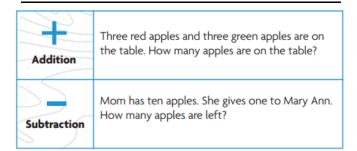
# Examples of the skills and strategies students will develop as they solve word problems in Kindergarten

Kindergarten Mathematics	Grade One Mathematics	Grade Two Mathematics	
Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (such as claps), acting out situations, verbal explanations, expressions, and equations  Solve word problems by adding or subtracting numbers up through 10 using objects and drawings	Solve word problems by adding or subtracting numbers up through 20  Solve addition and subtraction problems for different unknown numbers (20-?=15, 9+4=?)	•Solve one- and two- step word problems by adding or subtracting numbers up through 100	

### **Examples of Kindergarten word problems**



In kindergarten your child will use a variety of illustrations and models to understand and solve addition and subtraction problems



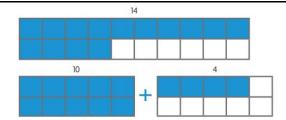
Examples of how students will work with numbers and learn to think of ten as a unitimportant building blocks for understanding place value

Kindergarten Mathematics	Grade One Mathematics	Grade Two Mathematics
Count to 100 by ones and tens  Understand that	•Understand that 10 can be thought of as a bundle of ten ones—called a "ten"	Understand that 100 can be thought of as a bundle of ten tens—called a "hundred"
numbers from 11 to 19 contain a ten and some leftover ones (for example, 14 =10+4)	Understand that the two digits of a two-digit number represent amounts of tens and ones (place value)      Add and subtract numbers through 100 using what students have learned about place value	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (place value)  Add and subtract numbers through 1000 using what students have

Your child will learn to find the "partners" that make ten for any number. This drawing shows that if you have 8, it takes 2 more to make 10



From there, students learn to think of ten as a unit and to break all the teen numbers down to a ten and some leftover ones



# **Orange**Unified School District

# A Parent's Guide to Mathematics Curriculum

"Tell me and I'll forget.

Show me and I'll remember.

Involve me and I'll understand."

-Confucius



#### Students Need Skills To Be Successful In the 21<sup>st</sup> Century!

In order for students to be 21st Century scholars Orange Unified School District is committed to ensuring that all students graduate high school with the skills they need to be successful in a global society. In mathematics, there are three shifts that will help prepare students for success in the 21st Century. First, instruction will concentrate on a more focused set of major math concepts and skills. This will allow students time to master these skills at a level of depth that leads to application and innovation. Second, concepts and skills are presented in a more organized way throughout the year and from one grade level to the next. This ensures a coherent learning sequence that supports students' mathematical development. Third, rich and challenging math content will be used to engage students in solving real-world problems in order to make math more relevant and meaningful.



The complete Math California Common Core State Standards for each grade level are available on the Orange Unified School District's website:

www.orangeusd.org

## What Your Child Will Learn In Kindergarten

In kindergarten, your child will focus primarily on two important areas. The first is learning numbers and what numbers represent. The second is addition and subtraction. Students will also learn to identify and work with shapes. Activities in these areas include:





- Counting how many objects are in a group and comparing the quantities of two groups of objects
- Comparing two numbers to identify which is greater or less than the other
- Understanding addition as putting together and subtraction as taking away from
- Adding and subtracting very small numbers quickly and accurately (fluently add or subtract numbers between 0 and 5)
- Breaking up numbers less than or equal to 10 in more than one way (for example, 9=6+3, 9=5+4)
- For any number from 1 to 9, finding the missing quantity that is needed to reach 10
- Representing addition and subtraction word problems using objects or by drawing pictures
- Solving addition and subtraction word problems involving numbers that add up to 10 or less or by

# Collaborating With Your Child's Teacher

You are an important part of your child's education! Reaching out to your child's teacher is highly encouraged and welcomed. Ask to see a sample of your child's work or bring a sample with you. Ask the teacher questions like:

- ✓ Is my child at the level where he/she should be at this point of the school year?
- ✓ What are my child's strengths in math?
- ✓ What do you think is giving my child the most trouble? How can I help my child grow in this area? What resources are available for support?
- ✓ What can I do to help my child with upcoming work?

# Helping Your Child Learn Outside Of School

- ✓ Count and group a collection of everyday objects.
- ✓ Construct numbers in multiple ways. For example, what are some ways that you can make 10? (5+5, 6+4, 8+2, etc.) Have your child explain his or her thinking.
- ✓ Create story problems to represent addition and subtraction of small numbers. For example, "Ann had 8 balloons. Then she gave 3 away, so she only had 5 left."
- Encourage your child to try to make sense of problems and persevering when a problem seems difficult.
- Make generalizations based on structures or patterns of previous learning.