

A Story of Units

## Pleasanton Mathematics Curriculum



### **Grade 2 • MODULE 5**

Addition and Subtraction Within 1,000 with Word Problems to 100

# **PROBLEM SETS**

Video tutorials: http://embarc.online

Info for parents: http://bit.ly/pusdmath

Version 3

2 GRADE

## **Mathematics Curriculum**



**GRADE 2 • MODULE 5** 

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## **GRADE 2 • MODULE 5**

Addition and Subtraction Within 1,000 with Word Problems to 100

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Name	Date	

- Complete each more or less statement.
  - a. 10 more than 175 is \_\_\_\_\_.
- b. 100 more than 175 is \_\_\_\_\_\_.
- c. 10 less than 175 is \_\_\_\_\_.
- d. 100 less than 175 is \_\_\_\_\_.
- e. 319 is 10 more than \_\_\_\_\_.
- f. 499 is 100 less than \_\_\_\_\_.
- g. \_\_\_\_\_ is 100 less than 888.
- h. \_\_\_\_\_ is 10 more than 493.
- i. 898 is \_\_\_\_\_ than 998.
- j. 607 is \_\_\_\_\_ than 597.
- k. 10 more than 309 is \_\_\_\_\_.
- l. 309 is \_\_\_\_\_ than 319.
- 2. Complete each regular number pattern.
  - a. 170, 180, 190, \_\_\_\_\_, \_\_\_\_
  - b. 420, 410, 400, \_\_\_\_\_, \_\_\_\_,
  - c. 789, 689, \_\_\_\_\_, \_\_\_\_, 289
  - d. 565, 575, \_\_\_\_\_, \_\_\_\_, 615
  - e. 724, \_\_\_\_\_, \_\_\_\_, 684, 674
  - f. \_\_\_\_\_, \_\_\_\_, 886, 876, 866

3. Complete each statement.

a. 
$$389 \xrightarrow{+10} \underline{\qquad} \xrightarrow{+100} \underline{\qquad}$$

b. 187 
$$\xrightarrow{-100}$$
 \_\_\_\_\_  $\xrightarrow{-10}$  \_\_\_\_\_

c. 
$$609 \xrightarrow{-10} \longrightarrow 499 \xrightarrow{+10} \longrightarrow 519$$

d. 
$$512^{-10}$$
 \_\_\_\_\_ $^{-10}$  \_\_\_\_ $^{+100}$  \_\_\_\_ $^{+100}$  \_\_\_\_ $^{+100}$  \_\_\_\_\_

4. Solve using the arrow way.

Name

Date \_\_\_\_

- 1. Solve each addition problem using place value strategies. Use the arrow way or mental math, and record your answers. You may use scrap paper if you like.
  - a. 2 hundreds 4 tens + 3 hundreds = \_\_\_\_ hundreds \_\_\_\_ tens

- 2. Solve each subtraction problem using place value strategies. Use the arrow way or mental math, and record your answers. You may use scrap paper if you like.
  - a. 6 hundreds 2 ones 4 hundreds = \_\_\_\_ hundreds \_\_\_\_ tens \_\_\_ ones

3. Fill in the blanks to make true number sentences. Use place value strategies, number bonds, or the arrow way to solve.

a. 200 more than 389 is \_\_\_\_\_.

b. 300 more than \_\_\_\_\_ is 568.

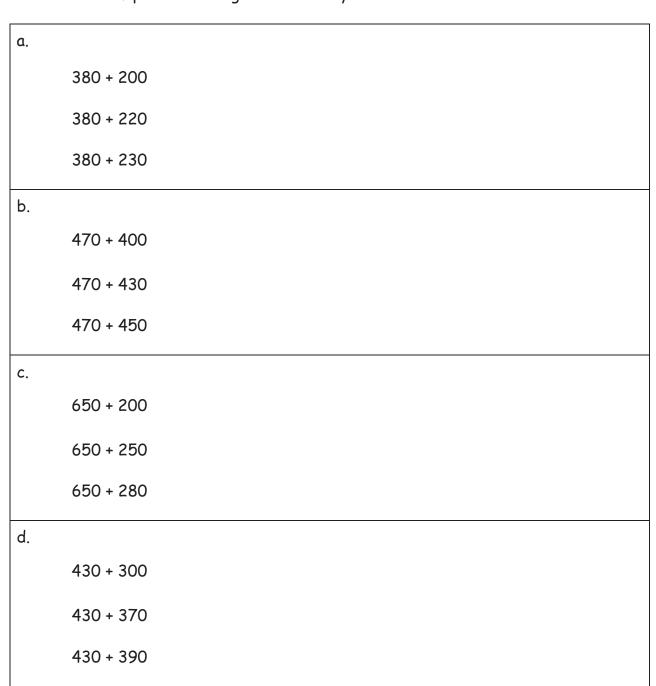
c. 400 less than 867 is \_\_\_\_\_.

d. \_\_\_\_\_ less than 962 is 262.

4. Jessica's lemon tree had 526 lemons. She gave away 300 lemons. How many does she have left? Use the arrow way to solve.

Name	_ Date	
	<del>-</del>	

1. Solve each set of problems using the arrow way.





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

3. Solve.

e. What is the value of 86 tens?

Name \_\_\_\_ Date \_\_\_\_\_

1. Solve using the arrow way.

a. 570 - 200

570 - 270

570 - 290

b.

760 - 400

760 - 460

760 - 480

C.

950 - 500

950 - 550

950 - 580

d.

820 - 320

820 - 360

820 - 390

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

α.

530 - 400 = \_\_\_\_\_ 530 - 430 = \_\_\_\_ 530 - 460 = \_\_\_\_

b.

950 – 550 = \_\_\_\_\_ 950 – 660 = \_\_\_\_ 950 – 680 = \_\_\_\_

C.

640 – 240 = \_\_\_\_\_ 640 – 250 = \_\_\_\_ 640 – 290 = \_\_\_\_

d.

740 – 440 = \_\_\_\_\_ 740 – 650 = \_\_\_\_ 740 – 690 = \_\_\_\_

3. Solve.

a. 88 tens – 20 tens = \_\_\_\_\_ b. 88 tens – 28 tens = \_\_\_\_\_

c. 88 tens – 29 tens = \_\_\_\_\_ d. 84 tens – 28 tens = \_\_\_\_\_

- e. What is the value of 60 tens?
- f. What is the value of 56 tens?

Name \_\_\_\_

Date \_\_\_\_

1. Solve.

2. Add by drawing a number bond to make a hundred. Write the simplified number sentence and solve.



c. 
$$330 + 180$$

\_\_\_\_\_= \_\_\_\_

d. 440 + 280

e. 199 + 86

f. 298 + 57

g. 425 + 397

Name	Date	

1. Draw and label a tape diagram to show how to simplify the problem. Write the new number sentence, and then subtract.

+ 10	220	
+ 10	190	

1 01	20 – 190 =		
h 4.	<i>)</i>	-	-
1) .)/	'\' — \	_	•
<b>D. O E</b>	-0 -/0		

2. Draw and label a tape diagram to show how to simplify the problem. Write a new number sentence, and then subtract. Check your work using addition.

a. 451 – 199 = <u>452 – 200</u> = \_\_\_\_

		Check:
+ 1	451	
+ 1	199	
	-22	

h 562 \_ 299 -

Check:	

c. 432 - 298 =

Check:

d. 612 – 295 = =

	Check:

Name	Date

1. Circle the student work that shows a correct solution to 543 + 290.

543+290 = 533+300=833 533 10	Explain the mistake in any of the incorrect solutions.
543+290 = 533+300 = 833 +10 543 +10 290	
$543 \xrightarrow{+200} 743 \xrightarrow{+60} 803 \xrightarrow{+30} 833$	

2. Circle the student work that correctly shows a strategy to solve 721 - 490.

$$721 - 490 = 711 - 500 = 211$$
 $| 10 | 721 | | 10 | 490 | | 731 - 500 = 231$ 

Fix the work that is incorrect by making a new drawing in the space below with a matching number sentence.

3. Two students solved 636 + 294 using two different strategies.

$$636 \xrightarrow{+4} 640 \xrightarrow{+60} 700 \xrightarrow{+30} 730 \xrightarrow{+200} 930$$

Explain which strategy would be easier to use when solving and why.

4. Circle one of the strategies below, and use the circled strategy to solve 290 + 374.

b. Solve: a. arrow way / number bond

C.	Explain why you chose that strategy.

Name	Date	

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

a. 301 + 49	b. 402 + 48
c. 315 + 93	d. 216 + 192
e. 545 + 346	f. 565 + 226
g. 222 + 687	h. 164 + 745

2. Solve using mental math, a simplifying strategy, or place value chart and place value disks.

Name	Date	

1. Solve the following problems using place value disks, a place value chart, and vertical form.

a. 417 + 293	b. 526 + 185
c. 338 + 273	d. 625 + 186
e. 250 + 530	f. 243 + 537
g. 376 + 624	h. 283 + 657

2. Solve using mental math, a simplifying strategy, or a place value chart and place value disks.

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

1. Solve using vertical form, and draw chips on the place value chart. Bundle as needed.

hundreds	tens	ones

a. 117 + 170 =	α.	117	+	170	=
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hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

d. 504 + 269 = \_\_\_\_\_

2. Solve using vertical form, and draw chips on a place value chart. Bundle as needed.

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

1. Solve using vertical form, and draw chips on the place value chart. Bundle as needed.

tens	ones
	tens

a. 227 + 183 =

hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

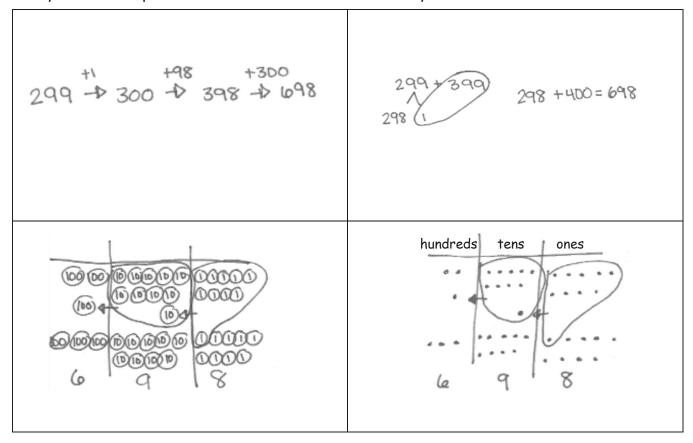
d. 648 + 289 = \_\_\_\_\_

- 2. Solve using vertical form, and draw chips on a place value chart. Bundle as needed.
  - a. 307 + 187

b. 398 + 207

Name	Date
1 101110	5415

1. Tracy solved the problem 299 + 399 four different ways.



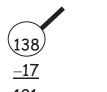
Explain which strategy is most efficient for Tracy to use and why.					

2. Choose the best strategy and solve. Explain why you chose that strategy.

a. 221 + 498	Explanation:
b. 467 + 200	Explanation:
c. 378 + 464	Explanation:

1. Solve using mental math.

2. Solve using mental math or vertical form with place value disks. Check your work using addition.



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Name	Date

1. Solve by drawing place value disks on a chart. Then, use addition to check your work.

a. 469 – 170	Solve vertically or mentally:	Check:
b. 531 – 224	Solve vertically or mentally:	Check:
c. 618 – 229	Solve vertically or mentally:	Check:

d. 838 – 384	Solve vertically or mentally:	Check:
e. 927 – 628	Solve vertically or mentally:	Check:

2. If 561 - 387 = 174, then 174 + 387 = 561. Explain why this statement is true using numbers, pictures, or words.

Name	Date
1 101110	5415

1. Solve by drawing chips on the place value chart. Then, use addition to check your

*****				
a. 699 – 21	.0		Solve vertically or mentally:	Check:
hundreds	tens	ones		
b. 758 – 38	37 I	l	Solve vertically or mentally:	Check:
hundreds	tens	ones		
c. 788 – 29	99 I	İ	Solve vertically or mentally:	Check:
hundreds	tens	ones	,	

d. 821 – 52	23		Solve vertically	Check:
hundreds	tens	ones	or mentally:	
e. 913 – 55	58 I		Solve vertically or mentally:	Check:
hundreds	tens	ones		

- 2. Complete all of the if...then statements. Draw a number bond to represent the related facts.
  - a. If 762 \_\_\_\_ = 173, then 173 + 589 = \_\_\_\_.

b. If 631 - \_\_\_\_ = 273, then \_\_\_\_ + 273 = 631.

Name Date
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1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle, if needed.

α.	304 –	53	=	
∽.	00.	00		

hundreds	tens	ones

hundreds	tens	ones

hundreds	tens	ones

d.	700 –	509	=	
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hundreds	tens	ones

ones

2. Emily said that 400 - 247 is the same as 399 - 246. Write an explanation using pictures, numbers, or words to prove Emily is correct.

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

1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle, if needed.

α.	200 –	113	=	
<b>∽</b> .				

hundreds	tens	ones

b	400 -	247	=		
υ.	100	L 1/	_		

hundreds	tens	ones

C.	700 –	428 =	

hundreds	tens	ones

d.	800 -	- 606	=	
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hundreds	tens	ones

hundreds	tens	ones

2. Solve 600-367. Then, check your work using addition.

Solution:	Check:

Name \_\_\_\_ Date \_\_\_\_

1. Use the arrow way and counting on to solve.

a. 300 – 247	b. 600 – 465

2. Solve vertically and draw a place value chart and chips. Rename in one step.

, ,	
a. 507 – 359	b. 708 – 529

3. Choose a strategy to solve and explain why you chose that strategy.

a. 600 – 437	Explanation:

4. Prove the student's strategy by solving both problems to check that their solutions are the same. Explain to your partner why this way works.



5. Use the simplifying strategy from Problem 4 to solve the following two problems.

a. 600 – 547	b. 700 – 513

1. Explain how the two strategies to solve 500-211 are related.

a.			b.	
hundreds	tens	ones		4 9 10
•••••	) * * * * * *			-211
				289
2.	8	· 9		

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MATH

2. Solve and explain why you chose that strategy.

a. 220 + 390 =	Explanation:
b. 547 – 350 =	Explanation:
c. 464 + 146 =	Explanation:
d. 600 – 389 =	Explanation:

Na	me _			Date	
-		Show your strategy to solve. Find a classmate who used a different strategy, and copy his work into the box.			
Ste	ep 3:	Discuss which strategy is more eff	ficient.		
1.	399 +	237 =			
	a. M	y strategy	b	_'s strategy	
2. 400 – 298 =					
	a. M	y strategy	b	_'s strategy	

548 + 181 = \_\_\_\_\_ 3.

a. My strategy	b's strategy

360 + \_\_\_\_ = 754

a. My strategy	b's strategy

862 – \_\_\_\_\_ = 690 5.

a. My strategy	b's strategy





Video tutorials: http://bit.ly/eurekapusd Info for parents: http://bit.ly/pusdmath