

A Story of Units

Pleasanton Mathematics Curriculum



Grade 2 • MODULE 4

Addition and Subtraction Within 200 with Word Problems to 100

PROBLEM SETS

Video tutorials: http://embarc.online

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Version 3

2 GRADE

Mathematics Curriculum



GRADE 2 • MODULE 4

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Addition and Subtraction Within 200 with Word Problems to 100

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Name

Date

1. Complete each more or less statement.

a. 1 more than 66 is _____.

b. 10 more than 66 is _____.

c. 1 less than 66 is _____.

d. 10 less than 66 is _____.

e. 56 is 10 more than _____.

f. 88 is 1 less than _____.

g. _____ is 10 less than 67.

- h. _____ is 1 more than 72.
- i. 86 is _____ than 96.
- j. 78 is _____ than 79.

2. Circle the rule for each pattern.

- a. 34, 33, 32, 31, 30, 29
- 1 less
- 1 more
- 10 less
- 10 more

- b. 53, 63, 73, 83, 93
- 1 less
- 1 more
- 10 less
- 10 more

3. Complete each pattern.

a. 37, 38, 39, _____, ____

b. 68, 58, 48, _____, ____, ____

c. 51, 50, ____, 46

d. 9, 19, ____, 59

- 4. Complete each statement to show mental math using the arrow way.
 - a. $39 \xrightarrow{+1}$ _____ $56 \xrightarrow{+10}$ ____ $42 \xrightarrow{-10}$ ____ $80 \xrightarrow{-1}$ ____

- b. $32 \xrightarrow{+1} \qquad \xrightarrow{+} \qquad 43$
- 87 -10 ____ -1
- c. $48 \xrightarrow{+10}$ \longrightarrow $68 \xrightarrow{+10}$ \longrightarrow \longrightarrow \longrightarrow \longrightarrow \longrightarrow \longrightarrow
- 5. Complete each sequence.
 - a. $45 \xrightarrow{+10} \xrightarrow{-1} \xrightarrow{-1} \xrightarrow{-10} \xrightarrow{-10}$
 - b. $61 \xrightarrow{-1} \longrightarrow \xrightarrow{-1} \longrightarrow \xrightarrow{+10} \longrightarrow \xrightarrow{-1} \longrightarrow$
- 6. Solve each word problem using the arrow way to record your mental math.
 - a. Yesterday Isaiah made 39 favor bags for his party. Today he made 23 more. How many favor bags did he make for his party?
 - b. There are 61 balloons. 12 blew away. How many are left?

1. Solve using place value strategies. Use your personal white board to show the arrow way or number bonds, or just use mental math, and record your answers.

a. 5 tens + 3 tens = _____ tens 2 tens + 7 tens = ____ tens

50 + 30 = _____

20 + 70 = _____

b. 24 + 30 = _____

50 + 24 = _____

14 + 50 = _____

c. 20 + 37 = _____ 60 + 27 = ____

2. Solve using place value strategies.

a. 8 tens - 2 tens = _____ tens 7 tens - 3 tens = ____ tens

80 - 20 = ____

70 - 30 =

b. 78 - 40 = _____

56 - 30 = _____ 88 - 50 = ____

c. 84 - = 24

57 - ____ = 37

93 - = 43

3. Solve.

4. Mark had 78 puzzle pieces. He lost 30 pieces. How many pieces does Mark have left? Use the arrow way to show your simplifying strategy.

Date _____ Name ____

1. Solve each using the arrow way.

47 + 41

a. 38 + 20 38 + 2138 + 19

b. 47 + 40

47 + 39

C. 34 - 10

34 - 11

34 - 9

d. 45 - 20

45 - 21

45 - 19

2. Solve using the arrow way, number bonds, or mental math. Use scrap paper if needed.

3. Jessie's mom buys snacks for his classroom. She buys 22 apples, 19 oranges, and 49 strawberries. How many pieces of fruit does Jessie's mom buy?

Name	Date
1 40.110	5415

- 1. Solve. Draw and label a tape diagram to subtract tens. Write the new number sentence.
 - a. 23 9 = <u>24 10</u> = _____

 23	}
9	

b. 32 – 19 = _____ = ____

c. 50 – 29 = _____ = ____

d. 47 – 28 = _____ = ____

2. Solve. Draw and label a tape diagram to add tens. Write the new number sentence.

29	1	45
----	---	----

No	Name Date	
So	Solve and show your strategy.	
	39 books were on the top bookshelf. Marcy added 48 more books to the top s How many books are on the top shelf now?	shelf.
2.	2. There are 53 regular pencils and some colored pencils in the bin. There are a of 91 pencils in the bin. How many colored pencils are in the bin?	total
3.	3. Henry solved 24 of his homework problems. There were 51 left to do. How m math problems were there on his homework sheet?	any

- 4. Matthew has 68 stickers. His brother has 29 fewer stickers.
 - a. How many stickers does Matthew's brother have?

- b. How many stickers do Matthew and his brother have altogether?
- 5. There are 47 photos in the blue album. The blue album has 32 more photos than the red album.
 - a. How many photos are in the red album?
 - b. How many photos are in the red and blue albums altogether?
- 6. Kiera has 62 blocks and Pete has 37 blocks. They give away 75 blocks. How many blocks do they have left?

Name

Date

1. Solve using mental math, if you can. Use your place value chart and place value disks to solve those you cannot solve mentally.

2. Solve the following problems using your place value chart and place value disks. Compose a ten, if needed. Think about which ones you can solve mentally, too!

3.	There are 47 blo	ue buttons	and 25	black	buttons	in Sec	an's drawer.	How mo	ıny
	buttons are in h	is drawer?							

For early finishers:

- 4. Leslie has 24 blue and 24 pink hair ribbons. She buys 17 more blue ribbons and 13 more pink ribbons from the store.
 - a. How many blue hair ribbons does she have now?

b. How many pink hair ribbons does she have now?

c. Jada has 29 more pink ribbons than Leslie. How many pink ribbons does Jada have?

	_
Name	Date

- 1. Solve the following problems using the vertical form, your place value chart, and place value disks. Bundle a ten, when necessary. Think about which ones you can solve mentally, too!
 - a. 22 + 8

21 + 9

b. 34 + 17

33 + 18

c. 48 + 34

46 + 36

d. 27 + 68

26 + 69

Extra Practice for Early Finishers: Solve the following problems using your place value chart and place value disks. Bundle a ten, when necessary.

2. Samantha brought grapes to school for a snack. She had 27 green grapes and 58 red grapes. How many grapes did she bring to school?

- 3. Thomas read 29 pages of his new book on Monday. On Tuesday, he read 35 more pages than he did on Monday.
 - a. How many pages did Thomas read on Tuesday?

b. How many pages did Thomas read on both days?

1. Solve vertically. Draw and bundle place value disks on the place value chart.





e.	27	+	45	=	
◡.					

2. There are 23 laptops in the computer room and 27 laptops in the first-grade classroom. How many laptops are in the computer room and first-grade classroom altogether?

For early finishers:

3. Mrs. Anderson gave 36 pencils to her class and had 48 left over. How many pencils did Mrs. Anderson have at first?



Name	Date	

1. Solve using the algorithm. Draw and bundle chips on the place value chart.

α.	123 + 16 =	

hundreds	tens	ones

hundreds	tens	ones

~ 10	09 + 3	2 -	

hundreds	tens	ones

	hundreds	tens	ones	
d. 57 + 138 =				

- 2. Jose sold 127 books in the morning. He sold another 35 books in the afternoon. At the end of the day he had 19 books left.
 - a. How many books did Jose sell?

hundreds	tens	ones

b. How many books did Jose have at the beginning of the day?

hundreds	tens	ones

Vame	Date
vane	Date

hundreds

tens

1. Solve using the algorithm. Draw chips and bundle when you can.

a.	127 + 18 =	



		hundreds	tens	ones	
b.	136 + 16 =				

c. 109 + 41 =	
---------------	--

tens	ones
	tens

hundreds	tens	ones

hundreds	tens	ones

Before bundling a ten

After bundling a ten

hundreds

_	
tens	

	0	nes

2. a. On Saturday, Colleen earned 4 ten-dollar bills and 18 one-dollar bills working on the farm. How much money did Colleen earn?

hundreds	tens	ones

b. On Sunday, Colleen earned 2 ten-dollar bills and 16 one-dollar bills. How much money did she earn on both days?

hundreds	tens	ones

Date ____

1. Solve using mental math.

2. Solve using your place value chart and place value disks. Unbundle a ten, if needed. Think about which problems you can solve mentally, too!

d explain your		

For early finishers:

4. There are 63 problems on the math test. Tamara answered 48 problems correctly, but the rest were incorrect. How many problems did she answer incorrectly?

5. Mr. Ross has 7 fewer students than Mrs. Jordan. Mr. Ross has 35 students. How many students does Mrs. Jordan have?

1. Use place value disks to solve each problem. Rewrite the problem vertically, and record each step as shown in the example.

22 - 18a.



$$34 - 25$$

b.

20 - 12

53 – 29 e.

f. 71 – 27 2. Terry and Pam both solved the problem 64 – 49. They came up with different answers and cannot agree on who is correct. Terry answered 25 and Pam answered 15. Use place value disks to explain who is correct, and rewrite the problem vertically to solve.

For early finishers:

- 3. Samantha has 42 marbles and Graham has 17 marbles.
 - a. How many more marbles does Samantha have than Graham?

b. James has 25 fewer marbles than Samantha. How many marbles does James have?

Name	Date	

1. Solve vertically. Draw a place value chart and chips to model each problem. Show how you change 1 ten for 10 ones, when necessary.

a. 31 - 19 =	
--------------	--

b.	46 -	24	=	

2. Solve 31 - 27 and 25 - 15 vertically using the space below. Circle to tell if the number sentence is true or false.

True or False

$$31 - 27 = 25 - 15$$

3. Solve 78 - 43 and 81 - 46 vertically using the space below. Circle to tell if the number sentence is true or false.

True or False

$$78 - 43 = 81 - 46$$

4. Mrs. Smith has 39 tomatoes in her garden. Mrs. Thompson has 52 tomatoes in her garden. How many fewer tomatoes does Mrs. Smith have than Mrs. Thompson?

1. Solve by writing the problem vertically. Check your result by drawing chips on the place value chart. Change 1 ten for 10 ones, when needed.

a.	134 -	23=	

hundreds	tens	ones

b.	140 -	12 =	

hundreds	tens	ones

_	121 -	. 1/1 -	
C .	171 -	. T. –	

hundreds	tens	ones

d.	161	_	26	=	
u.	101			_	

hundreds	tens	ones

0	187 -	- 49 =	

hundreds	tens	ones

2. Solve the following problems vertically without a place value chart.

1. Solve each problem using vertical form. Show the subtraction on the place value chart with chips. Exchange 1 ten for 10 ones, when necessary.

a. 173 - 42

hundreds	tens	ones

b. 173 - 38

hundreds	tens	ones

c. 170 - 44

hundreds	tens	ones

d. 150 - 19

hundreds	tens	ones

e. 186 - 57

hundreds	tens	ones

2. Solve the following problems without using a place value chart.

a. 73 - 56

b. 170 - 53

No	me	Date
So	lve the following word problems. Use the RD	W process.
1.	Frederick counted a total of 80 flowers in t flowers, and the rest were pink. How many	
2.	The clothing store had 42 shirts. After sell shirts were sold?	ling some, there were 16 left. How many

3. There were 26 magazines on Shelf A and 60 magazines on Shelf B. How many more magazines were on Shelf B than Shelf A?

4. Andy spent 71 hours studying in November.

In December, he studied 19 hours less.

Rachel studied 22 hours more than Andy studied in December.

How many hours did Rachel study in December?

5. Thirty-six books are in the blue bin.

The blue bin has 18 more books than the red bin.

The yellow bin has 7 more books than the red bin.

a. How many books are in the red bin?

b. How many books are in the yellow bin?

Name _____ Date ____

1. Solve mentally.

2. Solve.

3. Fill in the blanks. Then, complete the addition sentence. The first one is done for you.

a.
$$24 \xrightarrow{+6} \underline{30} \xrightarrow{+70} \underline{100}$$

b.
$$124 \xrightarrow{+6} \underline{\qquad} \xrightarrow{+70} \underline{\qquad}$$

c.
$$7 \xrightarrow{+3} \underline{\hspace{1cm}} \xrightarrow{+90} \underline{\hspace{1cm}} \xrightarrow{+100} \underline{\hspace{1cm}}$$

d.
$$70 \xrightarrow{+30} \longrightarrow \longrightarrow \longrightarrow \longrightarrow \longrightarrow \longrightarrow \longrightarrow$$

e.
$$38 \xrightarrow{+2} \xrightarrow{+60} \xrightarrow{+30} \xrightarrow{+30} \xrightarrow{+30} \xrightarrow{+6} \xrightarrow{+40} \xrightarrow{+40} \xrightarrow{+40} \xrightarrow{+40} \xrightarrow{+60} \xrightarrow{+40} \xrightarrow{+$$

f. 98
$$\xrightarrow{+2}$$
 _____ $\xrightarrow{+6}$ _____ $\xrightarrow{+40}$ _____

Name ____

Date ____

1. Solve using your place value chart and place value disks.

2. Circle the statements that are true as you solve each problem using place value disks.

b. 97 + 54

I change 10 ones for 1 ten.

I change 10 ones for 1 ten.

I change 10 tens for 1 hundred.

I change 10 tens for 1 hundred.

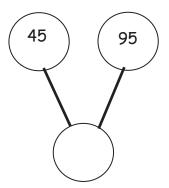
The total of the two parts is 160.

The total of the two parts is 141.

The total of the two parts is 170.

The total of the two parts is 151.

3. Write an addition sentence that corresponds to the following number bond. Solve the problem using your place value disks, and fill in the missing total.



4. There are 50 girls and 80 boys in the after school program. How many children are in the after school program?

5. Kim and Stacy solved 83 + 39. Kim's answer was less than 120. Stacy's answer was more than 120. Whose answer was incorrect? Explain how you know using words, pictures, or numbers.

Name	Date	

1. Solve the following problems using the vertical form, your place value chart, and place value disks. Bundle a ten or hundred, if needed,

F		-, .,	
a.	72 + 19	b.	28 + 91
c.	68 + 61	d.	97 + 35
e.	68 + 75	f.	96 + 47

g.	177 + 23	h.	146 + 54

- 2. Thirty-eight fewer girls attended summer camp than boys. Seventy-nine girls attended.
 - a. How many boys attended summer camp?

b. How many children attended summer camp?

1. Solve vertically. Draw chips on the place value chart and bundle, when needed.

100's	10's	1's	

100's	10's	1's	

100's	10's	1's	

Ч	47	+	75	=	
u.	1/	•	, ,	_	

100's	10's	1's	

100's	10's	1's

2. Jessica's teacher marked her work incorrect for the following problem. Jessica cannot figure out what she did wrong. If you were Jessica's teacher, how would you explain her mistake?

Jessica's work:	Explanation:
100's 10's 1's 77 +32 19	

1. Solve vertically. Draw chips on the place value chart and bundle, when needed.

100's	10's	1's

100's	10's	1's

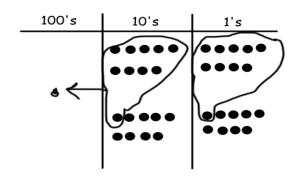
100's	10's	1's

d.	163	+	27	=	
----	-----	---	----	---	--

100's	10's	1's

2. Abby solved 99 + 99 on her place value chart and in vertical form, but she got an incorrect answer. Check Abby's work, and correct it.





What did Abby do correctly?

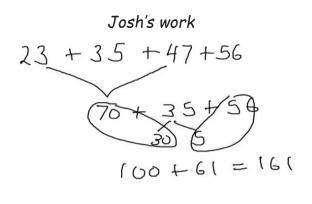
What did Abby do incorrectly?

Vame	Date	

1. Look to make 10 ones or 10 tens to solve the following problems using place value strategies.

a. 5 + 5 + 7=	25 + 25 + 17=	125 + 25 + 17=
b. 4 + 6 + 5 =	24 + 36 + 75 =	24 + 36 + 85 =
c. 2 + 4 + 8 + 6 =	32 + 24 + 18 + 46 =	72 + 54 + 18 + 26 =

2. Josh and Keith have the same problem for homework: 23 + 35 + 47 + 56. The students solved the problem differently, but got the same answer.



Solve 23 + 35 + 47 + 56 another way.

Keith's work
$$23 + 35 + 47 + 56$$

$$20 + 35 + 50 + 56$$

$$55' + 106'$$

$$5^{101}$$

$$60 + 101 = 161$$

3. Melissa bought a dress for \$29, a purse for \$15, a book for \$11, and a hat for \$25. How much did Melissa spend? Show your work.

Name	Date	
Nume	Duie	

1. Solve using number bonds to subtract from 100. The first one has been done for you.

b. 116 - 90

d. 115 - 80



g. 119 - 50	h. 129 - 60
i. 156 - 80	j. 142 - 70

2. Use a number bond to show how you would take 8 tens from 126.

Name	Date
Nume	Dute

1. Solve using mental math. If you cannot solve mentally, use your place value chart and place value disks.

2. Solve using your place value chart and place value disks. Unbundle the hundred or ten when necessary. Circle what you did to model each problem.

a. 124 - 60 =			b. 174 - 58 =		
I unbundled the hundred. I unbundled a ten. C. 121 - 48 =	Yes Yes		I unbundled the hundred. I unbundled a ten. d. 125 - 67 =	Yes Yes	
I unbundled the hundred. I unbundled a ten. e. 145 - 76 =		No No	I unbundled the hundred. I unbundled a ten. f. 181 - 72 =	Yes Yes	
I unbundled the hundred. I unbundled a ten.	Yes Yes	No No	I unbundled the hundred. I unbundled a ten.	Yes Yes	No No

g. 111 - 99 =	h. 131 - 42 =
I unbundled the hundred. Yes I unbundled a ten. Yes i. 123 - 65 =	I unbundled the hundred. Yes No I unbundled a ten. Yes No j. 132 - 56 =
I unbundled the hundred. Yes I unbundled a ten. Yes k. 145 - 37 =	I unbundled the hundred. Yes No I unbundled a ten. Yes No I. 115 - 48 =
I unbundled the hundred. Yes I unbundled a ten. Yes	I unbundled the hundred. Yes No I unbundled a ten. Yes No

3. There were 167 apples. The students ate 89 apples. How many apples were left?

For early finishers:

- 4. Tim and John have 175 trading cards together. John has 88 cards.
 - a. How many cards does Tim have?
 - b. Brady has 29 fewer cards than Tim. Have many cards does Brady have?

Name Date

1. Solve the following problems using the vertical form, your place value chart, and place value disks. Unbundle a ten or hundred when necessary. Show your work for each problem.

a. 72 – 49	b. 83 – 49
c. 118 – 30	d. 118 – 85
e. 145 – 54	f. 167 – 78
g. 125 – 87	h. 115 – 86

2. Mrs. Tosh baked 160 cookies for the bake sale. She sold 78 of them. How many cookies does she have left?

3. Tammy had \$154. She bought a watch for \$86. Does she have enough money left over to buy a \$67 bracelet?

Name	Date	
Nume	Duie	

1. Solve vertically. Draw chips on the place value chart. Unbundle when needed.

a	181 –	63	=	
u.	101		_	

hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

d.	115 –	26	=		
~ .	110	_			

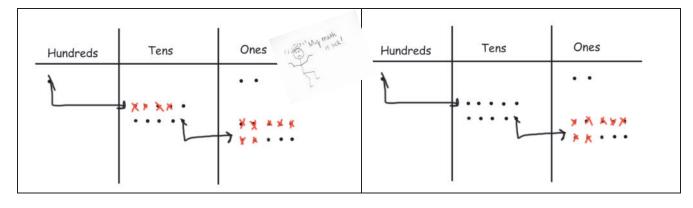
hundreds	tens	ones

hundreds	tens	ones

2. Tanisha and James drew models on their place value charts to solve this problem: 102-47. Tell whose model is incorrect and why.

James

Tanisha



's model is incorrect because _____

Name	Date
1 40.110	5415

- 1. Make each equation true.
 - a. 1 hundred = ____ tens
 - b. 1 hundred = 9 tens _____ ones
 - c. 2 hundreds = 1 hundred _____ tens
 - d. 2 hundreds = 1 hundred 9 tens ____ones
- 2. Solve vertically. Draw chips on the place value chart. Unbundle when needed.

a.	100 –	61 =	
----	-------	------	--

hundreds	tens	ones

b.	100 -	79 =	

hundreds	tens	ones

C.	200 –	7 =	

hundreds	tens	ones

 hundreds	tens	ones

hundreds	tens	ones

Name	Date	

1. Solve vertically. Draw chips on the place value chart. Unbundle when needed.

•	109 -	56 -	
u.	102 -	- 50 -	

hundreds	tens	ones	

hundreds	tens	ones

hundreds	tens	ones	

d. 200 – 123 =	hundreds	tens	ones

2. Solve vertically without a place value chart.

3. Solve vertically. Draw a place value chart and chips.

Ralph has 137 fewer stamps than his older brother. His older brother has 200 stamps. How many stamps does Ralph have?

Name	Date	

1. Solve each addition expression using both the totals below and new groups below methods. Draw a place value chart with chips and two different number bonds to represent each.

a. 27 + 19

New Groups Below	Totals Below	Place Value Chart	Number Bonds

b. 57 + 36

New Groups Below	Totals Below	Place Value Chart	Number Bonds

2. Add like units and record the totals below.

a.	8 7 + 9 5 (7 + 5) (80 + 90)	b.	106 + 24
c.	151 + 45	d.	126 + 72
e.	159 + 30	f.	108 + 91

Name	Date	

1. Linda and Keith added 127 + 59 differently. Explain why Linda's work and Keith's work are both correct.

Linda's work:	Keith's work:
127 + 59 16 70 + 100 186	127 + 59

2. Jake solved 124 + 69 using new groups below. Solve the same problem another way.

124	
, 	
193	

3. Solve each problem two different ways.

a. 134 + 48	b. 83 + 69
u. 134 + 40	D. 03 + 09
	1 12 122
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128
c. 46 + 75	d. 63 + 128

Name	

Solve the following word problems by drawing a tape diagram. Use any strategy you have learned to solve.

1. Mr. Roberts graded 57 tests on Friday and 43 tests on Saturday. How many tests did Mr. Roberts grade?

- 2. There are 54 women and 17 fewer men than women on a boat.
 - a. How many men are on the boat?

b. How many people are on the boat?

- 3. Mark collected 27 fewer coins than Craig. Mark collected 58 coins.
 - a. How many coins did Craig collect?

b. Mark collected 18 more coins than Shawn. How many coins did Shawn collect?

- 4. There were 35 apples on the table.
 - 17 of the apples were rotten and were thrown out.
 - 9 apples were eaten.

How many apples are still on the table?









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