

Examples of the skills and strategies students will develop as they solve word problems in First Grade

Kindergarten Mathematics	Grade One Mathematics	Grade Two Mathematics
<ul style="list-style-type: none"> •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 	<ul style="list-style-type: none"> •Solve word problems by adding or subtracting numbers up through 20 •Solve addition and subtraction problems for different unknown numbers (20-?=15, 9+4=?) 	<ul style="list-style-type: none"> •Solve one- and two-step word problems by adding or subtracting numbers up through 100

Examples of First Grade word problems

+ Addition	6 bunnies sat on the grass. Some more bunnies hopped over. Then there were 14 bunnies. How many bunnies hopped over?
- Subtraction	14 bunnies were sitting on the grass. Some bunnies hopped away. Then there were 5 bunnies. How many bunnies hopped away?
Comparison	Lucy has 12 apples. Julie has 9 apples. How many more apples does Lucy have than Julie?

Your child will use illustrations and diagrams to show addition and subtraction and to compare amounts

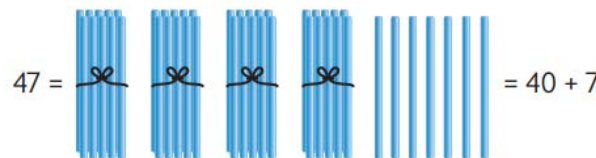


*Lucy has three more apples than Julie.
Julie has three fewer apples than Lucy.*

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

Kindergarten Mathematics	Grade One Mathematics	Grade Two Mathematics
<ul style="list-style-type: none"> •Count to 100 by ones and tens •Understand that numbers from 11 to 19 contain a ten and some leftover ones (for example, 14=10+4) 	<ul style="list-style-type: none"> •Understand that 10 can be thought of as a bundle of ten ones—called a “ten” •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 	<ul style="list-style-type: none"> •Understand that 100 can be thought of as a bundle of ten tens—called a “hundred” •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 learned about place value

Students use models and illustrations to show that 47 is the same as 47 ones, or 4 tens + 7 ones, and to better understand the relative size of the units



Your child will use this understanding of place value to add one- and two-digit numbers together

$$47 + 2 = 49$$



$$47 + 20 = 67$$



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*



FIRST GRADE

Students Need Skills To Be Successful In the 21st 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 First Grade

In grade one, students will work with whole numbers and place value including grouping numbers into tens and ones as they learn to add and subtract up through 20. Students will also use charts, tables, and diagrams to solve problems. Activities in these areas will include:



- Quickly and accurately adding numbers together that total up to 10 or less and subtracting from numbers up through 10
- Understanding the rules of addition and subtraction (for example, $5+2=2+5$)
- Solving word problems that involve adding or subtracting numbers up through 20
- Understanding what the different digits mean in two-digit numbers (place value)
- Comparing two-digit numbers using the symbols $>$ (more than), $=$ (equal to), and $<$ (less than)
- Understanding the meaning of the equal sign ($=$) and determining if statements involving addition and subtraction are true or false (for example, which statement is true? $3+3=6$, $4+1=5+2$)
- Adding one- and two-digit numbers together
- Measuring the lengths of objects using a shorter object as a unit of length
- Putting objects in order from longest to shortest or shortest to longest
- Organizing objects into categories and comparing the number of objects in different categories
- Dividing circles and rectangles into halves and quarters

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

- ✓ Look for everyday opportunities to have your child do mathematics. For example, if you open a carton of eggs and take out seven, ask, "How many are left in the carton?"
- ✓ Play math games with your child. For example, "I'm thinking of a number. When I add five, I get 11."
- ✓ Encourage your child to read and write numbers in different ways. For example, what are some ways that you can make the number 15? 15 can be $10+5$, $7+8$, $20-5$, or $5+5+5$.
- ✓ Have your child create story problems to represent addition, subtraction, and comparisons. For example, "I have seven pennies. My brother has five pennies. How many pennies does he need to have the same number as I have? He needs two more pennies."
- ✓ 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.