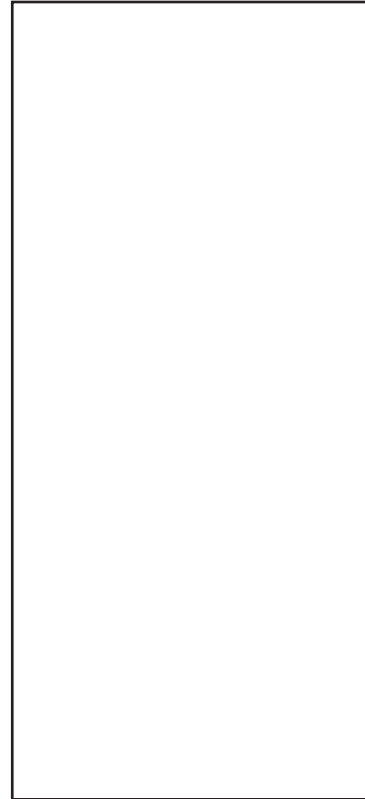
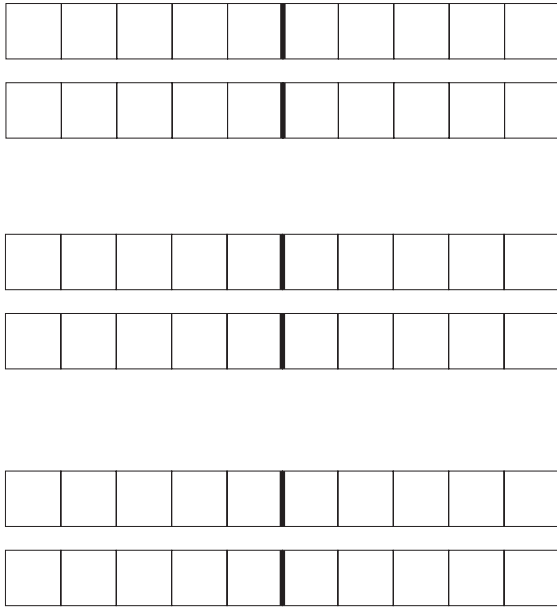


NAME \_\_\_\_\_



## Solving Leftovers

How do you solve the leftovers? Can you show your thinking on the ten-strips? Can you show your thinking with a number sentence or two? Can you make a story problem about a leftover fact?



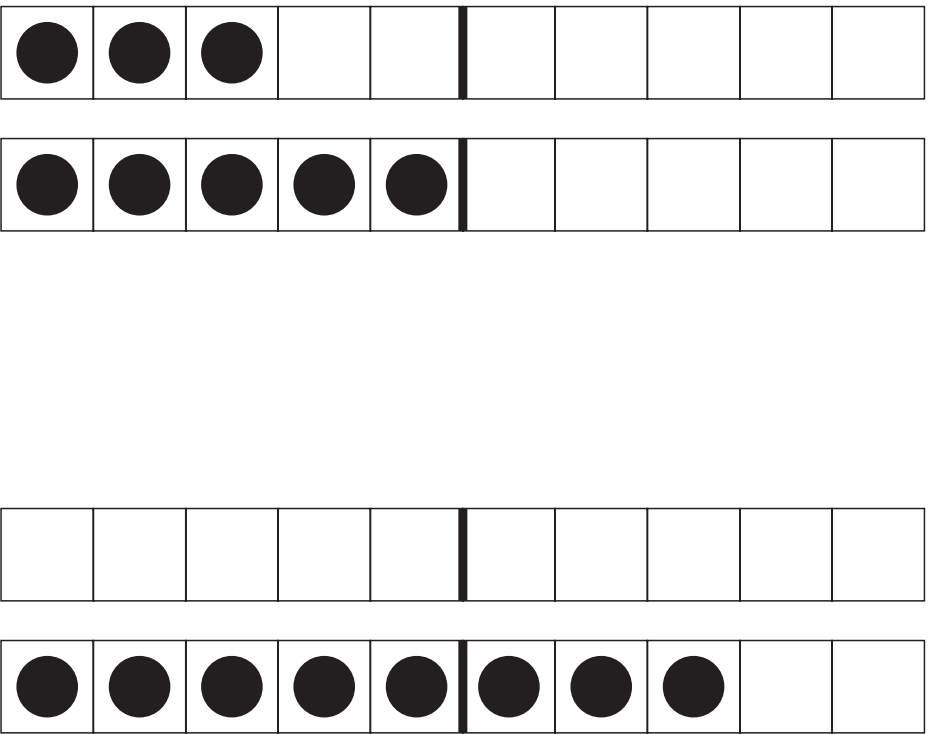
## What Are Ten-Strips?

Ten-strips are models we use to see numbers. They help us see groups, instead of counting one by one. Where do you see groups of 2 in the ten-strips? How about groups of 5 or 10?



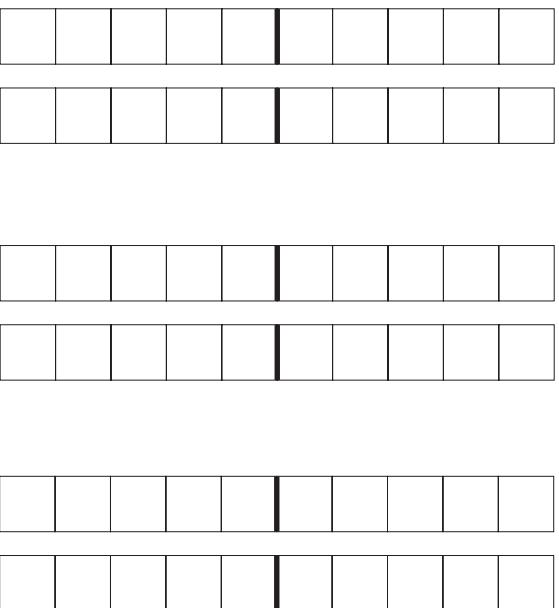
## Using the Ten-Strips

How many dots do you see on each pair of ten-strips? How are they the same? How are they different?



## Solving Leftovers

How do you solve the leftovers? Can you show your thinking on the ten-strips? Can you show your thinking with a number sentence or two? Can you make a story problem about a leftover fact?

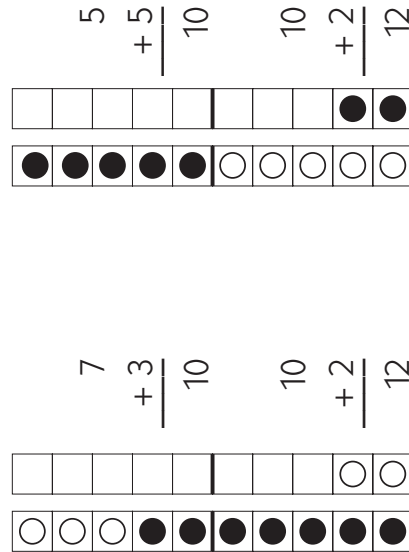


## Leftovers

We call these facts leftovers. These last ten facts can be solved in many ways. Knowing doubles, neighbors, and make ten facts can really help.

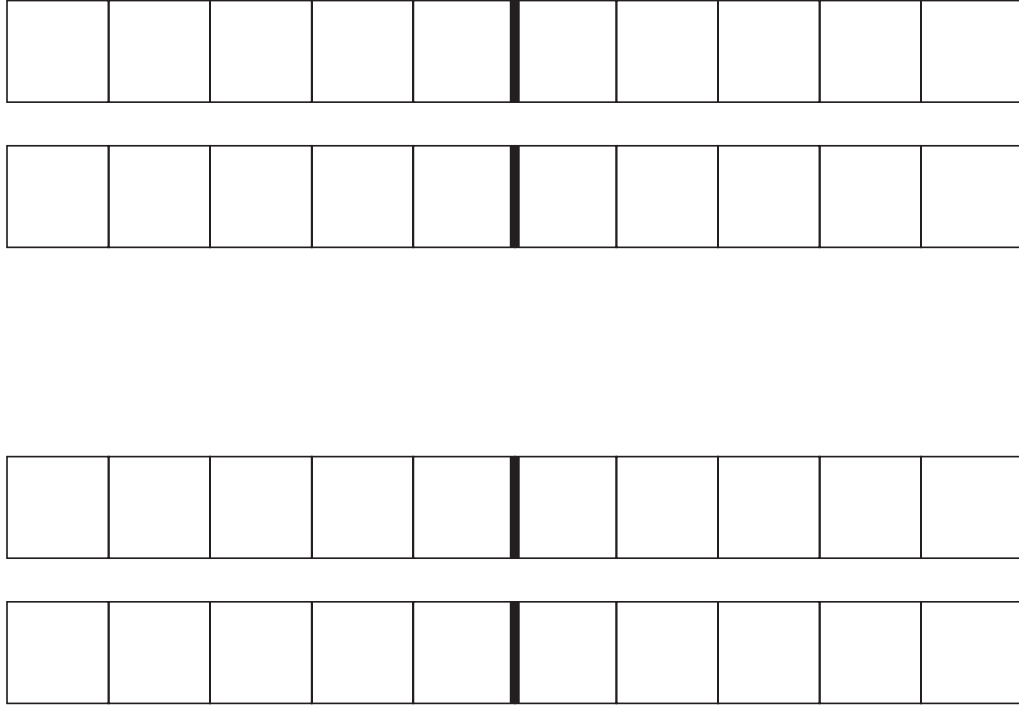
- |              |              |
|--------------|--------------|
| $7 + 4 = 11$ | $4 + 7 = 11$ |
| $7 + 5 = 12$ | $5 + 7 = 12$ |
| $8 + 4 = 12$ | $4 + 8 = 12$ |
| $8 + 5 = 13$ | $5 + 8 = 13$ |
| $8 + 6 = 14$ | $6 + 8 = 14$ |

For  $7 + 5$ , some people might think, “7 plus 3 is 10. Then 10 plus 2 is 12.” Someone else might think, “5 plus 5 is 10, and then 2 more is 12.” How do you think about some of these facts?



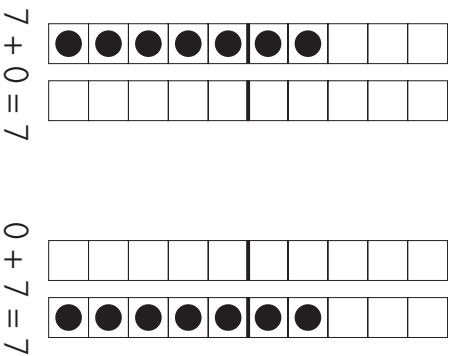
## Using the Ten-Strips

Choose a number to show on these ten-strips. Can you show the number in more than one way?



## Zero Facts

When you add 0 to any number, the sum (the answer) is always that number.



This works with larger numbers too!

$$26 + 0 = 26$$

$$0 + 387 = 387$$

## Zero Facts Story Problems

- 1 If you had 7 cookies and someone gave you 0 cookies, how many cookies would you have in all?
- 2 If you had 0 cookies and someone gave you 6 cookies, how many cookies would you have in all?

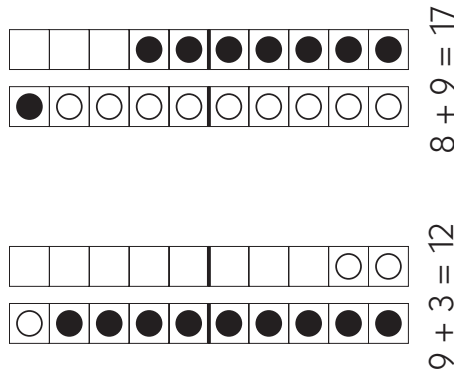
## Your Fast Nines

What are some other fast nine facts you know? Can you draw them and/or show them using number sentences? Can you make a story problem about a fast nine fact?



## Fast Nines

When you know how to make ten and do fast tens, adding 9 is a snap! If the fact is  $9 + 4$ , you can think about making ten ( $9 + 1 = 10$ ) and then adding 3 more.  $9 + 4$  is the same as  $10 + 3$ . Where do you see the make tens and fast tens on the ten-strips below?



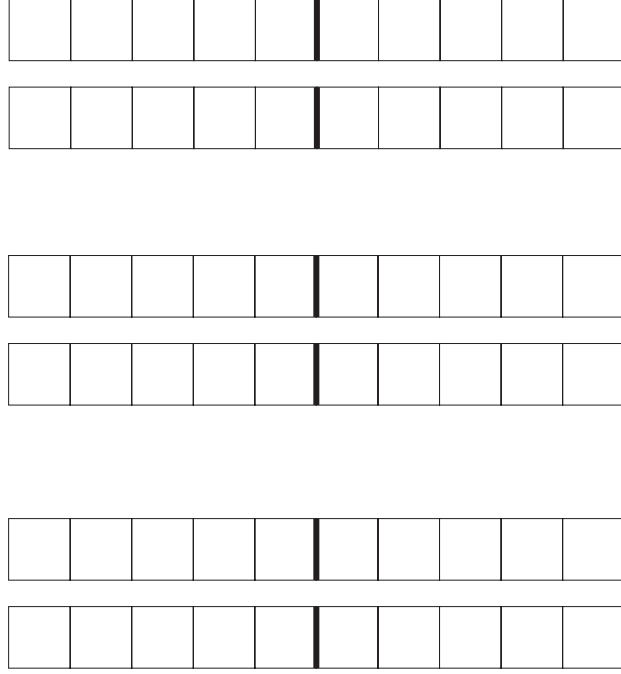
Do you ever use fast nines with larger numbers? If so, can you think of some examples and explain how?

## Fast Nine Story Problems

- 1 If you had 9 pencils in your case, and got 5 more, how many pencils would you have in all?
- 2 If you had 7 pencils in your case and got 9 more, how many pencils would you have in all?

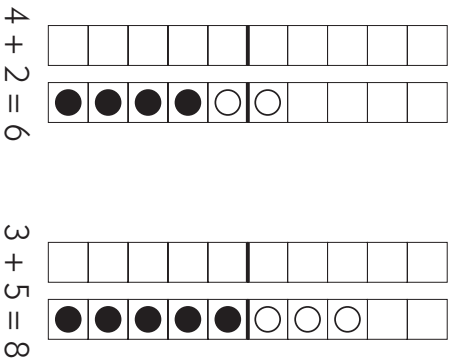
## Your Zero Facts

What are some other zero facts you know? Can you draw them and/or show them using number sentences? Can you make a story problem about a zero fact?



# Counting On

You can count on when you add just 1, 2, or 3 to another number. Start with the larger number and count up.



No matter how big the number, if you add 1, 2, or 3, it's fast to count up!

$$27 + 2 = 29$$

$$391 + 1 = 392$$

$$3 + 95 = 98$$

## Counting On Story Problems

- 1 If you had 4 cookies and someone gave you 2 cookies, how many would you have in all?
- 2 If you had 3 cookies and someone gave you 5 cookies, how many would you have in all?

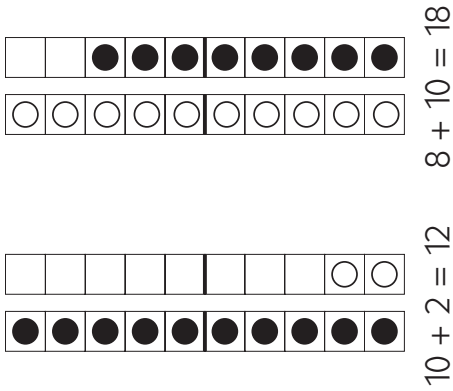
# Your Fast Tens

What are some other fast ten facts you know? Can you draw them and/or show them using number sentences? Can you make a story problem about a fast ten fact?



# Fast Tens

It's fast to add 10 to any single-digit number. You'll always get a teen number!



You can apply fast tens to larger numbers too.

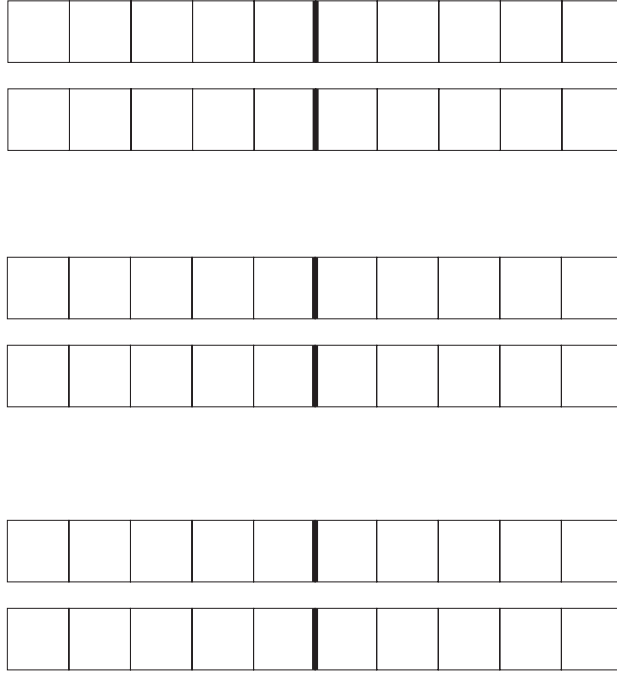
$$29 + 10 = 39 \qquad 247 + 10 = 257$$

## Fast Tens Story Problems

- 1** If I have 10 playing cards and you give me 4 more, how many will I have in all?
- 2** If you have 9 playing cards and I give you 10 more, how many will you have in all?

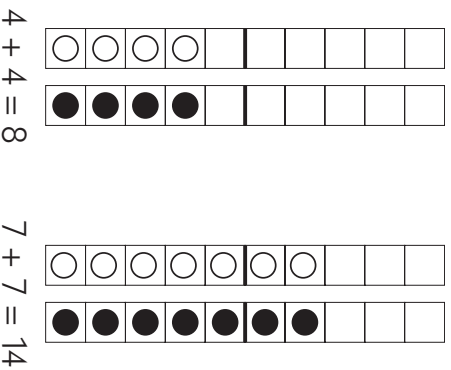
# Your Counting On Facts

What are some other counting on facts you know? Can you draw them and/or show them using number sentences? Can you make a story problem about a counting on fact?



# Doubles

When you add a number to itself, it's a double! Doubles are always even. Can you see why when you look at the ten-strips below?



Doubles can work with larger numbers like these. Maybe you can think of some more doubles with large numbers.

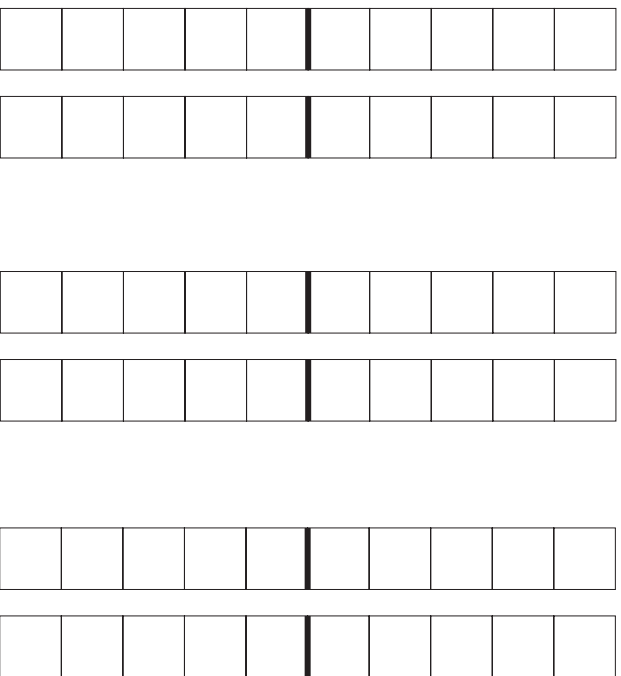
$$30 + 30 = 60 \qquad 400 + 400 = 800$$

## Doubles Story Problems

- 1 If you had 6 eggs and someone gave you 6 more, how many eggs would you have in all?
- 2 If you had 9 bouncy balls and someone gave you 9 more, how many would you have in all?

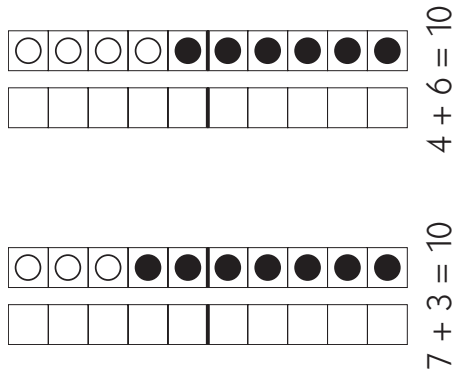
# Your Make Ten Facts

What are some other make ten facts you know? Can you draw them and/or show them using number sentences? Can you make a story problem about a make ten fact?



## Make Ten Facts

These pairs of numbers make ten:  $9 + 1$ ,  $8 + 2$ ,  $7 + 3$ ,  $6 + 4$ , and  $5 + 5$ . These are important facts because they help us think in groups of 10. What do you notice when you see make ten facts on the ten-strips?



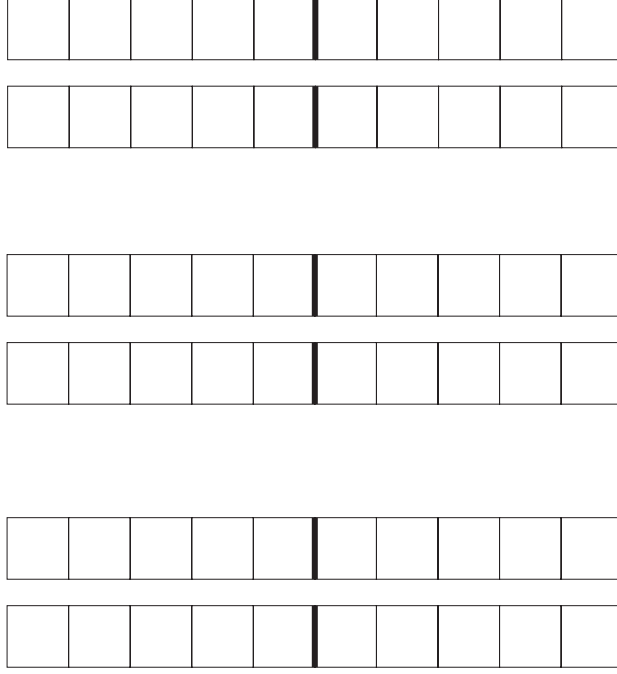
When we work with larger numbers, make tens can help. For example  $20 + 80 = 100$ . That's a make 100 fact! And  $300 + 700 = 1000$ . What would you call that fact?

## Make Ten Story Problems

- 1 If I had 8 cookies and you gave me 2 more, how many would I have in all?
- 2 If you had 3 cookies and I gave you 7 more, how many would you have in all?

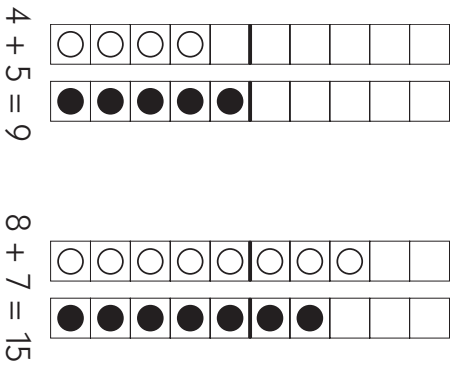
## Your Doubles

What are some other doubles you know? Can you draw them and/or show them using number sentences? Can you make a story problem about a doubles fact?



# Neighbors

When two numbers are right next to each other, we call them neighbors. When you know the doubles, neighbors are easy. Just double the smaller number and add 1 more. Or double the larger number and take 1 away.



Neighbors like these can be easy when you understand place value.

$$30 + 40 = 70 \qquad 500 + 400 = 900$$

## Neighbors Story Problems

- 1 If I had 4 cookies and you gave me 5 more, how many would I have in all?
- 2 If you had 7 flowers and I gave you 8 more, how many flowers would you have in all?

# Your Neighbors

What are some other neighbors facts you know? Can you draw them and/or show them using number sentences? Can you make a story problem about a neighbors fact?

