

A Story of Units

Pleasanton Mathematics Curriculum



Grade 2 • MODULE 4

Addition and Subtraction Within 200 with Word Problems to 100

Homework

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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Date ____

1. Complete each more or less statement.

a. 1 more than 37 is _____.

b. 10 more than 37 is _____.

c. 1 less than 37 is _____.

d. 10 less than 37 is _____.

e. 58 is 10 more than _____.

f. 29 is 1 less than _____.

g. _____ is 10 less than 45.

h. _____ is 1 more than 38.

i. 49 is _____ than 50.

j. 32 is _____ than 22.

2. Complete each pattern and write the rule.

a. 44, 45, ____, 48

Rule: _____

b. 44, ____, 24, ____, 4

Rule: _____

c. 44, ____, 74, 84

Rule:

d. ____, 43, 42, ____, 40

Rule: _____

e. ____, ____, 44, 34, ____

Rule:

f. 41, ____, 38, 37

Rule:

- 3. Label each statement as true or false.
 - a. 1 more than 36 is the same as 1 less than 38.
 - b. 10 less than 47 is the same as 1 more than 35.
 - c. 10 less than 89 is the same as 1 less than 90. _____
 - d. 10 more than 41 is the same as 1 less than 43.
- 4. Below is a chart of balloons at the county fair.

Color of Balloons	Number of Balloons
Red	59
Yellow	61
Green	65
Blue	
Pink	

- a. Use the following to complete the chart and answer the question.
 - The fair has 1 more blue than red balloons.
 - There are 10 fewer pink than yellow balloons.

Are there more blue or pink balloons?

b. If 1 red balloon pops and 10 red balloons fly away, how many red balloons are left? Use the arrow way to show your work.

Name

Date ____

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

2. Find each sum. Then use >, <, or = to compare.

3. Solve using place value strategies.

b.
$$8 \text{ tens} - 5 \text{ tens} = ___ \text{tens}$$

 $80 - 50 = ____$

8 tens 9 ones - 5 tens = ___ tens ___ ones
$$89 - 50 =$$

4. Complete each more than or less than statement.

a. 20 less than 58 is _____.

b. 36 more than 40 is _____.

c. 40 less than _____ is 28.

d. 50 more than _____ is 64.

5. There were 68 plates in the sink at the end of the day. There were 40 plates in the sink at the beginning of the day. How many plates were added throughout the day? Use the arrow way to show your simplifying strategy.

Name ____

Date ____

1. Solve using the arrow way. The first set is done for you.

a.

 $67 \xrightarrow{+20} 87$

 $67 \xrightarrow{+20} 87 \xrightarrow{+1} 88$

 $67 \xrightarrow{+20} 87 \xrightarrow{-1} 86$

b.

56 + 41 = ____

56 + 39 = ____

C.

d.

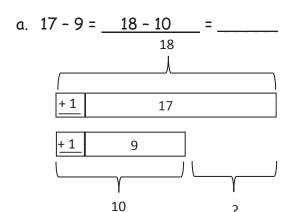
2. Solve using the arrow way, number bonds, or mental math. Use scrap paper if needed.

a. 48 - 20 =	b. 86 - 50 =	c. 37 + 40 =
48 - 21 =	86 - 51 =	37 + 41 =
48 - 19 =	86 - 49 =	37 + 39 =
d. 62 + 30 =	e. 77 - 40 =	f. 28 + 50 =
62 + 31 =	77 - 41 =	28 + 51 =
62 + 29 =	77 - 39 =	28 + 49 =

- 3. Marcy had \$84 in the bank. She took \$39 out of her account. How much does she have in her account now?
- 4. Brian has 92 cm of rope. He cuts off a piece 49 cm long to tie a package.
 - a. How much rope does Brian have left?
 - b. To tie a different package, Brian needs another piece of rope that is 8 cm shorter than the piece he just cut. Does he have enough rope left?

Date _____

1. Solve. Draw and label a tape diagram to subtract 10, 20, 30, 40, etc.



b. 33 - 19 = _____ = ____

c. 60 - 29 = _____ = ____

d. 56 - 38 = _____ = ____

2. Solve. Draw a number bond to add 10, 20, 30, 40, etc.

3. Kylie has 28 more oranges than Cynthia. Kylie has 63 oranges. How many oranges does Cynthia have? Draw a tape diagram or number bond to solve.

Ν	lame	Date
So	olve and show your strategy.	
1.	38 markers were in the bin. Chase added the 43 methods the bin. How many markers are in the bin now?	arkers that were on the floor to
2.	. There are 29 fewer big stickers on the sticker she 62 little stickers on the sheet. How many big stick	
3.	. Rose has 34 photos in a photo album and 41 photos Rose have?	in a box. How many photos does

- 4. Halle has two ribbons. The blue ribbon is 58 cm. The green ribbon is 38 cm longer than the blue ribbon.
 - a. How long is the green ribbon?
 - b. Halle uses 67 cm of green ribbon to wrap a present. How much green ribbon is left?

- 5. Chad bought a shirt for \$19 and a pair of shoes for \$28 more than the shirt.
 - a. How much was the pair of shoes?
 - b. How much money did Chad spend on the shirt and shoes?
 - c. If Chad had \$13 left over, how much money did Chad have before buying the shirt and shoes?

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

Solve using a place value chart.

3. Melissa has 36 more crayons than her brother. Her brother has 49 crayons. How many crayons does Melissa have?

4. There were 67 candles on Grandma's birthday cake and 26 left in the box. How many candles were there in all?

5. Frank's mother gave him \$25 to save. If he already had \$38 saved, how much money does Frank have saved now?

- Name _____ Da
- 1. Solve the following problems using the vertical form, your place value chart, and place value disks. Bundle a ten, if needed. Think about which ones you can solve mentally, too!
 - a. 31 + 9

32 + 8

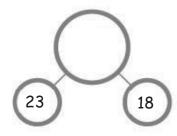
b. 42 + 18

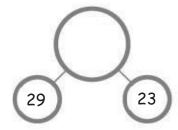
43 + 17

c. 26 + 67

28 + 65

2. Add the bottom numbers to find the missing number above it.





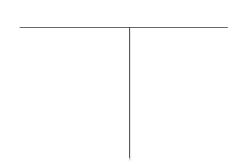
3. Jahsir counted 63 flowers by the door and 28 flowers on the windowsill. How many flowers were by the door and on the windowsill?

- 4. Antonio's string is 38 centimeters longer than his reading book. The length of his reading book is 26 centimeters.
 - a. What is the length of Antonio's string?

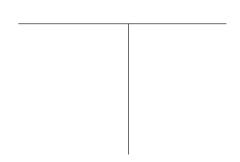
b. The length of Antonio's reading book is 20 centimeters shorter than the length of his desk. How long is Antonio's desk?

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





e.	32	+	59	=
€.	\mathcal{L}	•	J /	_



2. Twenty-eight second-grade students went on a field trip to the zoo. The other 24 second-grade students stayed at school. How many second grade students are there?



3. Alice cut a 27 cm piece of ribbon and had 39 cm of ribbon left over. How much ribbon did Alice have at first?



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

a. 127 + 14 = _____

hundreds	tens	ones

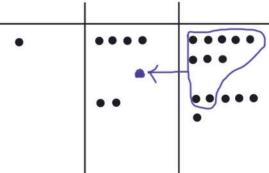
b. 135 + 46 = _____

hundreds	tens	ones	

c. 108 + 37 = _____

hundreds	tens	ones

2. Solve using the algorithm. Write a number sentence for the problem modeled on the place value chart.



- 3. Jane made 48 lemon bars and 23 cookies.
 - a. How many lemon bars and cookies did Jane make?

hundreds	tens	ones

b. Jane made 19 more lemon bars. How many lemon bars does she have?

hundreds	tens	ones

Date _____

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

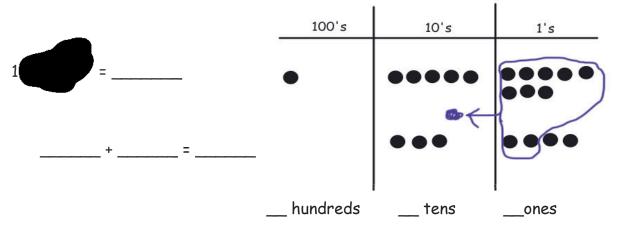
hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

2. Jamie started to solve this problem when she accidently dropped paint on her sheet. Can you figure out what problem she was given and her answer by looking at her work?



3. a. In the morning, Mateo borrowed 4 bundles of ten markers and 17 loose markers from the art teacher. How many markers did Mateo borrow?

hundreds	tens	ones

b. In the afternoon, Mateo borrowed 2 bundles of ten crayons and 15 loose crayons. How many markers and crayons did Mateo borrow in all?

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!

3. Solve, and explain your strategy.

α. 41 – 27 = _____

b. 67 – 28 = _____

4. The number of marbles in each jar is marked on the front. Miss Clark took 37 marbles out of each jar. How many marbles are left in each jar? Complete the number sentence to find out.









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

34 - 18a.



41 - 16 b.

2. Some first- and second-grade students voted on their favorite drink. The table shows the number of votes for each drink.

Types of Drink	Number of Votes
Milk	28
Apple Juice	19
Grape Juice	16
Fruit Punch	37
Orange Juice	44

a. How many more students voted for fruit punch than for milk? Show your work.

b. How many more students voted for orange juice than for grape juice? Show your work.

c. How many fewer students voted for apple juice than for milk? Show your work.

A.V.	N I
Name	Date

1. Solve vertically. Use the place value chart and chips to model each problem. Show how you change 1 ten for 10 ones, when necessary. The first one has been started for you.

42 - 26 = _____ 10's 100's b. 100's 10's 54 - 28 = _____ C. 1's 10's 100's 60 - 17 = _____

2. 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 =	



f.

	. .
Name	Date

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.	156	_	42	=	

hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

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

a.

b.

- 3. Solve and show your work. Draw a place value chart and chips, if needed.
 - a. Aniyah has 165 seashells. She has 28 more than Ralph. How many seashells does Ralph have?

b. Aniyah and Ralph each give 19 seashells to Harold. How many seashells does Aniyah have left? How many seashells does Ralph have left?

Name	Date	

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. 153 - 31

hundreds	tens	ones

b. 153 - 38

tens	ones	
	tens	tens ones

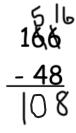
c. 160 - 37

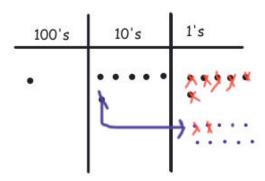
hundreds	tens	ones

d.	182	_	59

hundreds	tens	ones

2. Lisa solved 166 - 48 vertically and on her place value chart. Explain what Lisa did correctly and what she needs to fix.





a.	Lisa correctly	 	 	
	,			

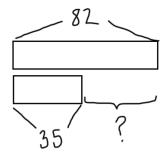
b.	Lisa needs to fix _		

Name	Date
1 141110	5415

Solve the following word problems. Use the RDW process.

1. Vicki modeled the following problem with a tape diagram.

Eighty-two students are in the math club. 35 students are in the science club.



How many more students are in the math club than science club?

Show another model to solve the problem. Write your answer in a sentence.

2. Forty-six birds sat on a wire. Some flew away, but 29 stayed. How many birds flew away? Show your work.

3. Ian bought a pack of 47 water balloons. 19 were red, 16 were yellow, and the rest were blue. How many water balloons were blue? Show your work.

4. Daniel read 54 pages of his book in the morning. He read 27 fewer pages in the afternoon. How many pages did Daniel read altogether? Show your work.

Name _____

Date ____

1. Solve mentally.

e.
$$5 \text{ ones} + 6 \text{ ones} = ____ten(s) ____ one(s)$$
 $5 + 6 = _____$

f. 14 ones + 4 ones = ____ ten(s) ____ one(s)
$$14 + 4 =$$

2. Solve.

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

a.
$$36 \xrightarrow{+4}$$
 $40 \xrightarrow{+60}$ $100 \xrightarrow{+30}$ 130

a.
$$36 \xrightarrow{+4} 40 \xrightarrow{+60} 100 \xrightarrow{+30} 130$$
 b. $78 \xrightarrow{+2} \underline{\qquad} \xrightarrow{+10} \underline{\qquad} \xrightarrow{+10} \underline{\qquad}$

c.
$$61 \xrightarrow{+9}$$
 $\xrightarrow{+10}$ $\xrightarrow{+10}$ $\xrightarrow{+10}$ $\xrightarrow{+10}$ $\xrightarrow{+100}$

d.
$$27 \xrightarrow{+3} \underline{\hspace{1cm}}^{+70} \underline{\hspace{1cm}}^{+70} \underline{\hspace{1cm}}^{+100} \underline{\hspace{1cm}}$$

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.

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.

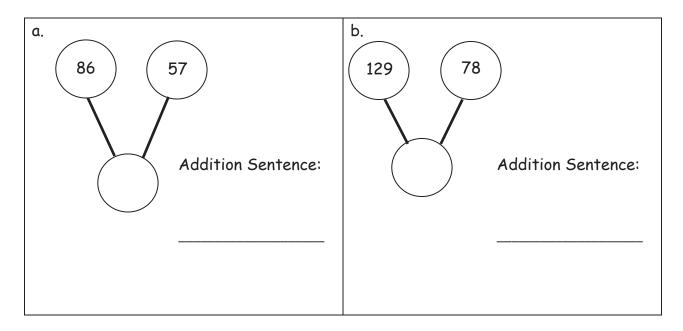
The total of the two parts is 109.

The total of the two parts is 163.

The total of the two parts is 119.

The total of the two parts is 173.

3. Solve the problem using your place value disks, and fill in the missing total. Then, write an addition sentence that relates to the number bonds.



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

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

a. 84 + 37	b. 42 + 79
c. 58 + 56	d. 46 + 96
e. 75 + 69	f. 48 + 94

g. 162 + 38	h. 156 + 44

- 2. Seventy-four trees were planted in the garden. Forty-nine more bushes were planted than trees in the garden.
 - a. How many bushes were planted?

b. How many trees and bushes were planted?



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

a. 41 + 39 = _____

100's	10's	1's

b. 54 + 26 = ____

100's	10's	1's

c. 96 + 39 = _____

100's	10's	1's	

d.	84	+	79	=	
u.	\mathbf{U}^{T}	•	1 /	_	

100's	10's	1's

100's	10's	1's

2. For each box, find and circle two numbers that add up to 150.

a.		b.		C.		
67	63	48	92	75	55	
73	83	68	62	65	45	
57	7	58		7	75	

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.	127	+	78	} =	
----	-----	---	----	-----	--

100's	10's	1's

- 2. The blue team scored 37 fewer points than the white team. The blue team scored 69 points.
 - a. How many points did the white team score?

b. How many points did the blue and white teams score altogether?

Name	Date	
1 401110	Daie	

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

a. 6 + 3 + 7=	36 + 23 + 17=	126 + 23 + 17=
b. 8 + 2 + 5 =	38 + 22 + 75 =	18 + 62 + 85 =
c. 9 + 4 + 1 + 6 =	29 + 34 + 41 + 16 =	81 + 34 + 19 + 56 =

2. The table shows the top six soccer teams and their total points scored this season.

Teams	Points
Red	29
Yellow	38
Green	41
Blue	76
Orange	52
Black	24

- a. How many points did the yellow and orange teams score together?
- b. How many points did the yellow, orange, and blue teams score together?
- c. How many points did the red, green, and black teams score together?
- d. Which two teams scored a total of 70 points?
- e. Which two teams scored a total of 100 points?

Name	Date	
Nume	Duie	

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

a.	105 - 90 = 15	
/	\wedge	

b. 121 - 90

100 - 90 = 10

5

10 + 5 = 15

_	112 -	- 80
C.	117	00

100

d. 135 - 70

e.	136	_	60
€.	100		\sim

f. 129 - 50

h. 138 - 40

2. Monica incorrectly solved 132 - 70 to get 102. Show her how to solve it correctly.

Monica's work:	Correct way to solve 132 - 70:
132 - 70 =	
100 32	
100-30=70	
70+32= 102	

3. Billy sold 50 fewer magazines than Alex. Alex sold 128 magazines. How many magazines did Billy sell? Solve using a number bond.

Name	Date

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. 115 - 50 =		b. 125 - 57 =	
I unbundled the hundred. I unbundled a ten. c. 88 - 39 =	Yes No	I unbundled the hundred. I unbundled a ten. d. 186 - 39 =	Yes No
I unbundled the hundred. I unbundled a ten.	Yes No Yes No	I unbundled the hundred. I unbundled a ten.	
e. 162 - 85 =		f. 172 - 76 =	
	Yes No Yes No	I unbundled the hundred. I unbundled a ten.	Yes No Yes No

h.
131 - 98 =
I unbundled the hundred. Yes No
I unbundled a ten. Yes No
j.
150 - 56 =
I unbundled the hundred. Yes No
I unbundled a ten. Yes No
1.
136 - 87 =
100 07
I unbundled the hundred. Yes No
I unbundled a ten. Yes No

3. 96 crayons in the basket are broken. The basket has 182 crayons. How many crayons are not broken?

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. 65 – 38	b. 66 – 49

2. Dominic has \$167. He has \$88 more than Mario. How much money does Mario have?

- 3. Which problem will have the same answer as 133 77? Show your work.
 - a. 155 66
 - b. 144 88
 - c. 177 33
 - d. 139 97

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

α.	114 –	65 =	
u.	T T I	00 -	

hundreds	tens	ones

hundreds	tens	ones

c.	141 -	- 89 =	
----	-------	--------	--

hundreds	tens	ones

d. 136 – 77 =	d.	136 –	77	=	
---------------	----	-------	----	---	--

hundreds	tens	ones

hundreds	tens	ones

2. Extension: Fill in the missing number to complete the problem. Draw a place value chart and chips to model.

1 2 3	
_ <u>5</u> 🔲	
6 9	

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

hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

d. 200 – 57 = _____

hundreds	tens	ones	

e. 200 – 83 = _____

hundreds	tens	ones

2. Susan solved 200 - 91 and decided to add her answer to 91 to check her work. Explain why this strategy works.

\$ 0 p	109
- 91	+91
109	200

Susan's work:

Explana	ation:		

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

hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

d.	200 -	107	=

hundreds	tens	ones

hundreds	tens	ones

2. Herman collected 200 shells on the beach. Of those, he kept 136 shells and left the rest on the beach. How many shells did he leave on the beach?

Name	Date	

1. Add like units and record the totals below.

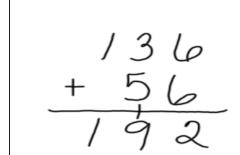
a.	b.
48	118
+ 27	<u>+ 73</u>
c.	d.
156	137
+ 62	+ 82

e.		f.
	147	149
	+ 35	<u>+ 51</u>
g.		h.
	188	126
	+ 22	<u>+ 65</u>

2. Daniel counted 67 apples on one tree and 79 apples on another tree. How many apples were on both trees? Add like units and record the totals below to solve. Kari's work:

	_
Name	Date

1. Kari and Marty solved 136 + 56.



Marty's work:

Explain what is different about how Kari and Marty solved the problem.	
	•

2. Here is one way to solve 145 + 67. For (a), solve 145 + 67 another way.

	a.
1 4 5	
+ 67	
212	

b. Explain how the two ways to solve 145 + 67 are similar.

3. Show another way to solve 142 + 39.

Vame	Date
Marie	Date

- 1. Melissa had 56 pens and 37 more pencils than pens.
 - a. How many pencils did Melissa have?

b. How many pens and pencils did Melissa have?

2. Antonio gave 27 tomatoes to his neighbor and 15 to his brother. He had 72 tomatoes before giving some away. How many tomatoes does Antonio have left? 3. The bakery made 92 muffins. Seventeen were blueberry, 23 were cranberry, and the rest were chocolate chip. How many chocolate chip muffins did the bakery make?

4. After spending \$43 on groceries and \$19 on a book, Mrs. Groom had \$16 left. How much money did Mrs. Groom have to begin with?









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