

Tier 3 Intervention Lessons

3.NBT.2a

Learning Target: I will add 3-digit numbers

Readiness for 4.NBT.5: Multiplying multi-digit numbers

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Tier 3 Intervention Planning Guide

Learning Target: I will add 3-digit numbers

Readiness for multiplying multi-digit numbers

	Recommended Actions				
Beginning (5 min.)	 Review the learning target with the whole group Ask each student to set a goal for the day based on their previous Quick Check Score Have each student use a highlighter to plot their goal for the day 				
Middle (15 min.)	 Model solving a word problem – "I do" (Sessions 1, 3 and 6 only) Guided Practice – "We do" Sessions 1 and 2: Add 3-digit numbers using base-ten blocks and place-value cards Sessions 3, 4 and 5: Add 3-digit numbers using base-ten drawings and showing sub-totals Sessions 6, 7 and 8: Add 3-digit numbers using place-value understanding and showing new tens 				
End (10 min.)	 Bring the students back together. Ask students to reflect on their progress towards the learning target What did I learn today about adding 3-digit numbers numbers? How confident do you feel about adding 3-digit numbers on my own?				
After Session 6	 Differentiation Options: Allow students who met the learning goal to work independently while others do the guided practice during the next session Exit students who met the learning goal for a third time Problem solve with a team to plan additional support for students who do not meet the learning goal within 8 sessions 				



Session 1: Modeling (I Do)

Learning Target: I will add 3-digit numbers

Readiness for multiplying multi-digit numbers

A food truck sold 185 lunches on Saturday and 152 lunches on Sunday. How many total lunches did the food truck sell on Saturday and Sunday?



Session 1: Modeling (I Do - Teacher Notes)

Learning Target: I will add 3-digit numbers

Readiness for multiplying multi-digit numbers

A food truck sold 185 lunches on Saturday and 152 lunches on Sunday. How many total lunches did the food truck sell on Saturday and Sunday?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

The problem is about a food truck selling lunches.

Second, I need to determine what I need to find.

I need to find the total number of lunches sold on Saturday and Sunday.

Third, I need to determine what I know.

I know that the food truck sold 185 lunches on Saturday and 152 lunches on Sunday.

Fourth, I need to figure out what I can try.

I am going to try using base-ten blocks and place-value cards to help me find the total number of lunches.

I will begin by building the problem...

Saturday's total was 1 hundred, 8 tens and 5 ones.

(Build the number 185 with place-value blocks and cards.)

And, Sunday's total was 1 hundred, 6 tens and 2 ones.

(Build the number 162 with base-ten blocks and place-value cards.)

To find the total number of lunches on both days, I need to use addition. (Set the plus sign "+" to the left of the 162.)

Next, I will find each sub-total...

2 hundreds equals 200...14 tens equals 140...and 7 ones.

(Point to the blocks, re-arrange them and set the cards under each type.

Last, I need to combine place-value to find the total...

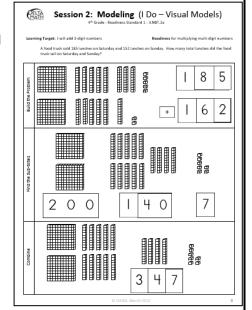
2 hundreds and 10 tens make 3 hundreds.

(Set the 300 card underneath the sub-totals)

This leaves me with 4 tens and 7 ones. (Set the 40 card on top of the 300 and 7 on top of the 40.)

Last, I need to make sure that my answer makes sense.

I found that the food truck sold 347 total lunches on Saturday and Sunday. It makes sense because I built each number with base-ten blocks and combined the place-values to see a total of 3 hundreds, 4 tens and 7 ones.



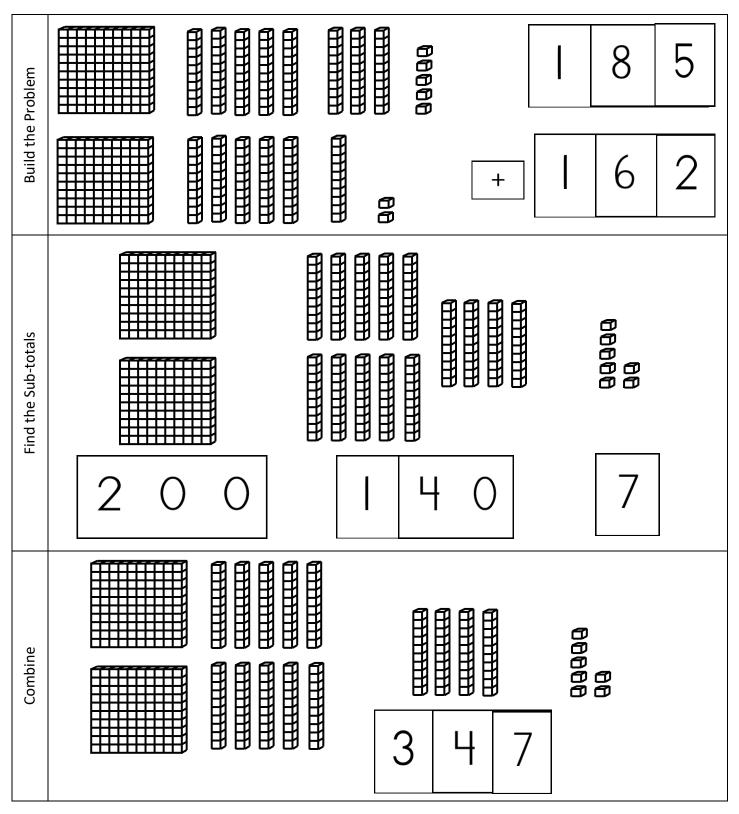


Session 1: Modeling (I Do – Visual Models)

Learning Target: I will add 3-digit numbers

Readiness for multiplying multi-digit numbers

A food truck sold 185 lunches on Saturday and 152 lunches on Sunday. How many total lunches did the food truck sell on Saturday and Sunday?



Place-Value Cards (1 → 100)

Less Than	Sreater Than	Equal to	+ -	- X	•
5		0		O	0
L	9	5	0	9	O
3	8	L	0	8	O
2	7	3	0	7	O
	6	2	0	6	O



Place-Value Cards (200 → 900)

2	0	0	3	0	0
	0	O	5	0	0
6	0	0	7	0	0
8	0	0	9	0	0

Learning Target: I will add 3-digit numbers

Session 1: Guided Practice (We Do)

Materials:

- Base-Ten Blocks (20 tens and 20 ones)
- Place-value Cards (2 sets)

We Do Together: (Teacher Actions)

- > Say the addition problem.
- > Use base-ten blocks and place-value cards to add the 3-digit numbers.

1.		2.
	437 + 245	315 + 162
3.		4.
	183 + 239	345 + 271

You Do Together: (As a class, or in small groups)

> Students take turns leading and repeat the steps to add 3-digit numbers.

5.	253 + 328	6. 426 + 249
7.	167 + 425	8. 385 + 152
9.	374 + 168	10. 236 + 267



Session 1: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form A

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1. 5 7 3

<u>+125</u>

2.

492 + 385 = ____

3.

$$723 + 149 =$$

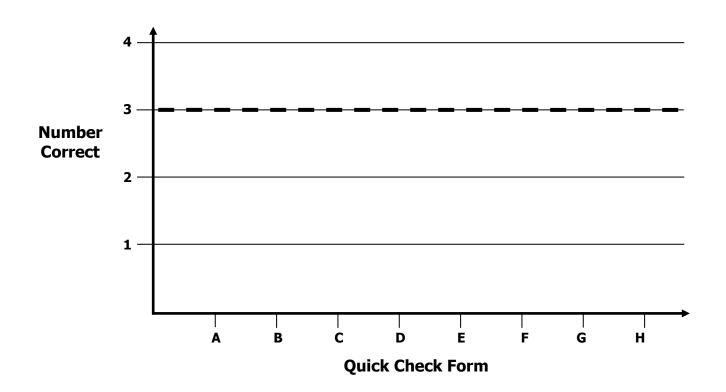


Growth Chart

Name	Date
------	------

Learning Target: I will add three-digit numbers.

Goal: 3 out of 4 correct



Intervention	Date	Score
Session 1:		
Session 2:		
Session 3:		
Session 4:		
Session 5:		
Session 6:		
Session 7:		
Session 8:		



Learning Target: I will add 3-digit numbers

Session 2: Guided Practice (We Do)

Materials:

➤ Base-Ten Blocks (20 tens and 20 ones)

➤ Place-value Cards (2 sets – See Session 1)

We Do Together: (Teacher Actions)

> Say the addition problem.

> Use base-ten blocks and place-value cards to add the 3-digit numbers.

1.		2.
	435 + 147	382 + 267
3.		4.
	189 + 433	241 + 179

You Do Together: (As a class, or in small groups)

> Students take turns leading and repeat the steps to add 3-digit numbers.

5.	152 . 220	6.
	153 + 328	226 + 349
7.		8.
	267 + 425	485 + 152
9.		10.
	374 + 268	136 + 267



Session 2: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form B

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1. 375 + 518

2.

3.



Session 3: Modeling (I Do)

Learning Target: I will add 3-digit numbers Readiness for multiplying multi-digit numbers

Jack had 265 baseball cards before his 10th birthday. Jack's uncle gave him 197 baseball cards on his 10th birthday. How many baseball cards did Jack have after his 10th birthday?

16



Session 3: Modeling (I Do - Teacher Notes)

Learning Target: I will add 3-digit numbers

Readiness for multiplying multi-digit numbers

Jack had 265 baseball cards before his 10th birthday. Jack's uncle gave him 197 baseball cards on his 10th birthday. How many baseball cards did Jack have after his 10th birthday?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about. The problem is about Jack's baseball cards.					
Second, I need to determine what I need to find. I need to find how many baseball cards Jack had after his 10th birthday.					
Third, I need to determine what I know. I know Jack had 265 baseball cards and his uncle gave him 197 baseball cards.					
Fourth, I need to figure out what I can try. I am going to try using base-ten drawings to help me combine the hundreds, tens and ones and record them on separate lines. I will begin by writing and drawing what I know 265 cards can be drawn as 2 hundreds, 6 tens and 5 ones. (Write, label and draw the 265 baseball cards.) And, 197 cards can be drawn as 1 hundred, 9 tens and 7 ones. (Write, label and draw the 197 baseball cards.) Since I need to find the total, I will write a plus sign and a line underneath the 197. (Write the + sign and line.)	Before Gift	Baseball Cards 2 6 5 + 1 9 7		000000	
To add the ones5 + 7I will circle ten of them to help me7 ones and 3 ones make 10. (Circle ten ones.) And 2 more ones make 12 ones. (Point to the 2 ones and 10 circled ones. Then write "12 Ones" under the drawing.) I will record the 12 ones under the answer line. (Write 12 as a sub-total.)	Before Gift	2 6 5 + 1 9 7 1 2		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	



Session 3: Modeling (I Do - Teacher Notes)

Continued:

To add the tens6 + 9I will circle 10 of them to help me9 tens and 1 ten make 10 tens. (Circle 10 tens.) And 5 more tens make 15 tens. (Point to the 10 circled tens and extra 5 tens and write "15 tens" under the drawing.) I will record the 15 tens as 150 on another line. (Write 150 as a sub-total.)	Before Gift	2 6 5 + 1 9 7 1 2 1 5 0	15 Tens 12 Ones
To add the hundreds2 + 1I see a total of 3. (Point to the 2 hundreds and 1 hundred. Then write "3 hundreds" under the drawing.) I will record the 3 hundreds as 300 on another line. (Write 300 as a sub-total.)	Before Gift	2 6 5 + 1 9 7 1 2 1 5 0 3 0 0	3 Hundreds 15 Tens 12 Ones
Last, I will draw a final answer line and add the sub-totals from each line. (Draw the final answer line and the label "Total Cards.) 1 hundred plus 3 hundreds equal 4 hundreds. (Point to the hundred's digits of each sub-total and write "4" in the hundred's place of the answer.) 1 ten plus 5 tens plus 0 tens equals 6 tens. (Point to the ten's digits of each sub-total and write "6" in the ten's place of the answer.) And 2 ones plus 0 ones plus 0 ones equals 2 ones. (Point to the one's digits of each sub-total and write "2" in the one's place of the answer.)	Before Gift Total Cards	2 6 5 + 1 9 7 1 2 1 5 0 3 0 0 4 6 2	3 Hundreds 15 Tens 12 Ones

Last, I need to make sure that my answer makes sense.

I found that Jack had a total of 462 baseball cards. It makes sense because I made a math drawing of each number of cards and combined them to see a total of 4 hundreds, 6 tens and 2 ones.



Learning Target: I will add 3-digit numbers

Session 3: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- > Say the addition problem.
- > Use a base-ten drawing to and find each sub-total to add the 3-digit numbers.

1.

2.



Learning Target: I will add 3-digit numbers

Session 3: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

> Students take turns leading to add 3-digit numbers using place-value drawings.

4.

5.



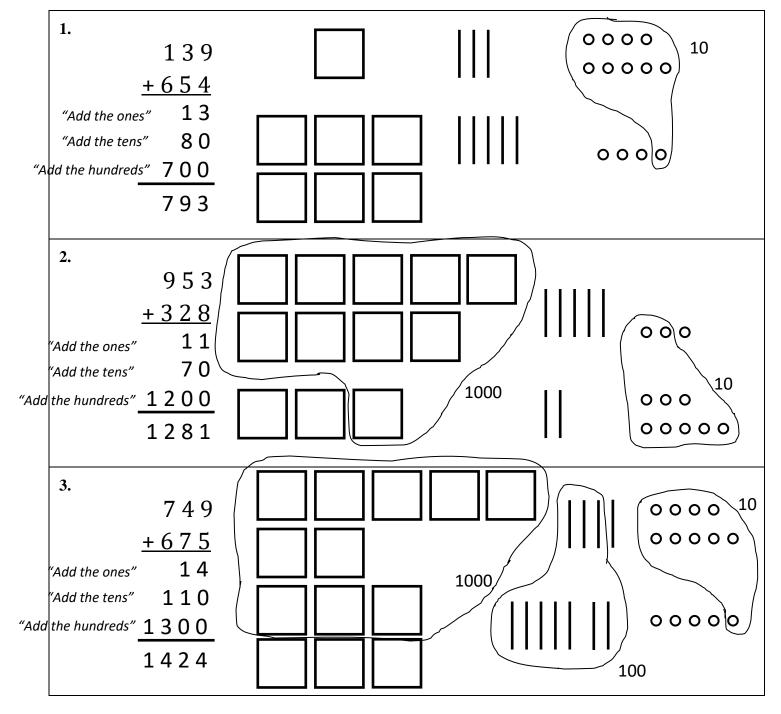
Learning Target: I will add 3-digit numbers

Session 3: Guided Practice (We Do – Teacher Notes)

We Do Together: (Teacher Actions)

> Say the addition problem.

➤ Use a base-ten drawing to and find each sub-total to add the 3-digit numbers.





Session 3: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form C

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1. 6 4 7 + 2 9 5

2.

$$637 + 291 = \underline{\hspace{1cm}}$$

3.



Learning Target: I will add 3-digit numbers

Session 4: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- > Say the addition problem.
- > Use a base-ten drawing to and find each sub-total to add the 3-digit numbers.

1.

2.



Learning Target: I will add 3-digit numbers

Session 4: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

> Students take turns leading to add 3-digit numbers using place-value drawings.

4.

5.



Session 4: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form D

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1. 4 2 8

+ 1 6 7

2.

$$437 + 186 =$$

3.

$$515 + 463 =$$



Learning Target: I will add 3-digit numbers

Session 5: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- > Say the addition problem.
- > Use a base-ten drawing to and find each sub-total to add the 3-digit numbers.

1.

2.



Learning Target: I will add 3-digit numbers

Session 5: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

> Students take turns leading to add 3-digit numbers using place-value drawings.

4.

5.



Session 5: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form E

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.		
	573	

+125

$$723 + 149 =$$



Session 6: Modeling (I Do)

Learning Target: I will add 3-digit numbers **Readiness** for multiplying multi-digit numbers

Smith Elementary School combines fourth and fifth graders during their lunch recess. On Tuesday, there were 248 fourth graders and 175 fifth graders on the playground. What was the total number of students on the playground on Tuesday?



Session 6: Modeling (I Do - Teacher Notes)

Learning Target: I will add 3-digit numbers

Readiness for multiplying multi-digit numbers

Smith Elementary School combines fourth and fifth graders during their lunch recess. On Tuesday, there were 248 fourth graders and 175 fifth graders on the playground. What was the total number of students on the playground on Tuesday?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about. The problem is about four and fifth graders on the playground.				
Second, I need to determine what I need to find. I need to find how many students were on the playground on Tuesday.				
Third, I need to determine what I know. I know there were 248 fourth graders and 175 fifth graders on the playground on Tuesday.				
Fourth, I need to figure out what I can try. I am going to try using base-ten drawings to help me combine the hundreds, tens and ones and record them on the same line. I will begin by writing and drawing what I knowthe 248 fourth graders can be drawn as 2 hundreds, 4 tens and 8 ones. (Write, label and draw the 248 4th graders.) And, the 175 fifth graders can be drawn as 1 hundred, 7 tens and 5 ones. (Write, label and draw the 175 5th graders.) Since I need to find the total, I will write a plus sign and a line underneath the 175. (Write the + sign, line and "Total Students".)	4 th Graders 5 th Graders Total Students	2 4 8 + 1 7 5		
To add the ones8 + 5I will circle ten to help me. 8 and 2 makes 10 and 3 more is 13. (Circle ten ones and write 10 next to it.) I will record the new ten in the ten's place on the answer line and the 3 ones in the answer. (Write "1" in the ten's place on the answer line and "3" in the one's digit of the answer.)	4 th Graders 5 th Graders Total Students	2 4 8 + 1 7 5 		



Session 6: Modeling (I Do - Teacher Notes)

Continued:

To find add the tens4 + 7 + 1I will circle 10 to help me. 7 and 3 make 10 and 1 more is 11. (Circle 10 tens and write 100 next to it.) Plus the new ten is 12 tens, or 120 I will record the new hundred on the answer line and the 2 tens in the answer. (Write "1" in the hundred's place on the answer line and "2" in the ten's digit of the answer.)	4 th Graders 5 th Graders Total Students	2 4 8 + 1 7 5 	100
To add the hundreds2 + 1 + 1, I can do this in my head4. (Point to the original 2 hundreds and the new hundred in the drawing.) I will record 4 hundreds in the hundred's place in the answer. (Write "4" in the hundred's place of the answer.)	4 th Graders 5 th Graders Total Students	2 4 8 + 1 7 5 	

Last, I need to make sure that my answer makes sense.

I found that there were 423 students on the playground. It makes sense because I made a math drawing of each grade level of students, created new tens and hundreds to help me the total of 4 hundreds, 2 tens and 3 ones.



Learning Target: I will add 3-digit numbers

Session 6: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- > Add the 3-digit numbers using your place-value understanding and finding new groups of 10.
- > Draw a picture to check your work or help you find the answer.

1.

2.

Learning Target: I will add 3-digit numbers

Session 6: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

> Students take turns leading to add the 3-digit numbers.

5.	6.
5 1 7 + 3 8 6	589 <u>+ 576</u>
7.	8.
695 <u>+ 978</u>	5 2 7 + 3 8 5
9.	10.
7 2 5 + 3 9 7	846 + 429



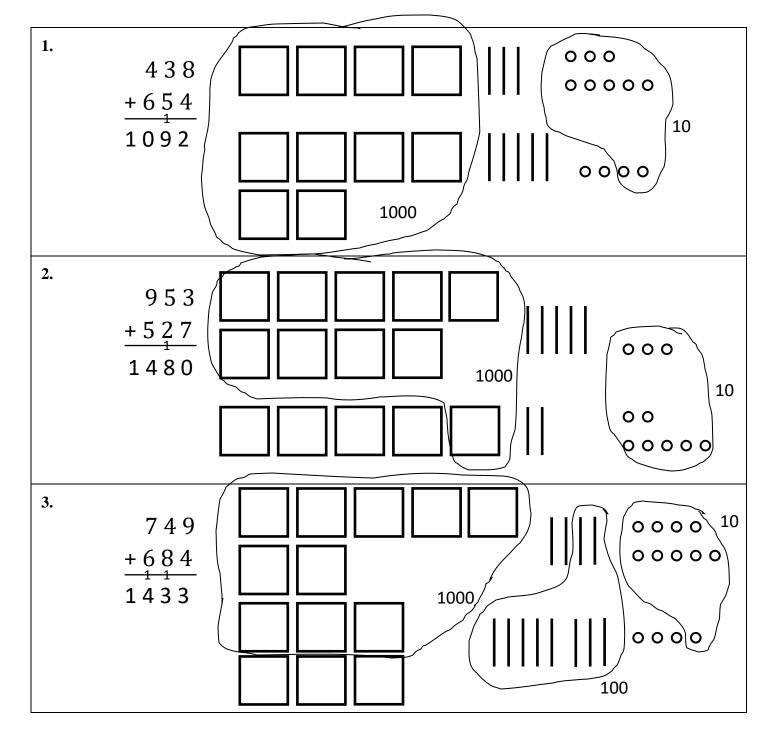
Name _____ Date ____

Learning Target: I will add 3-digit numbers

Session 6: Guided Practice (We Do – Teacher Notes)

We Do Together: (Teacher Actions)

- Add the 3-digit numbers using your place-value understanding and finding new groups of 10.
- > Draw a picture to check your work or help you find the answer.





Session 6: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form F

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.375
+518

2.

3.



Name _____ Date ____

Learning Target: I will add 3-digit numbers

Session 7: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Add the 3-digit numbers using your place-value understanding and finding new groups of 10.
- > Draw a picture to check your work or help you find the answer.

1.

2.

Learning Target: I will add 3-digit numbers

Session 7: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

> Students take turns leading to add the 3-digit numbers.

5.	6.
471 + 268	698 + 676
7.	8.
659 + 787	8 7 2 + 3 5 8
9.	10.
8 5 2 + 4 7 9	764 + 592



Session 7: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form G

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1. 6 4 7

+ 2 9 5

2.

$$637 + 291 = \underline{\hspace{1cm}}$$

3.



Name _____ Date ____

Learning Target: I will add 3-digit numbers

Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- > Add the 3-digit numbers using your place-value understanding and finding new groups of 10.
- > Draw a picture to check your work or help you find the answer.

1.

2.

Learning Target: I will add 3-digit numbers

Session 8: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

> Students take turns leading to add the 3-digit numbers.

5.	6.
3 1 7 + 5 8 6	476 + 589
7.	8.
985 + 678	3 2 7 + 5 8 4
9.	10.
397 <u>+ 735</u>	436 +819



Session 8: Self-Reflection

Learning Target: I will add 3-digit numbers

Briefly discuss student responses

- ➤ What did I learn today about adding 3-digit numbers?
- ➤ How confident do I feel about adding 3-digit numbers on my own? (Thumbs up, down, or sideways)

Quick Check - Form H

Name_____ Date____

Learning Target: I will add three-digit numbers.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1. 428 +167

2.

$$437 + 186 =$$

3.

$$515 + 463 =$$



Independent Practice

Learning Target: I will add 3-digit numbers

Title of Game: Build the Greater Sum

Number of Players: 2

Objective: To build the greatest sum.

Materials: 1 set of 3-digit number cards per group and 1 recording sheet per player.

Directions:

- > Shuffle the 3-digit number cards and place them face down in a pile on the table.
- Players take turns: Choose three 3-digit number cards, place 2 of them on the game mat below to create an addition problem and discard the card not used.
- After both 3-digit numbers addition problems have been created, each player writes their problem on the recording sheet and finds their sum.
- Each player shares their problem and the sum.

- > The player with the greatest sum circles the problem on their recording sheet.
- Collect the 3-digit-cards and repeat the steps to build another "greatest" sum.
- The winner of the game is the player with the most problems circled.

	Player 1		Player 2
+		+	



Name	Date
------	------

Learning Target: I will add 3-digit numbers

Independent Practice: Build the Greater Sum(Recording Sheet)

Round 1		Round 2	
	+		+
	·		·
Round 3		Round 4	
	+		+
Round 5		Round 6	
	+		+
	<u> </u>		



3-Digit Number Cards (Set A)

I 9 2	2 8 4 Set A	3 7 6
4 6 8	5 5 1	6 4 3 Set A
7 3 5	8 2 7	9 1 9
1 5 8	2 7 6 Set A	3 9 4 Set A
4 1 2	5 3 7	6 8 5
7 2 3	8 4 9 Set A	9 6 1



3-Digit Number Cards (Set B)

I 9 7	2 8 9 Set B	3 7 2 Set B
4 6 3	5 5 8	6 4 7
7 3 I	8 2 4 Set B	9 I 2
1 5 2	2 7 4 Set B	3 9 8 Set B
4 1 7	5 3 4 Set B	6 8 7
7 2 6	8 4 2	9 6 8



Questions for Solving Word Problems

Q_1	
	What is the problem about?
Q_2	
	What do I need to find?
Q ₃	
	What do I know?
Q_4	
	What can I try?
Q_5	
	Does my answer make sense?



Steps for Solving Word Problems

Q_1 .	What is the problem about?
Q_2 .	What do I need to find?
0	
<i>Q</i> ₃ .	What do I know?
Q4.	What can I try?
Q_5 .	Does my answer make sense?