Practice Number Partners for 10

Look at the Example. Then solve problems 1-4.



1 Use the cubes. Write ways to make 10.





Look at the model.

Complete the two equations.



3 Color to show 5 + 5 = 10.



Find all the number partners for 10.
 Complete the number bonds.









Apply It

Solve problems 1-6.

Draw counters to show 10. Write two equations.



10 —	_ =
10 —	_ =

2 Complete the number bond. Write two equations.



3 Complete the number bond. Write four equations.



Complete the number bond. Write two equations.



Complete the number bond. 5 Write four equations.



6 Complete the number bond. Write four equations.



LESSON 10

Explore Using Strategies for Addition and Subtraction Facts

Listen to the clues.

Use counters to find missing numbers.

Try It

Learning Target

 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

Math Toolkit

SMP 1, 2, 3, 4, 5, 6, 7, 8

counters

Connect It

I have 8 marbles.

5 marbles are red, the rest are yellow.

How many are yellow?



Prepare for Using Strategies to Add and Subtract

1 Think about what you know about strategies that help you solve addition and subtraction problems. Fill in each box. Use words, numbers, and pictures. Show as many ideas as you can.



2 Explain your strategy for solving 6-2 =____.

3 Solve the problem. Show your work.

I have 7 buttons. 3 buttons are yellow, the rest are green. How many are green?



LESSON 10

Develop Using Strategies for Addition and Subtraction Facts

Hugo tries to figure out the total 4 + 5. He knows some other facts that can help him. What facts could help him? What is the total?



Hugo tries to figure out the total 4 + 5. He knows some other facts that can help him. What facts could help him? What is the total?

Model It

Use facts you know. Write the totals.

1+1	1+2	1+3	1+4	1 + 5	1+6	1+7	1+8	1 + 9
2+1	2 + 2	2 + 3	2 + 4	2 + 5	2 + 6	2 + 7	2 + 8	
3+1	3 + 2	3 + 3	3 + 4	3 + 5	3 + 6	3 + 7		
4+1	4 + 2	4 + 3	4 + 4 8	4 + 5	4 + 6 10			
5 + 1	5 + 2	5 + 3	5 + 4 9	5 + 5 10				

- 4 + 6 and 5 + 5 can help because they have addends that are close to 4 + 5.
- 5 + 4 can help because it has the same addends as 4 + 5.
- 4 + 4 can help because it is a doubles fact and one addend is 1 less than 5.
 - 4 + 5 =_____

Connect It

- 1 How is your way like Model It? How is your way different?
- 2 Which other fact do you think is the most helpful to use when solving 4 + 5?

Apply It

3 Look at the facts in row A.
What addend is in each fact? _____

Look at the facts in row B.

What addend is in each fact? _____

Write all the missing totals in the table.

A	^{4 + 1} 5	4 + 2 6	4 + 3	4+4	4 + 5	4 + 6 10		
В	5 + 1	5 + 2 7	5 + 3 8	5 + 4	5 + 5			
С	6 + 1 7	6 + 2 8	6 + 3 9	6 + 4 10				

9

Look at the facts in row C. What addend is in each fact?

Look at the facts in **column** H. What addend is in each fact? _____ Write all the missing totals in the table.

5 Complete the subtraction equations.



Practice Using Strategies to Add and Subtract

Look at the Example. Then solve problems 1–5.

Ex	Example									
An	An addition table can help you learn facts.									
Ito	It can also help you see patterns.									
Be	low is part	of an add	dition table	e.						
	1 + 1 2	1 + 2 3	1 + 3 4	1 + 4 5	1 + 5 6					
А	2 + 1 3	2 + 2 4	2 + 3	2 + 4	2 + 5					
В	3 + 1 4	3 + 2	3 + 3	3 + 4	3 + 5					
l '			-		-					

- Look at the facts in row A.
 What addend is in each fact? _____
 Write the missing totals in row A in the table.
- 2 Look at the facts in row B. What addend is in each fact? _____ Write the missing totals in row B in the table.

5	
57	

Write the totals in the table.

1 + 6 7	1 + 7	1+8	1 + 9
2 + 6	2 + 7	2 + 8	
3 + 6	3 + 7		



Complete the subtraction equations.





Then complete the subtraction equations.



8 - = 3





LESSON 10

Math Toolkit

Develop Using Strategies for Addition and Subtraction Facts

Lila notices patterns on the fact table.

What could be some patterns she notices?

Color to show patterns.



								•	cruyons
I	1 + 2	1 + 3	1 + 4	1 + 5	1+6	1 + 7	1 + 8	1 + 9	
	3	4	5	6	7	8	9	10	
İ	2 + 2	2 + 3	2 + 4	2 + 5	2 + 6	2 + 7	2 + 8		
	4	5	б	7	8	9	10		
ĺ	3 + 2	3 + 3	3 + 4	3 + 5	3 + 6	3 + 7		<u>.</u>	
	5	6	7	8	9	10			
ĺ	4 + 2	4 + 3	4 + 4	4 + 5	4 + 6				
	6	7	8	9	10				
İ	5 + 2	5 + 3	5 + 4	5 + 5					
	7	8	9	10					
İ	6 + 2	6 + 3	6 + 4						
	8	9	10						
ĺ	7 + 2	7 + 3							
	9	10							
Î	8 + 2								
	10								
Î									
									nighigg it

A pattern I noticed on the table was . . .

Lila notices patterns on the fact table.

What could be some patterns she notices?

Color to show patterns.

Model It

Look at the facts in the colored boxes.

1 + 1	1 + 2	1 + 3	1 + 4	1 + 5	1+6	1 + 7	1 + 8	1 + 9
2	3	4	5	6	7	8	9	10
2 + 1	2 + 2	2 + 3	2 + 4	2 + 5	2 + 6	2 + 7	2 + 8	
3	4	5	6	7	8	9	10	
3 + 1	3 + 2	3 + 3	3 + 4	3 + 5	3 + 6	3 + 7		
4	5	6	7	8	9	10		
4 + 1	4 + 2	4 + 3	4 + 4	4 + 5	4 + 6			
5	6	7	8	9	10			
5 + 1	5 + 2	5 + 3	5 + 4	5 + 5				
6	7	8	9	10				
6 + 1	6 + 2	6 + 3	6 + 4					
7	8	9	10					
7 + 1	7 + 2	7 + 3						
8	9	10				fact	c with 1	
8 + 1	8 + 2							-
9	10					fact	s with 2	2
9 + 1						📃 dou	bles fac	cts
10						🗌 part	ners fo	r 10

Connect It

- How are your patterns like Model It? How are they different?
- 2 Boom and Buzz look across a row. Boom says there is a pattern in the addends. Buzz says there is a pattern in the totals. Who is right? How do you know?

Apply It

3 Fill in the missing totals in this table. Complete the subtraction equations.

6 – 5 =	4 + 1	4 + 2	4 + 3	4+4	4 + 5	4+6
7 F	5	6	7	8	9	10
/ - 5 =	5 + 1	5 + 2	5 + 3	5 + 4	5 + 5	
8 – 5 =						

- 9 5 = _____
- 10 5 = _____

Practice Using Strategies to Add and Subtract

Look at the Example. Then solve problems 1–5.

Example The shaded boxes show ways to make 4.

1 + 1	1 + 2	1 + 3	1 + 4
2	3	4	
2 + 1	2 + 2	2 + 3	2 + 4
3	4		6
3 + 1	3 + 2	3 + 3	3 + 4
4		6	7
4 + 1	4 + 2	4 + 3	4 + 4
5	6	7	8

Write the missing totals in the table.

2 Look at the table. Circle the ways to make 5. Complete the addition equations.





Write the missing totals for the doubles facts in the table.

1 + 1	1 + 2	1+3
	3	4
2 + 1	2 + 2	2 + 3
3		5
3 + 1	3 + 2	3 + 3
4	5	

Circle the totals for the doubles facts. Use the pattern to complete these addition equations.

4 + 4 = <u>5 + 5 = </u>

5 Fill in the blanks.

Then complete the subtraction equations.







4 – ____ = 2

	-
	_ ≺
	_

Refine Using Strategies for Addition and Subtraction Facts

Complete the Example. Then solve problems 1–4.

E>	Example Fill in the blanks.				
	4 + <u>3</u> 7	<mark>4</mark> +4 8	4 + 5 <u>9</u>	4 + 6 10	
	+ 3 8	5 + 9	+ 10		

Apply It

Fill in the blanks.

5	
E	э.,
-	_

+ 1	7 +	+
8	9	10
8 + 9	+ 2 10	

2

2 + 6	+ 5 7	2 + 6	+ 7	2 + 10
+ 4 7	3 + 8	+ 9	3 +	



Fill in the blanks.

Then complete the subtraction equations.



Fill in the blanks.

6 + 1	6 + 2	6 + 3	6 + 4
7		9	
7 + 1	7 + 2	7 + 3	
	9		
8 + 1	8 + 2		
9			
9 + 1		-	

Practice Using Strategies to Add and Subtract

Look at the Example. Then solve problems 1–5.

Example

1+6	1 + 7	1+8	1 + 9
7	8	9	10

Fill in the blanks.

5 +	+	+ 3	5 +
6	7	8	9
+1	6+	+	+4
7	8	9	10

2 Fill in the blanks.

+ 3	3 +	3 +	+ 6
6	7	8	9
4+	+ 4	+ 5	4 + 6
7		9	



Fill in the blanks.

Then complete the subtraction equations.

//



_____- - 8 = 2

Fill in the blanks.

4+	4+	+4	+ 5
6		8	
+ 2	5 +	5 +	+ 5
	8		10







Fill in the blanks.

Facts with 7	Facts with 8	Facts with 9	Facts with 10
7 – 7 =	8 – 7 =	9 – 7 =	10 - 7 =
7 - 6 =	8 - 6 =	9 - 6 =	10 - 6 =
7 - 5 =	8 - 5 =	9 - 5 =	10 - 5 =
7 - 4 =	8 – 4 =	9 - 4 =	10 - 4 =
7 - 3 =	8 - 3 =	9 - 3 =	10 - 3 =
7 - 2 =	8 – 2 =	9 - 2 =	10 - 2 =
7 - 1 =	8 - 1 =	9 - 1 =	10 - 1 =

What patterns do you notice?

Buzz says he has found all of the ways to make 6.

$$0+6=6$$
 $1+5=6$
 $2+3=6$
 $3+3=6$
 $4+2=6$
 $5+1=6$
 $6+0=6$

 Do you agree? Circle:
 Yes
 No

Tell why.

Practice Finding the Unknown Number

Look at the Example. Then solve problems 1–5.

Example

15 basketballs. Some roll away. Now there are 8. How many roll away? 15 - ? = 8

$$8 + 7 = 15$$

7 basketballs roll away.

Find the missing number.

$$12 - ? = 6$$







Find the missing number.





3

Find the missing number.

5 = ____ - 7

5 6 7 8 9 10 11 12 13 14







11 - ____ = 3

5

6

7

8

9

4

LESSON 16 Refine Finding the Unknown Number

Apply It

Solve problems 1–7.

13 stars are in the box. Joy takes some stars. 9 stars are left. How many stars does Joy take?

13 - ____ = 9 stars

2 Find the missing number.

? + 9 = 16

3 Find the missing number. Complete the number bond.



10 11 12

13











3 + 9 = _____



5 Find the missing number.

15 - 6 = _____

6 Find the missing number.

20 - ____ = 10

7 Find the missing number.

_____+ 6 = 14

Practice Solving Word Problems to 20

Look at the Example. Then solve problems 1–4.



 8 bottles have milk. 4 bottles have juice. How many bottles in all?



8 + 4 = _____



2 17 coloring pages are on the table. Tanya colors some. There are 9 pages left. How many pages does Tanya color?



Isabella has 12 balls. Ryan has 5 balls. How many fewer balls does Ryan have than Isabella?



___ fewer balls

- Sofia has 8 more marbles than Olaf. Olaf has
 7 marbles. How many marbles does Sofia have?
 - 7 + 8 = _____





Practice Solving Word Problems to 20



5 children dance on stage.
 9 more children join them.
 How many children are dancing now?







9 large books and 7 small books are on the shelf. How many books are there in all?

____ books 9 + 7 = _____

12 eggs are in a carton. 4 are brown. The rest are white. How many eggs are white?

_____ — ____ = _____ eggs

Practice Solving Word Problems to 20

Look at the Example. Then solve problems 1–4.



 Ron has 13 pens. Brianna has 6 fewer pens than Ron. How many pens does Brianna have?

____ pens





3 11 star stickers are in the box.
 8 rainbow stickers are in the box.
 How many fewer rainbow stickers?

____ fewer rainbow stickers

Stanley has 7 more fish than Bob.
 Stanley has 12 fish.
 How many fish does Bob have?

____ fish

Refine Solving Word Problems to 20

Apply It

Solve problems 1–6.

Fido has 6 more spots than Pup.

Pup has 6 spots.

How many spots does Fido have?

_____ spots

2 Tara sings 5 fewer songs than Danny.

Danny sings 11 songs.

_____ — ____ = _____

How many songs does Tara sing?

_____ songs

3 6 berries are in the bowl.

Amal puts 8 more in the bowl.

How many berries are there now?

_____+ ____ = _____

_____ berries

 Kris has 8 toy planes. He makes more. Now he has 12 toy planes. How many more does Kris make?



____ more toy planes

5 Paul has 9 fewer coins than Hasina. Paul has 6 coins. How many coins does Hasina have?

____ coins

6 20 tennis balls are on the table.
 Some roll off. Now there are 10.
 How many roll off?

tennis	s bal	ls