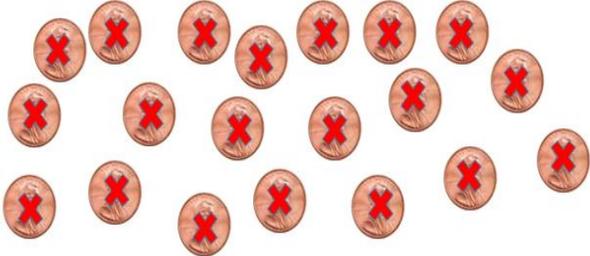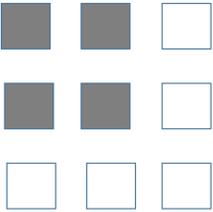# Kindergarten Important Math Information
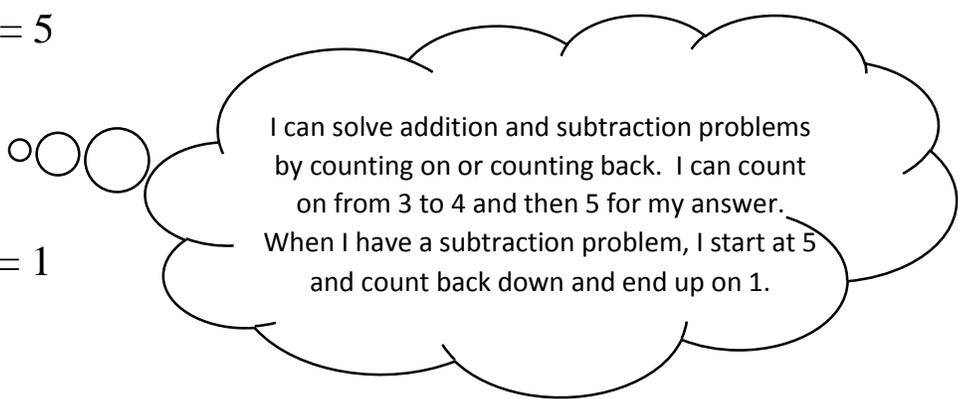## *Numbers to 20, Addition and Subtraction*

Dear Family,

Our class is starting a unit of study in mathematics called *Numbers to 20, Addition and Subtraction.* This unit of study focuses on counting, reading and writing numerals, and continuing to work with addition and subtraction problems. The specific learning goals your student will be working toward are listed below with examples of student work showing understanding of each learning goal.

Learning Goal: Read and write numerals to 20 and represent up to 20 objects with a written numeral.

Example Problems	Example Student Solutions
Talia has been collecting pennies in her bank. Count how many pennies Talia has.	When I am counting, I mark each object so I make sure that it does not get counted twice. Talia has 20 pennies in her bank.

Learning Goal: Count to 60 by ones.

Example Problem	Example Student Solution
Start from 35 and count up to 60.	"35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60"

Learning Goal: Show and solve addition and subtraction problems.

Example Problem	Example Student Solutions
Jesus has 9 toy airplanes. 4 are black and the rest are red. How many toy airplanes are red?	I used boxes to show the airplanes. Then I colored 4 boxes black so I could see how many I had left over because those would be the red airplanes. $9 - 4 = 5$ Jesus has 5 red toy airplanes.

Learning Goal: Fluently add and subtract within 5.	
Example Problem	Example Student Solutions
Solve the following problems: 3 + 2 = 5 – 4 =	$3 + 2 = 5$ I can solve addition and subtraction problems by counting on or counting back. I can count on from 3 to 4 and then 5 for my answer. When I have a subtraction problem, I start at 5 and count back down and end up on 1. $5 - 4 = 1$

Mathematical Thinking and Practices Learning Goal: I can show my thinking using pictures, numbers, and words.

Things you can do at home to support your student throughout this unit of study:

Counting

We continue to focus on strategies for counting accurately and are practicing counting sets of up to 20 objects. This is more challenging because there are more objects to keep track of, but also because the number sequence in the teens doesn't follow the same pattern as the rest of the numbers. For example, think about 21, 22, 23 (or 31, 32, 33 or 41, 42, 43), and then consider the fact that we don't say ten-one, ten-two, ten-three for 11, 12, 13. You can support your child by finding lots of ways to count together at home.

Solving Story Problems

In this unit, students have lots of opportunities to solve problems about combining (addition) and separating (subtraction) small amounts. Find ways to present problems about common situations: "There are six people in our family. But Grandma and Grandpa are joining us for dinner tonight. How many people will there be?" Or, "Usually, we have six people at our dinner table, but José is eating at a friend's house. How many people will there be?" Or, "If James wants three tacos, and Maria wants four, how many tacos do I need to make?" Encourage children to explain how they solve such problems. Most kindergarteners count from one. Some may count on (or back) or "just know" some combinations.

Math and Literature

You can find these books in your local library and read them together. These books focus on measuring, counting forward, and counting back:

- *Chicka Chicka 1, 2, 3* by Bill Martin.
- *Animals on* Board by Stuart J. Murphy
- *From One to One Hundred* by Teri Sloat
- *Mouse* Count by Ellen Stoll Walsh