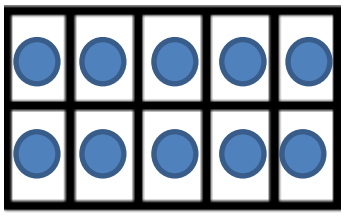
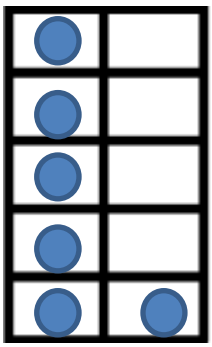
## 2nd Grade Module 1: Sums and Differences to 20

**Ten-frame**: a rectangle divided into 10 squares (5 in each row). Squares are filled in to show how many parts out of 10 the number has. They can go either horizontal or vertical.

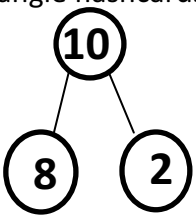
10= 

6= 

**Number Bond**: a way to show the related facts (fact family) that make up a larger number. Three circles linked together to show how one number is made up from the other 2 numbers. Think of the old-fashioned triangle flashcards we used to use.

8+2=10

2+8=10

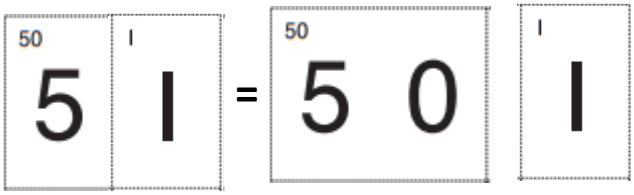



10-2=8

10-8=2

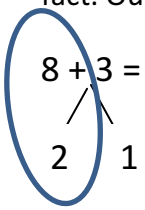
**Say Ten counting**: a method of counting that separates numbers into place value. In Say Ten counting we start off using place value cards to help the kids see the idea.

| Regular | Say Ten |
|---|---|
| fifty-one | 5 tens 1 |
| sixty-seven | 6 tens 7 |
| seventy-five | 7 tens 5 |
| eighty-four | 8 tens 4 |
| ninety-five | 9 tens 5 |



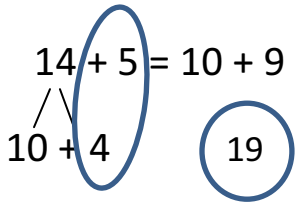

**Ten Plus**: is a way of counting using tens and ones place value. It practices oral fluency. Usually the teacher says one part of the equation and the class has to answer back the other side. If I said 13, the class should answer 10+3. If I said 30+5, they respond 35.

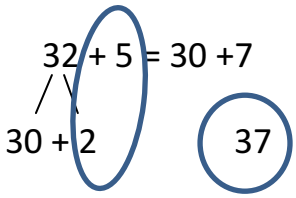
**Make Ten and Subtract from Ten**: this is taking apart the numbers to show the related 10s fact. Our next modules deal with place value and sets of 10.



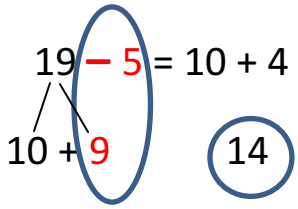

Instead of adding the 8 and the 3 to get a sum, the 3 is split into a 2 and a 1. The 2 moves over and is added to the 8 to create the 10. Then the 1 is added in to finish the problem and get a sum of 11. *The number must be split to create a 10 – the students cannot just split it any way they choose*.

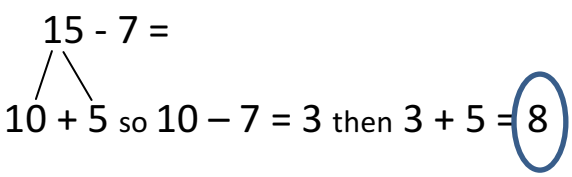
If we have larger number, anything over 10 (but not a 10s fact: 20, 30, 40 etc.), we split that number into a 10 and the ones place. The ones place is added onto the second addend.




For subtraction, we make the ten and then add or subtract as needed. (We take the 9 and subtract the 5: 9-5=4 to get the 4 in the equivalent tens problem)




(You have to take from the ten and not the ones. There are not enough ones (5) to take the 7 from, so you need to go to the tens first, subtract from the 10 and then take that number and add it to the remaining ones to get the answer.)

**Ten- Strip:** a tens strip is another way we show groups of ten. It is 10 dots in a straight row, with a line connecting the dots. The dots are in groups of 5. This is reinforcing place value. These are really handy when it comes to drawing the math picture for problems that have larger numbers.


= 10


= 5


= 30

**Equal =** : The equal sign (=) does not mean the answer. Equal means "the same as". We are looking for math problems that are the same value.

14 – 6 = 4 + 4 both math sentences are equal they both represent 8.

# RDWW

This year we are focusing on a 4 step process for solving word problems. This procedure will be expected on all classwork, homework, and tests. When children answer problems in multiples ways, it supports visual and kinesthetic learning. Thank you for your support!

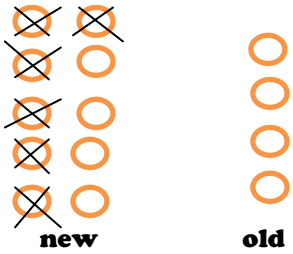
## Read

Read the problem. Look for key words, numbers and understand what is being asked.

Example: Susan has a pack of **10** new pencils and **4** pencils from an old pack. She **gave 6** pencils from her new pack to her brother. **How many pencils does she have left?**

## Draw

Draw a picture to show the information in the problem.




## Write

Write a number sentence to show the answer.

Possible Answers:

10-6=4 or 10+4=14

4+4=8 14-6=8

## Write

Write a word sentence to answer the question.

Susan has 8 pencils left.