13. Ada writes 10 + 8 = 18 on the board. Maria wants to use the Commutative Property of Addition to rewrite Ada's addition sentence. What number sentence should Maria write?

Problem Solving

- 4 + 7 = 4. 6 + 7 = 6. 0 + 4 =2. ____+___= _____+___= _____+___= ____ Is the sum even or odd? Write even or odd. 8. 6 + 4 7. 5 + 2 _____ 9. 1 + 0 **11.** 3 + 8 _____ **12.** 7 + 7 _____ **10.** 5 + 5
- Find the sum. Then use the Commutative Property of Addition to write the related addition sentence.

15. WRITE Math Write the definitions of the Identity Property of Addition and the Commutative Property of Addition. Use the addition table to provide examples of each.

Name _____

1.

9

Number Patterns Common Core COMMON CORE STANDARD-3.OA.D.9 Solve problems involving the four operations, and identify and explain patterns in arithmetic. + 2 = 11**3.** 3 + 10 =___ **5.** 8 + 9 = +____= +___= 2 + 9 = 11

Practice and Homework Lesson 1.1

14. Jackson says he has an odd number of

correct? Explain.

model cars. He has 6 cars on one shelf

and 8 cars on another shelf. Is Jackson

Lesson Check (3.0A.D.9)

- 1. Marvella writes the addition problem 5 + 6. Is this sum even or odd?
- 2. What related number sentence shows the Commutative Property of Addition?

3 + 9 = 12

Spiral Review (Reviews 2.MD.A.3, 2.MD.C.8, 2.MD.D.10)

- 3 pennies. How much money does Amber have?
- **3.** Amber has 2 quarters, 1 dime, and **4.** Josh estimates the height of his desk. What is a reasonable estimate?

Use the bar graph for 5-6.

5. Who read the most books?

6. Who read 3 more books than Bob?





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Name	×	Practi	Practice and Homework		
Round to or Hund Locate an Round to	o the Nearest 1 red d label 739 on the r the nearest hundre	Common Core Us op	DMMON CORE STANDARD — 3.NBT.A.1 e place value understanding and properties of erations to perform multi-digit arithmetic.		
< 600	700	800	90	→ 00	
1. 739 is l	between <u>700</u> and	800			
2. 739 is c	closer to than	it is to			
3. 739 rou Round to	unded to the nearest t he nearest ten and	hundred is	· .		
4. 66		5. 829	6. 57	2	
7. 209		8. 663	9. 94	9	
Probl	em Solving 🥵	ala			
10. The ba 435 pour rounde pounde	by elephant weighs ands. What is its wei d to the nearest hun ?	11. J ght a idred 2	ayce sold 218 cup at his lemonade s 218 rounded to th	os of lemonade tand. What is e nearest ten?	
12. WRITE	Math Describe ho	w to round 678 to	the nearest hund	red.	

- 1. One day, 758 people visited the Monkey House at the zoo. What is 758 rounded to the nearest hundred?
- 2. Sami ordered 132 dresses for her store. What is 132 rounded to the nearest ten?

Spiral Review (Reviews 2.G.A.1, 2.G.A.3, 3.OA.D.9)

3. What property describes the number sentence?

4. Is the sum even or odd?

2 + 6

6 + 0 = 6

5. What name describes this shape?



6. What word describes the equal shares of the shape?







Practice and Homework Lesson 1.3

COMMON CORE STANDARD-3.NBT.A.1 Use place value understanding and properties of operations to perform multi-digit arithmetic.

Common

Name

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Estimate Sums

Use rounding or compatible numbers to estimate the sum.

1. 171 <u>+ 727</u>	175 + 725 900	2	87 34	<u>+</u>	3. <u>+</u>	222 203	<u>+</u>
4. 52 <u>+ 39</u>	+	5. <u>+</u>	256 321	+	6. <u>+</u>	302 412	+
7. 325 + 458	L	=		8. 620 + 107	+	=	
Problem	Solving (Real					

9. Stephanie read 72 pages on Sunday and 83 pages on Monday. About how many pages did Stephanie read during the two days?

World

10. Matt biked 345 miles last month. This month he has biked 107 miles. Altogether, about how many miles has Matt biked last month and this month?

11. WRITE Math Explain how to estimate 368 + 231 two different ways.

- The McBrides drove 317 miles on one day and 289 miles on the next day. Estimate the number of miles the McBrides drove during the two days.
- 2. Ryan counted 63 birds in his backyard last week. This week, he counted 71 birds in his backyard. About how many birds did Ryan count?

Spiral Review (Reviews 2.G.A.1, 3.NBT.A.1, 3.OA.D.9)

3. What name describes this shape?

4. Is the sum even or odd?

6 + 7

- 5. What is 503 rounded to the nearest hundred?
- 6. What is 645 rounded to the nearest ten?



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Name _

Mental Math Strategies for Addition

Count by tens and ones to find the sum. Use the number line to show your thinking.

1. 29 + 14 = 43



Use mental math to find the sum. Draw or describe the strategy you use.

3. 52 + 19 = _____

Practice and Homework Lesson 1.4

Common Core Ge

COMMON CORE STANDARD—**3.NBT.A.2** Generalize place value understanding for multi-digit whole numbers.

2. 36 + 28 =_____

4. 122 + 306 = _____

Problem Solving Real

- 5. Shelley spent 17 minutes washing the dishes. She spent 38 minutes cleaning her room. **Explain** how you can use mental math to find how long Shelley spent on the two tasks.
- 6. It took Marty 42 minutes to write a book report. Then he spent 18 minutes correcting his report.
 Explain how you can use mental math to find how long Marty spent on his book report.

7. WRITE Math Which method do you prefer to use to find sums—count by tens and ones, use compatible numbers, or use friendly numbers and adjust? Explain why.

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- Sylvia spent 36¢ for a pencil and 55¢ for a notepad. Use mental math to find how much she spent.
- 2. Will spent 24 minutes putting together a model plane. Then he spent 48 minutes painting the model. How long did Will spend working on the model plane?

Spiral Review (Reviews 2.G.A.1, 2.G.A.3, 3.OA.D.9, 3.NBT.A.1)

3. What name describes this shape?



4. What word describes the equal shares of the shape?



- Tammy wrote the addition problem 5 + 6. Is this sum even or odd?
- 6. Greg counted 83 cars and 38 trucks in the mall parking lot. Estimate the total number of cars and trucks Greg counted.



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Use Properties to Add

Use addition properties and strategies to find the sum.

1.
$$34 + 62 + 51 + 46 = \underline{193}$$

 $34 > 10$
 $10 < \frac{46}{62}$
 $\underline{+51}$
 $\underline{193}$
3. $42 + 36 + 18 = \underline{---}$

Practice and Homework Lesson 1.5



2. 27 + 68 + 43 =

COMMON CORE STANDARD—**3.NBT.A.2** Use place value understanding and properties of operations to perform multi-digit arithmetic.

4. 74 + 35 + 16 + 45 =

Problem Solving Real

- **5.** A pet shelter has 26 dogs, 37 cats, and 14 gerbils. How many of these animals are in the pet shelter in all?
- 6. The pet shelter bought 85 pounds of dog food, 50 pounds of cat food, and 15 pounds of gerbil food. How many pounds of animal food did the pet shelter buy?

7. **WRITE** Math Give an example of an addition problem in which you would and would not group the addends differently to add.

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- 1. At summer camp there are 52 boys, 47 girls, and 18 adults. How many people are at summer camp?
- 2. At camp, 32 children are swimming, 25 are fishing, and 28 are canoeing. How many children are swimming, fishing, or canoeing?

Spiral Review (Reviews 2.MD.A.3, 3.NBT.A.1)

- **3.** Hank estimated the width of the door to his classroom in feet. What is a reasonable estimate?
- 4. Garth estimated the height of the door to his classroom in meters. What is a reasonable estimate?

- 5. Jeff's dog weighs 76 pounds. What is the dog's weight rounded to the nearest ten pounds?
- 6. Ms. Kirk drove 164 miles in the morning and 219 miles in the afternoon. Estimate the total number of miles she drove that day.



Nı Oj İn	umbers ar perations Base Ten	nd	F	RC	DUNI N	DING UMB	S W	'HOLI S	E	
			NBT.A.1 Use nearest 10 c	e pla or 10	ce-value un 0.	derstanding	to round	whole numbe	ers to	the
	1.	When ro (A) 800	ounding to	the B	nearest 840	ten, what ©	t numbe 835	er does 834 D	4 rou 830	ind to?
	2.	When ro 852 roui	ounding to nd to?	the	nearest	hundred,	what n	umber wou	uld	2 2 (7)
		A 900		₿	850	C	800	D	100	00
	3.	Write 2 i to the ne	numbers th earest 10.	nat v	would rou	und to 34	0 when	rounded	ſ	Make sure to determine which place value you
		A B. Expla round	ain, how di d to the ne	d yo ares	_ and ou know 1 st 10?	that these	e numb	ers would	ļ	
	4.	Which o	f the follow	/ing	rounds t	he numb	er accu	rately?		
		(A) 2367 (B) 4560	when rour	nde	d to the r	nearest 1	0 is 236	65 800		
		© 3687	when rour	nde	d to the r	learest 1	00 is 368	30		
		D 4382	when rour	nde	d to the r	nearest 1	00 is 43	300		
	5.	Place ar be locate	n X on the r ed.	num	nber line	below wł	nere the	e number 7	83 v	vould
)		
			750					800		

6. Place an ✗ on the number line below where the number 352 would be located.

Numbers and Operations in Base Ten



7. The post office needs to hire a new mail carrier to help deliver mail for the shift that delivers the most mail. They want the new mail carrier to work either the Thursday and Friday shift or the Monday and Tuesday shift. On Monday there were 346 pieces of mail delivered. On Tuesday there were 621 pieces of mail delivered. On Thursday there were 212 pieces of mail delivered. On Friday there were 627 pieces of mail delivered. Rounding to the nearest 100, which shift should the new mail carrier work? Explain your thinking.

8. While playing a board game, Sam rolled three dice that made 643 as the largest number. Erin rolled three dice and her number was 629. Erin thinks that Sam's and her number when rounded to the nearest 100 are the same. Do you agree or disagree with her thinking? Justify your reasoning.



Name _

Use the Break Apart Strategy to Add

Practice and Homework Lesson 1.6



COMMON CORE STANDARD—**3.NBT.A.2** Use place value understanding and properties of operations to perform multi-digit arithmetic.

Estimate. Then use the break apart strategy to find the sum.

1. Estimat	te: 8	00	2. Estimate: _		
325	=	300 + 20 + 5	518 =		
+ 494	=	400 + 90 + 4	+ 372 =		
		700 + 110 + 9			

3. Estimate: _____

4. Estimate: _____

=

=

495

+ 254

731 =+ 207 =

Problem Solving (Real

Use the table for 5-6.

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5. Laura is making a building using Set A and Set C. How many blocks can she use in her building?

Build-It Blocks				
Set	Number of Blocks			
А	165			
В	188			
C	245			

- 6. Clark is making a building using Set B and Set C. How many blocks can he use in his building?
- 7. **WRITE** Math Explain how to use the break apart strategy to find 247 + 358.

- 1. Arthur read two books last week. One book has 216 pages. The other book has 327 pages. Altogether, how many pages are in the two books?
- One skeleton in a museum has 189 bones. Another skeleton has 232 bones. How many bones are in the two skeletons?

Spiral Review (Reviews 2.MD.C.8, 3.OA.D.9, 3.NBT.A.2)

- 3. Culver has 1 quarter, 3 dimes, and 1 penny. How much money does he have?
- 4. Felicia has 34 quarters, 25 dimes, and 36 pennies. How many coins does Felicia have?

- 5. Jonas wrote 9 + 8 = 17. What number sentence shows the Commutative Property of Addition?
- 6. At Kennedy School there are 37 girls and 36 boys in the third grade. How many students are in the third grade at Kennedy School?





9. Mark has 215 baseball cards. Emily has 454 baseball cards. How many baseball cards do Mark and Emily have altogether? 10. Jason has 330 pennies. Richie has 268 pennies. Rachel has 381 pennies. Which two students have more than 700 pennies combined?

11. **WRITE** Math Explain one way to add 3-digit numbers.

- 1. There are 167 students in the third grade. The same number of students is in the fourth grade. How many third graders and fourth graders are there?
- 2. Jamal read a book with 128 pages. Then he read a book with 179 pages. How many pages did Jamal read?

Spiral Review (3.NBT.A.1, 3.NBT.A.2)

- Adam travels 248 miles on Monday. He travels 167 miles on Tuesday. Estimate the total number of miles Adam travels.
- **4.** Wes made \$14, \$62, \$40, and \$36 mowing lawns. How much did he make mowing lawns?

- 5. There are 24 students in Mrs. Cole's class and 19 students in Mr. Garmen's class. How many students are in the two classes?
- 6. There were 475 children at the baseball game on Sunday. What is 475 rounded to the nearest ten?

9. Ben has a collection of 812 stamps. He gives his brother 345 stamps. About how many stamps does Ben have left?

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10. Savannah's bakery sold 284 loaves of bread in September. In October the bakery sold 89 loaves. About how many more loaves of bread did Savannah's bakery sell in September than in October?

11. WRITE Math Explain how to estimate 586 - 321 two different ways.

- Jorge has 708 baseball cards and 394 basketball cards. About how many more baseball cards than basketball cards does Jorge have?
- 2. Danika is making necklaces. She has 512 silver beads and 278 blue beads. About how many more silver than blue beads does Danika have?

Spiral Review (3.NBT.A.1, 3.NBT.A.2)

- A store manager ordered 402 baseball caps and 122 ski caps. Estimate the total number of caps the manager ordered.
- 4. Autumn collected 129 seashells at the beach. What is 129 rounded to the nearest ten?

- 5. Find the sum.
 - 585 + 346

 Julie made \$22, \$55, \$38, and \$25 babysitting. How much did she make babysitting?

Mental Math Strategies for Subtraction

Use mental math to find the difference. Draw or describe the strategy you use.

1. 74 - 39 = 35 -5 - 4 - 10 - 10 - 10 35 40 44 54 64 74

3. 51 - 12 = _____

Common

COMMON CORE STANDARD—**3.NBT.A.2** Use place value understanding and properties of operations to perform multi-diait arithmetic.

4. 76 - 23 =

2. 93 - 28 =

Problem Solving (World

- 5. Ruby has 78 books. Thirty-one of the books are on shelves. The rest are still packed in boxes. How many of Ruby's books are still in boxes?
- 6. Kyle has 130 pins in his collection. He has 76 of the pins displayed on his wall. The rest are in a drawer. How many of Kyle's pins are in a drawer?

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7. **WRITE** Math Give one example of when you would use the friendly numbers strategy to subtract. Explain why.

- 1. One day, a baker made 54 fruit pies. At the end of the day, only 9 of the pies were NOT sold. How many pies were sold that day?
- 2. George's father bought a 50-pound bag of wild bird seed. At the end of two weeks, 36 pounds of seed were left in the bag. How many pounds of seed had been used?

Spiral Review (3.NBT.A.1, 3.NBT.A.2)

- For a party, Shaun blew up 36 red balloons, 28 white balloons, and 24 blue balloons. How many total balloons did he blow up?
- 4. Tiffany has read 115 pages of her book. She has 152 pages left to read. How many pages are in the book?

- 5. The flower shop had 568 flowers on Monday. By Tuesday, the shop had 159 flowers left. About how many flowers had been sold?
- There are 383 books in one section of the school library. Of the books, 165 are fiction books. Estimate the number of books in that section that are NOT fiction.

Name		Practic L	ce and Homework esson 1.10		
Use Place Value Estimate. Then find	to Subtract	COMMON CORE STANDARD — 3.NBT.A.2 Use place value understanding and properties of operations to perform multi-digit arithmetic.			
1. Estimate: 500	2. Estimate:	3. Estimate:	4. Estimate:		
585	738	651	815		
<u>– 119</u>	<u> </u>	<u> </u>	<u> </u>		
5. Estimate:	6. Estimate:	7. Estimate:	8. Estimate:		
627	862	726	543		
<u> </u>	<u> </u>	<u> </u>	- 358		

Problem Solving World

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- 9. Mrs. Cohen has 427 buttons. She uses 195 buttons to make puppets. How many buttons does Mrs. Cohen have left?
- **10.** There were 625 ears of corn and 247 tomatoes sold at a farm stand. How many more ears of corn were sold than tomatoes?

11. **WRITE** Math Explain how to subtract 247 from 538.

- On Saturday, 453 people go to a school play. On Sunday, 294 people go to the play. How many more people go to the play on Saturday?
- 2. Corey has 510 marbles. He fills one jar with 165 marbles. How many of Corey's marbles are NOT in the jar?

Spiral Review (3.NBT.A.1, 3.NBT.A.2)

- 3. Pattie brought 64 peppers to sell at the farmers' market. There were 12 peppers left at the end of the day. How many peppers did Pattie sell?
- 4. An airplane flies 617 miles in the morning. Then it flies 385 miles in the afternoon. About how many more miles does the airplane fly in the morning?

5. What is the unknown number?

 $(\blacksquare + 4) + 59 = 70$

6. Dexter has 128 shells. He needs 283 more shells for his art project. How many shells will Dexter use for his art project?

- Bev scored 540 points. This was 158 points more than Ike scored. How many points did Ike score?
- 10. A youth group earned \$285 washing cars. The group's expenses were \$79. How much profit did the group make washing cars?

11. WRITE Math Explain how to use the combine place values strategy to find 223 – 119.

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- 1. A television program lasts for 120 minutes. Of that time, 36 minutes are taken up by commercials. What is the length of the actual program without the commercials?
- 2. Syd spent 215 minutes at the library. Of that time, he spent 120 minutes on the computer. How much of his time at the library did Sid NOT spend on the computer?

Spiral Review (3.NBT.A.1, 3.NBT.A.2)

- 3. Xavier's older brother has 568 songs on his music player. To the nearest hundred, about how many songs are on the music player?
- 4. The students traveled to the zoo in 3 buses. One bus had 47 students. The second bus had 38 students. The third bus had 43 students. How many total students were on the three buses?

- 5. Callie has 83 postcards in her collection. Of the postcards, 24 are from Canada. The rest of the postcards are from the United States. How many of the postcards are from the United States?
- 6. There were 475 seats set up for the school play. At one performance, 189 of the seats were empty. How many seats were filled at that performance?

2. Mike's Music sold 287 CDs on the first day of a 2-day sale The store sold 96 more CDs on the second day than on the first day. How many CDs in all were sold during the 2-day sale?

3. **WRITE** Math Write an addition or subtraction problem and draw a diagram to solve it.

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Lesson Check (3.OA.D.8)

- 1. Ms. Hinely picked 46 tomatoes from her garden on Friday. On Saturday, she picked 17 tomatoes. How many tomatoes did she pick?
- 2. Rosa read 57 pages of a book in the morning. She read 13 fewer pages in the afternoon. How many pages did Rosa read in the afternoon?

Spiral Review (3.NBT.A.1, 3.NBT.A.2)

- 3. Mike has 57 action figures. Alex has 186 action figures. Estimate the number of action figures Mike and Alex have altogether.
- 4. There are 500 sheets of paper in the pack Hannah bought. She has used 137 sheets already. How many sheets of paper does Hannah have left?

- 5. There were 378 visitors to the science museum on Friday. There were 409 visitors on Saturday. How many more people visited the museum on Saturday?
- 6. Ravi scores 247 points in a video game. How many more points does he need to score a total of 650?

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