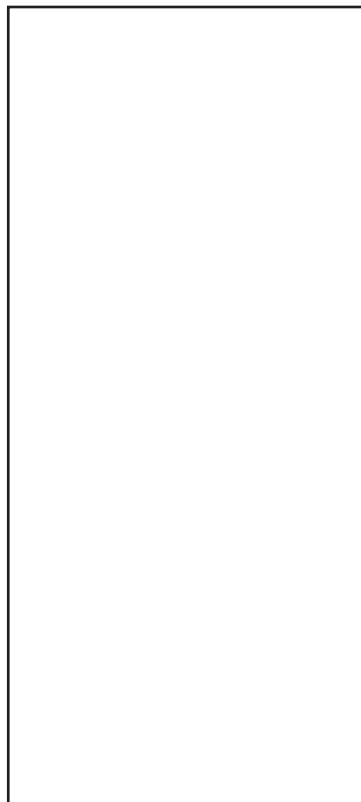
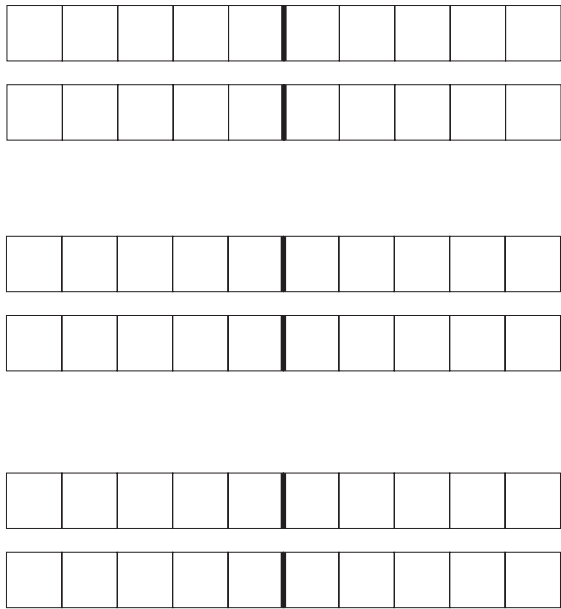


NAME _____

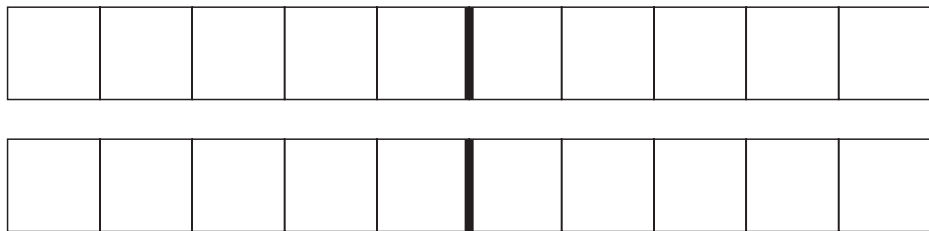
Solving Leftovers

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?



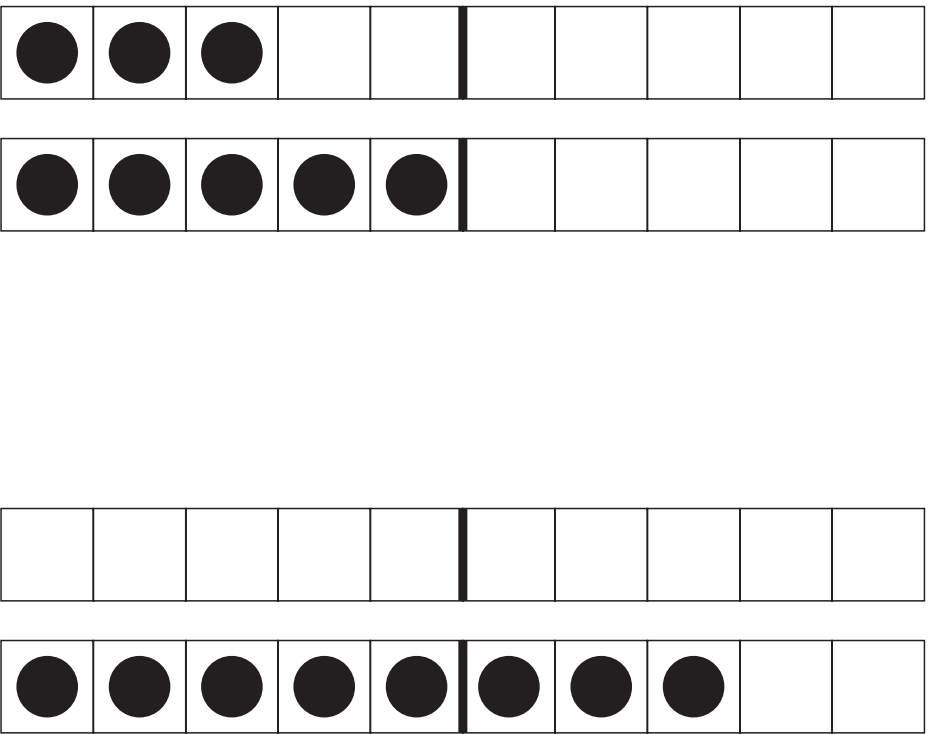
What Are Ten-Strips?

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?



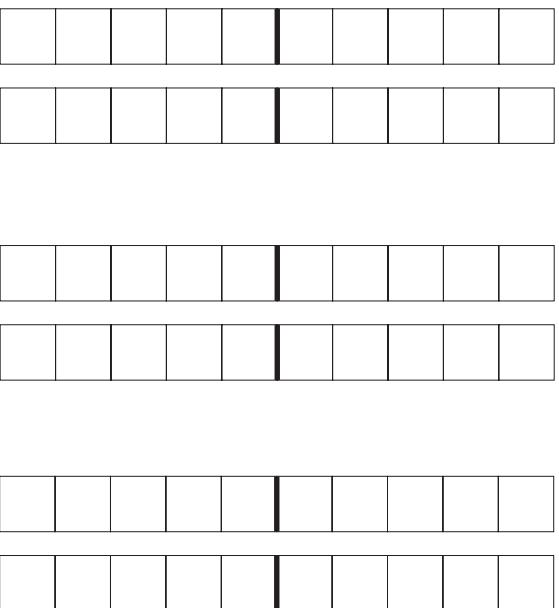
Using the Ten-Strips

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?

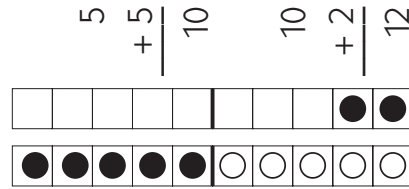
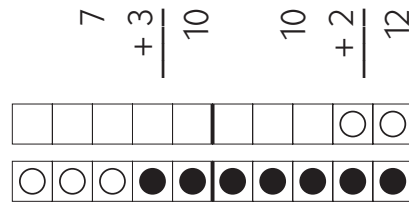


Leftovers

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.

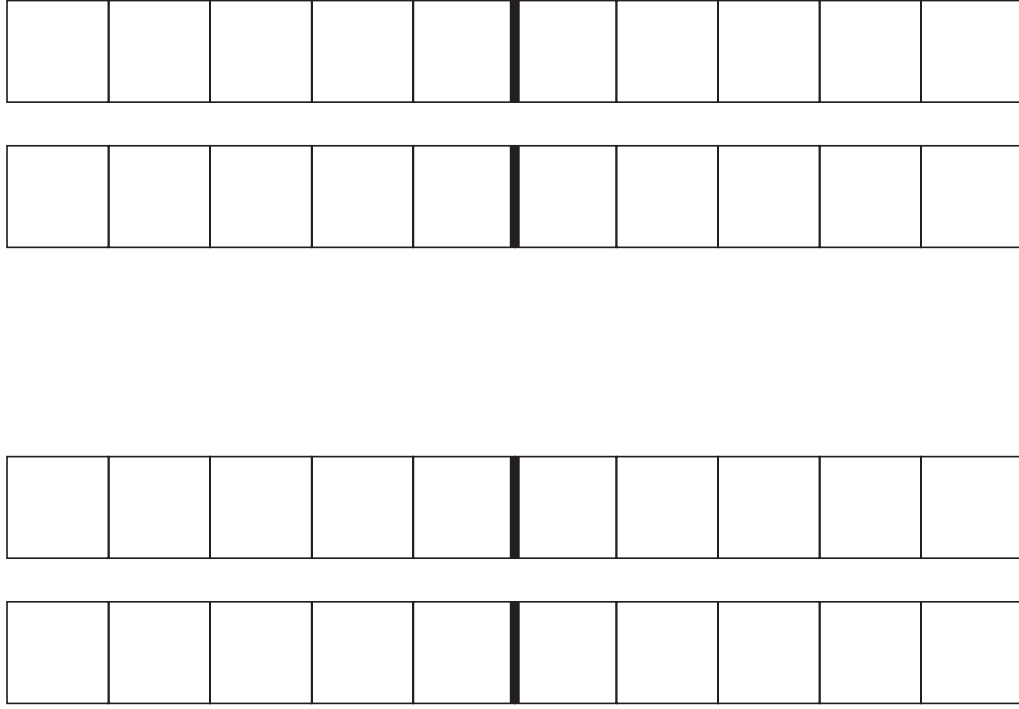
- | | |
|--------------|--------------|
| $7 + 4 = 11$ | $4 + 7 = 11$ |
| $7 + 5 = 12$ | $5 + 7 = 12$ |
| $8 + 4 = 12$ | $4 + 8 = 12$ |
| $8 + 5 = 13$ | $5 + 8 = 13$ |
| $8 + 6 = 14$ | $6 + 8 = 14$ |

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?



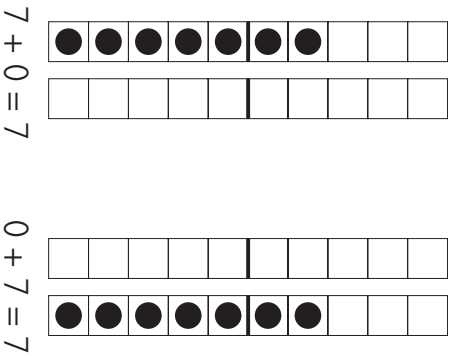
Using the Ten-Strips

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!

$$26 + 0 = 26$$

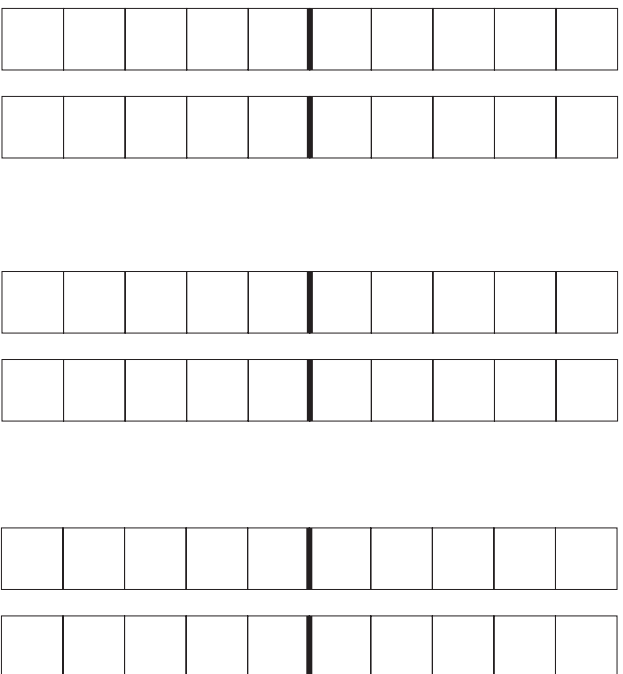
$$0 + 387 = 387$$

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?

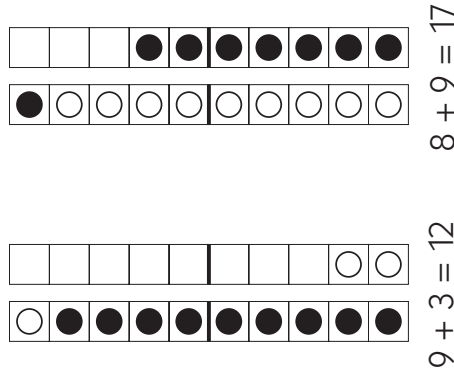
Your Fast Nines

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?



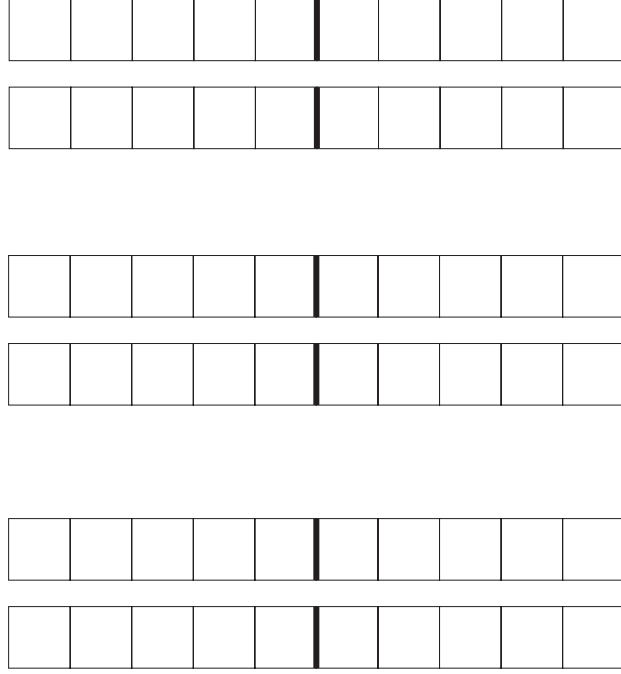
Do you ever use fast nines with larger numbers? If so, can you think of some examples and explain how?

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?

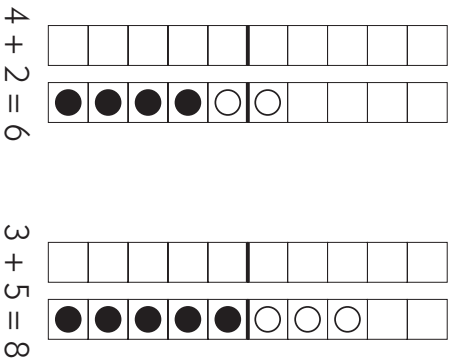
Your Zero Facts

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!

$$27 + 2 = 29 \qquad 3 + 95 = 98$$

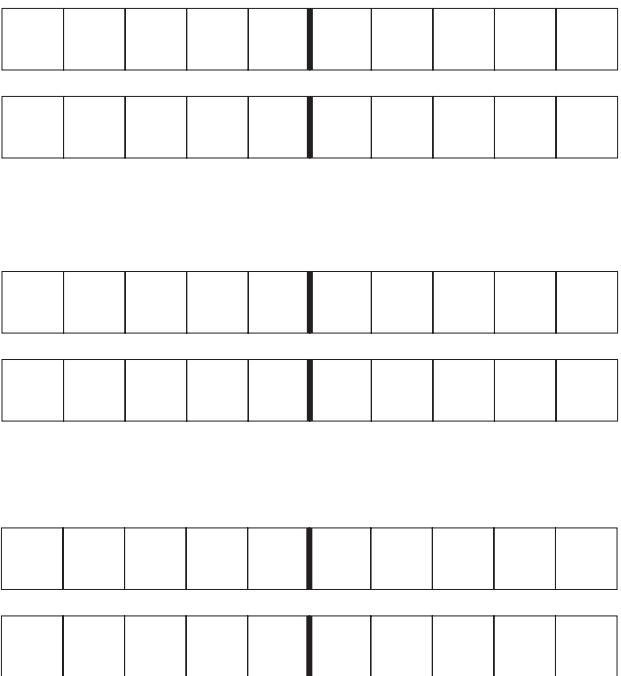
$$391 + 1 = 392$$

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?

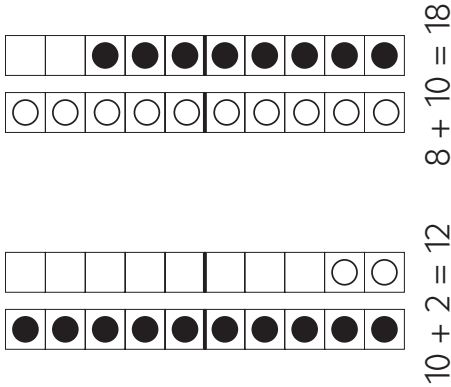
Your Fast Tens

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.

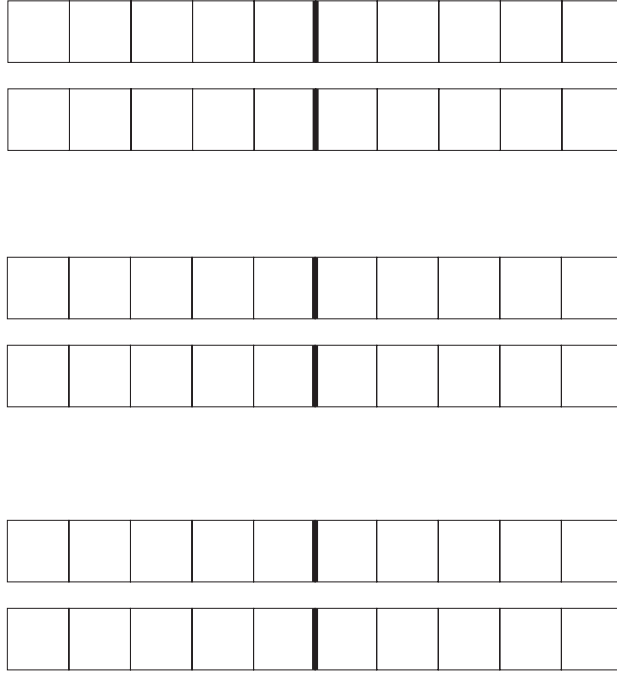
$$29 + 10 = 39 \qquad 247 + 10 = 257$$

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?

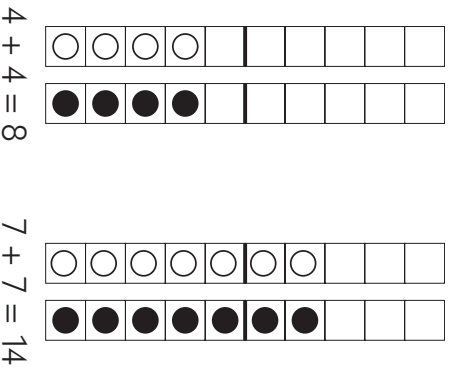
Your Counting On Facts

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?

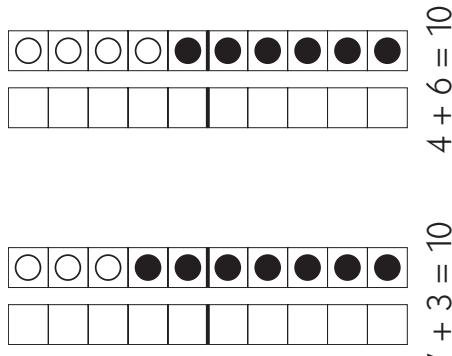
Your Make Ten Facts

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?



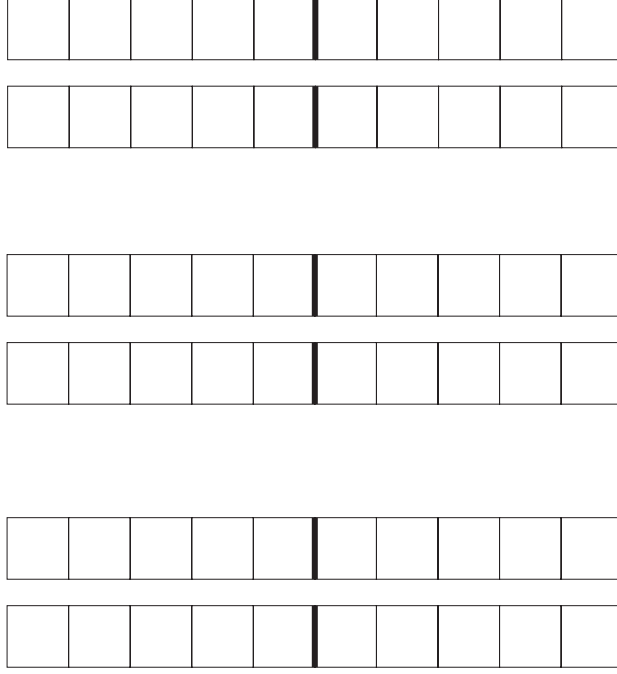
When we work with larger numbers, make tens can help. For example $20 + 80 = 100$. That's a make 100 fact! And $300 + 700 = 1000$. What would you call that fact?

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?

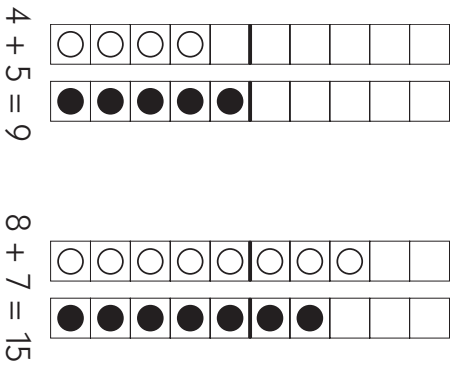
Your Doubles

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?

