec mathematical get other ways, helpful, and efficient. To support optimizing output, ELS participate in MLR2: Compare and Connect. mathematical get mathematical get subtract within 100 (Grade T). Students used strategies to subtract within 100 (Grade T). Students decompose one number by place value to subtract 3-digit numbers. Next Students subtracted 3-digit numbers without regrouping (Unit 10). Students decompose one number by place value to subtract 3-digit numbers. Next Rigor Procedural Skill & Fluency • Students built on their understanding of subtraction strategies by decomposing an Application • Students develop fluency with 3-digit subtraction by decomposing one number		
Students used strategies to subtract within 100 (Grade T). Students decompose one numbers by place value to subtract 3 digit numbers. Students subtracted 3 digit numbers. Students subt	Students decompose one number by place value to count back to subtract 3-digit numbers.	 Students collaborate with pe and contribute to group effor achieve a collective
Conceptual Understanding Procedural Skill & Fluency Application Students build on their Understanding of subtraction Understanding Unde	Students used strategies to subtract within 100 (Grade 1). Students subtracted 3-digit numbers without regrouping	Students count on to subtract 3-digit numbers (Unit 10). Students solve two step wor problems with four operation
Students build on their Students develop fluency Students apply understanding of subtraction with 3-digit subtraction by decomposing a decomposing one number subtraction strategies by decomposing a decomposing one number subtraction strategies by decomposing a decomposing one number subtraction strategies by decomposing and decomposing one number subtraction strategies by decomposing a decomposing one number subtraction strategies by decomposing a decomposing and decom	ligor	
	Students build on their understanding of subtraction strategies by decomposing a	 Students apply understandin of decomposing as a subtraction strategy to solve
back to subtract efficiently. the difference. 3 digit numbers Application is not	3-digit number and counting back to subtract efficiently.	real-world problems involvin 3-digit numbers. Application is not a targeted element of rigor for this standa

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LESSON 10-4 Count On to Subtract 3-Digit Numbers

Learning Target

- I can count on to subtract 3-digit numbers.

Standards • Major A Supporting • Additional

Content

C 2.NBT.B.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.

Math Practices and Processes

MPP Reason abstractly and quantitatively. MPP Look for and make use of structure.

Content Objective	Language Objectives	SEL Objective	
Students count on to subtract 3-digit numbers.	Students explain how to count on to subtract 3-digit numbers using con and con't. To support cultivating conversation, ELs participate in MLR3: Critique, Correct, and Clarify.	 Students exchange ideas for mathematical problem-solving with a peer, leterning attentively and providing thoughtful and constructive feedback. 	
Coherence			
Previous	Now	Next	
Students used strategies to subtract within 100 (Grade 1). Students decomposed one number to count back to subtract 3-digit numbers (Unit 10).	Students count on to solve 3-digit subtraction equations.	Students regroup tens to subtract 3 digit numbers (Unit 10). Students solve two step word problems with four operations (Grade 3).	
Rigor			
Conceptual Understanding	Procedural Skill & Fluency	Application	
 Students build on their understanding of place value and properties of operations to subtract 3-digit numbers. 	 Students build proticiency with counting on using a number line to subtract 3-digit numbers. 	 Students apply their understanding of counting on as a strategy to solve real-world problems involving 3-digit numbers. 	
		Application is not a targeted element of rigor for this standard.	

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LESSON 10-5 Regroup Tens

Learning Target

- I can regroup tens to subtract 3-digit numbers.

Standards + Major + Supporting • Additional

Content

2.NBT.B.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.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
Students represent and solve 3-digit subtraction equations that require regrouping a ten.	 Students talk about representing and solving 3-digit subtraction equations that require regrouping a ten using not enough and represent. 	 Students set learning goals and initiate work on tasks to accomplish their goals.
	To support maximizing linguistic and cognitive meta-awareness, ELs participate in MLRS: Co-Craft Questions and Problems.	
Coherence		
Previous	Now	Next
Students used strategies to subtract within 100 (Grade 1). Students represented and solved 2 digit subtraction equations that required regrouping (Unit 6).	 Students apply their understanding of place value to subtract 3-digit numbers by regrouping tens. 	Students represent and solve 3-digit subtraction equations that require regrouping a len and a hundred (Unit 10). Students solve two step word problems with four operations (Grade 3).
Rigor		
Conceptual Understanding	Procedural Skill & Fluency	Application
 Students build on their understanding of place value to subtract 3 digit numbers by regrouping tens. 	 Students develop proficiency representing and solving subtraction problems with 3-digit numbers that involve regrouping tens. 	 Students apply understanding of regrouping tens to solve real-world subtraction problems involving 3-digit numbers. Application is not a targeted element of rigor for this standard.

LESSON 10-6 Regroup Tens and Hundreds

Learning Target

. I can regroup tens and hundreds to subtract 3-digit numbers.

Content

C 2.NBT.B.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.

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Math Practices and Processes

MPP Construct viable arguments and critique the reasoning of others. MPP Model with mathematics.

Focus

Content Objective	Language Objectives	SEL Objective
 Students represent and solve 3-digit subtraction equations that require regrouping a ten and a hundred. 	Students discuss representing and solving 3 digit subtraction equations that require regrouping a ten and a hundred using the verb change. To support optimizing output, ELs participate in MLR1: Stronger and Clearer Each Time.	 Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.
Coherence		
Previous	Now	Next
Students used strategies to subtract within 100 (Grade 1). Students represented and solved 3-digit subtraction equations that required regrouping a ten (Unit 10).	 Students represent and solve 3-digit subtraction problems that require regrouping a ten and a hundred. 	Students adjust numbers to subtract 3-digit numbers (Unit 10). Students solve two-step word problems with four operations (Grade 3).
Rigor		
Conceptual Understanding	Procedural Skill & Fluency	Application
 Students build on their understanding of place value to subtract 3-digit numbers by regrouping a ten and a hundred. 	 Students develop proficiency representing and solving subtraction problems with 3-digit numbers that involve regrouping a ten and a hundred. 	 Students apply understanding of regrouping a ten and a hundred to solve real-world subtraction problems involving 3-digit numbers.
		Application is not a targeted

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LESSON 10-7 Adjust Numbers to Subtract 3-Digit Number

Learning Target

- I can adjust 3-digit numbers to make them friendlier to subtract.

Standards • Major A Supporting • Additional

Content

◇ 2.NBT.B.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.

Math Practices and Processes

MPP Reason abstractly and quantitatively. MPP Attend to precision.

Focus

Content Objective	Language Objectives	SEL Objective
 Students adjust numbers to subtract 3-digit numbers. 	Students explain how to adjust numbers to subtract 3-digit numbers using the verb adjust. To support sense making, ELs participate in MLR2: Collect and Display.	 Students reflect on and describe the logic and reasoning used to make a mathematical decision or conclusion.
Coherence	Now	Next
Students used strategies to subtract within 100 (Grade 1). Students represented and solved 3-digit subtraction equations that require regrouping a ten and a hundred (Unit 10).	Students adjust numbers to create friendly numbers for subtraction of 3-digit numbers.	Students explain the strategies they use to subtract 3-digit numbers (Unit 10). Students solve two-step word problems with four operations (Grade 3).
Rigor		
Conceptual Understanding	Procedural Skill & Fluency	Application
 Students build on their understanding of place value and properties of operations to subtract 3-digit numbers. 	 Students build proficiency with the subtraction strategy of adjusting numbers to make them friendly. 	Students apply understanding of subtraction to solve problem with real-world contexts. Application is not a largeted element of rigor for this standard.

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LESSON 10-8 **Explain Subtraction Strategies**

Learning Target

- I can explain subtraction strategies to subtract 3-digit numbers.

Standards + Major A Supporting Additional

Content

O 2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.

Math Practices and Processes

MPP Reason abstractly and quantitatively.

MPP Construct viable arguments and critique the reasoning of others.

Focus

Content Objective	Language Objectives	SEL Objective
Students explain the strategies they use to subtract 3-digit numbers.	Students talk about the strategies they use to subtract 3-digit numbers with use, best, and use/uf. To support optimizing output, students participate in MLR4: Info Gap.	 Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.
Coherence		
Previous	Now	Next
 Students used strategies to subtract within 100 (Grade 1). Students adjusted numbers to subtract 3-digit numbers (Unit 10). 	 Students use three different strategies for subtracting 3-digit numbers and decide which method is most effective. 	Students solve one-step addition and subtraction word problems (Unit 10). Students solve two-step word problems with four operations (Grade 3).
Rigor		
Conceptual Understanding	Procedural Skill & Fluency	Application
 Students express understanding of different strategies for subtracting 3-digit numbers and why they are efficient. 	 Students build on their procedural skill and fluency with subtraction strategies by using the most efficient strategy to 	 Students apply understanding of subtraction strategies to solve real-world problems involving 3-digit numbers.

solve an equation.

involving 3-digit numbers. Application is not a targeted element of rigor for this standard.

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LESSON 10-9 Solve Problems Involving Addition and Subtraction

Learning Target м - I can use addition or subtraction strategies to help me solve one- and two-step word problems. ad de Content N O 2.NBT.B.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 Th strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or the subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to - 1 compose or decompose tens or hundreds. Math Practices and Processes MPP Make sense of problems and persevere in solving them. MPP Reason abstractly and quantitatively. Focus N Content Objective Language Objectives SEL Objective D · Students solve one-step or Students discuss solving · Students identify and discuss two-step addition or subtraction one-step or two-step addition or the emotions experienced during math learning. 8 word problems. subtraction word problems using wit the verb help. Sh - To support maximizing linguistic nu and cognitive meta-awareness, ELs participate in MLRS: Co-Craft The Questions and Problems tall Coherence Previous Next Now · Students used strategies to - Students use strategies for · Students solve two-step word subtract within 100 (Grade 1). adding and subtracting 3-digit problems with four operations numbers to solve word problems. (Grade 3). · Students explained the strategies they used to subtract 3-digit numbers (Unit 10). Rigor Procedural Skill & Fluency Conceptual Understanding Application Students use their understanding · Students apply addition and Students use strategies, such as of place value and properties of decomposing numbers, counting subtraction strategies to solve operations as they add and on or back, and adjusting as they multi-step problems with subtract numbers while solving solve one- and two-step problems real-world contexts. with addition and subtraction. one- and two-step problems. Procedural skill & fluency is Conceptual understanding is not a targeted element of rigor not a targeted element of rigor for this standard for this standard. 157A Unit 10 - Strategies to Subtract 3-Digit Numbers

Integration of Career Readiness, Life Literacies and Key Skills

PFL.9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
PFL.9.1.2.CR.2	List ways to give back, including making donations, volunteering, and starting a business.
PFL.9.1.2. FI.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).
PFL.9.1.2.FP.1	Explain how emotions influence whether a person spends or saves.
PFL.9.1.2.FP.3	Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).

PFL.9.1.2.PB.1	Determine various ways to save and places in the local community that help people save and accumulate money over time.
PFL.9.1.2.PB.2	Explain why an individual would choose to save money.
TECH.9.4.2.Cl.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
TECH.9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
TECH.9.4.2.DC.3	Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).
TECH.9.4.2.DC.6	Identify respectful and responsible ways to communicate in digital environments.
TECH.9.4.2.DC.7	Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
TECH.9.4.2.TL.2	Create a document using a word processing application.
TECH.9.4.2.TL.5	Describe the difference between real and virtual experiences.
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
TECH.9.4.2.TL.7	Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).

Technology and Design Integration

CS.K-2.8.1.2.AP.4	Break down a task into a sequence of steps.
CS.K-2.8.1.2.AP.5	Describe a program's sequence of events, goals, and expected outcomes.
CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.K-2.8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
CS.K-2.8.1.2.DA.3	Identify and describe patterns in data visualizations.
CS.K-2.8.1.2.DA.4	Make predictions based on data using charts or graphs.
CS.K-2.8.2.2.ITH.4	Identify how various tools reduce work and improve daily tasks.

Interdisciplinary Connections

LA.RI.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
LA.RI.2.2	Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
LA.RI.2.3	Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
LA.RI.2.4	Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
LA.RI.2.5	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
LA.RI.2.6	Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

LA.RI.2.7	Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
LA.RI.2.8	Describe and identify the logical connections of how reasons support specific points the author makes in a text.
LA.RI.2.9	Compare and contrast the most important points presented by two texts on the same topic.
LA.RI.2.10	Read and comprehend informational texts, including history/social studies, science, and technical texts, at grade level text complexity proficiently with scaffolding as needed.
LA.W.2.5	With guidance and support from adults and peers, focus on a topic and strengthen writing as needed through self-reflection, revising and editing.
LA.SL.2.1	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
LA.L.2.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.

• Definitions of Differentiation Components:

- Content the specific information that is to be taught in the lesson/unit/course of instruction.
- Process how the student will acquire the content information.
- Product how the student will demonstrate understanding of the content.
- Learning Environment the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

Exit Ticket: Use Data to Inform Differentiation

Every lesson closes with an Exit Ticket. Differentiation recommendations reside in the Teacher Edition to make the Exit Ticket data actionable.

Modifications and Accommodations

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

Schoolwide Benchmark assessments:

Aimsweb benchmarks 3X a year

Linkit Benchmarks 3X a year

DRA

Additional Benchmarks used in this unit:

Reveal Unit assessments

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).

Formative Assessments used in this unit:

Teacher observation

Checklists

Questioning and Discussion

Quizzes

Summative Assessments

summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.

Summative assessments for this unit:

End of Unit assessments

Instructional Materials

See above

Standards

MATH.2.NBT.B.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.
MATH.2.NBT.B.8	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
MATH.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.