



# DUVAL Math Parent Tips

## Sums and Differences to 20

August 2015

In Module 1, students fluently add one digit to two-digit numbers at least through 100 using place value understanding, properties of operations, and the relationship between addition and subtraction.

Second Grade,  
Module 1

### Words to Know

**Make 10**—Make Ten is a key strategy for any addition facts with an 8 or a 9. We want students to think “How many more are needed to make 10?” and then “How many are left over?”

For example:  $8 + 7$

How many more are needed to make 10? 2!

If the 2 is taken from the 7, how many are left over? 5!

So,  $8 + 7$  is  $10 + 5$ , or 15.

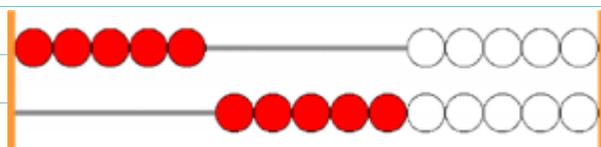
#### Special points of interest:

- ✓ Sums and Differences to 10.
- ✓ Words to Know
- ✓ Number Bond
- ✓ Ten Frame
- ✓ Hide Zero Card
- ✓ Examples
- ✓ Help at home
- ✓ Standards for Mathematical Practice
- ✓ Florida Standards

**Say Ten Counting**— Your child will count with an emphasis on place value. They will say, “Ten, one” and then “eleven” to understand the value of each digit.

Watch this here: <https://youtu.be/Yefl9bwEbWY>

**Rekenrek**—The Rekenrek is comprised of two strings of ten bead each, strategically broken into two groups: five red beads, and five white beads. Readily apparent in this model is an implicit invitation for children to think in groups of five and ten. As illustrated below, the strings of red and white beads (in groups of 5) provide a visual model that encourages young learners to subitize, i.e., to build numbers based on groups of fives and ten.



### Questions?

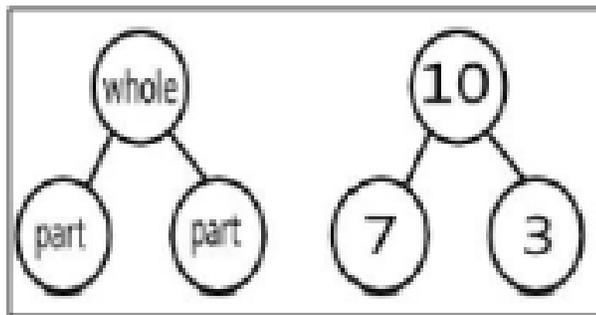
Mrs. Beth Gonzalez

Director, Mathematics K-5

gonzalezb1@duvalschools.org

904-390-2990

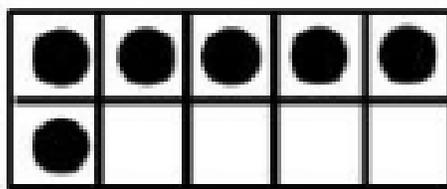
## Number Bond



**Number Bond** - A number bond is a mental picture of the relationship between a number and the parts that combine to make it

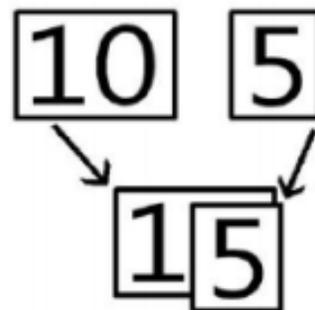
## Ten Frame

Students will begin by using ten-frame cards. This is a ten-frame card. The card has 10 places to hold dots. This card only has 6 dots and we need 4 more to make 10.  $6+4 = 10$



## Hide Zero Card

Hide zero cards are single digit and double digit number cards used to create a new number. Place the single digit card on top of the zero (hide the zero) to create a new double digit number.



## Examples!

Jessie has a bag of marbles. There were 4 yellow marbles, 7 white marbles, and 3 blue marbles. How many marbles in all? Show your thinking using words, math drawings, or a number sentence.

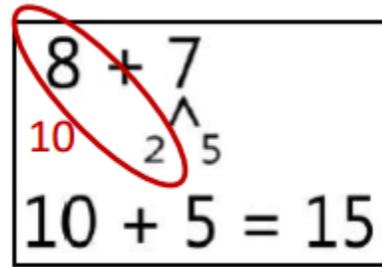
$$4 + 7 + 3 = 14$$

$$\begin{array}{c} \swarrow \quad \searrow \\ 10 \end{array}$$

$$4 + 10 = 14$$

Looking at the additional sentence, we can make a 10 using 7 and 3. Then add 4 more.

Students will make ten and then add. Carson has 7 crayons at home and 8 at school., How many crayons does Carson have?



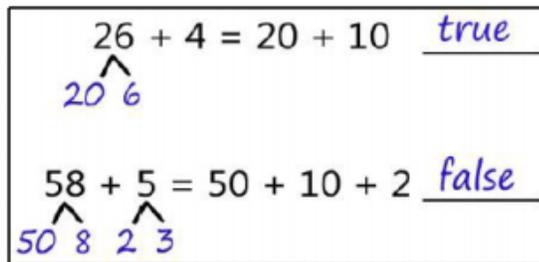
Carson has 15 crayons in all.

- $3 + 7 = 10$
- $13 + 7 = 20$
- $23 + 7 = 30$
- $83 + 7 = 90$

The number pattern above shows the basic fact 3+7. Each addition sentence has this basic fact within it. Talk to your child about this.

**The goal of DUVAL Math is to produce students who are not merely literate, but fluent, in mathematics. Your child has an exciting year of discovering the story of mathematics ahead!**

Label each sentence as true or false.



58 can be decomposed to 50 and 8. What number can we add to 8 to make 10? (2) Decompose 5 as 2 and 3. To make this sentence true it should be:  $50+8+2+3=50+10+3$

## How can you help at home?

Roll single digit numbers and add them together. • Roll 2-digit or 3-digit numbers and add them together. • Add all the digits of your house number together. • Make a train with Legos or colored blocks. Write a number sentence for the different colors in the train. •

Represent two digit numbers with popsicle sticks - make bundles of ten for the tens and use single sticks for the ones. Add the piles together. • Use small items (counters, beans, small toys) to represent number sentences. Use index cards to make +, -, , and = symbols.

Show a number sentence with a missing element:  $7 + \underline{\quad} = 12$ . Have your student find the missing addend.



# Standards for Mathematical Practice

During the first 10 days of schools, teachers will emphasize the importance of the 8 Standards for mathematical practice through 30 minute lessons.

These practices will be embedded in lessons daily throughout the school year.

Strength with the mathematical practices make strong mathematicians!

## Common Core Eight Standards for Mathematical Practice

M.P. 1	KEEP TRYING	Make sense of problems and persevere in solving them.
M.P. 2	THINK ABOUT MATH	Reason abstractly and quantitatively.
M.P. 3	TALK ABOUT MATH	Construct viable arguments and critique the reasoning of others.
M.P. 4	MODEL MATH	Model with mathematics.
M.P. 5	USE MATH TOOLS	Use appropriate tools strategically.
M.P. 6	CHECK YOUR WORK	Attend to precision.
M.P. 7	LOOK FOR PATTERNS	Look for and make use of structure.
M.P. 8	LOOK FOR SHORTCUTS	Look for and express regularity in repeated reasoning.

## Mathematics Florida Standards

**2.OA.1.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See CCLS Glossary, Table 1.)

Add and subtract within 20.

**2.OA.2.2** Fluently add and subtract within 20 using mental strategies. (See standard 1.OA.6 for a list of mental strategies.) By end of Grade 2, know from memory all sums of two one-digit numbers.

**2.NBT.2.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.