

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

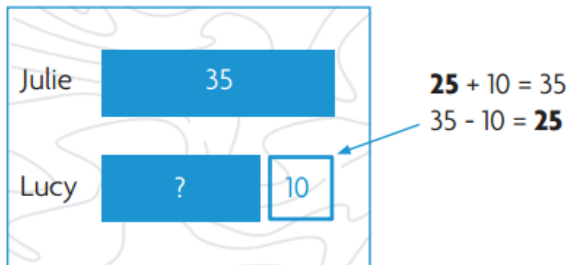
Grade One Mathematics	Grade Two Mathematics	Grade Three Mathematics
<ul style="list-style-type: none"> Solve word problems by adding or subtracting numbers up through 20 	<ul style="list-style-type: none"> Solve one- and two-step word problems by adding or subtracting numbers up through 100 	<ul style="list-style-type: none"> Solve two-step word problems by adding, subtracting, multiplying, and dividing numbers up through 100

Students in Second Grade will use diagrams such as this one to think through and solve one- and two-step word problems

Julie has 35 books. Julie has 10 more books than Lucy. How many books does Lucy have? How many books do they have together?

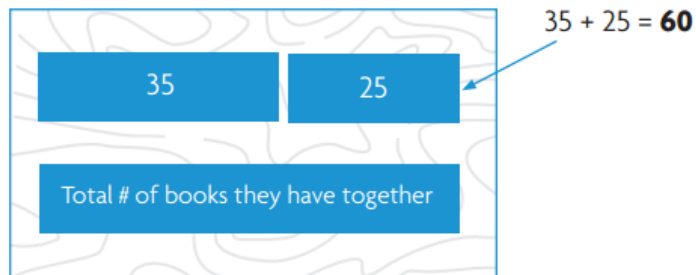
Step 1: If Lucy has 10 less books than Julie, students first need to figure out what 10 less than 35 is.

$$35 \text{ books} - 10 \text{ books} = 25 \text{ books}$$



Step 2: Students then have to add the number of books Julie has to the number of books Lucy has.

$$35 \text{ books} + 25 \text{ books} = 60 \text{ books}$$



Examples of how students will develop and use their understanding place value

Grade One Mathematics	Grade Two Mathematics	Grade Three Mathematics
<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 	<ul style="list-style-type: none"> Use place value understanding to round whole numbers to the nearest 10 or 100 Quickly and accurately add and subtract numbers through 1000 Use place value understanding to multiply and divide numbers up through 100 Multiply one-digit whole numbers by multiples of 10 between 10 and 90. For example, 9×80 or 5×60

Students learn that $250 = 2$ hundreds and 5 tens, 25 tens or 250 ones

$$250 = 2 \text{ (hundreds)} + 5 \text{ (tens)} + 0 \text{ (ones)}$$

Students apply their understanding that $5 \text{ tens} + 5 \text{ tens} = 10 \text{ tens}$, or 1 hundred, that can then be added to the hundreds place

$$2 \text{ (hundreds)} \ 5 \text{ (tens)} \ 0 \text{ (ones)} + 2 \text{ (hundreds)} \ 5 \text{ (tens)} \ 3 \text{ (ones)} = 5 \text{ (hundreds)} \ 0 \text{ (tens)} \ 3 \text{ (ones)}$$



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*



SECOND 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 Second Grade

In grade two, students will extend their understanding of place value to the hundreds place. They will use this place value understanding to solve word problems, including those involving length and other units of measure. Students will continue to work on their addition and subtraction skills, quickly and accurately adding and subtracting numbers up through 20 and also working with numbers up through 100. They will also build a foundation for understanding fractions by working with shapes and geometry. Activities in these areas will include:



- Quickly and accurately adding numbers together that total up to 20 or less or subtracting from numbers up through 20
- Solving one- or two-step word problems by adding or subtracting numbers up through 100
- Understanding what the different digits mean in a three-digit number
- Adding and subtracting three digit numbers
- Measuring lengths of objects in standard units such as inches and centimeters
- Solving addition and subtraction word problems involving length
- Solving problems involving money
- Breaking up a rectangle into same-size squares
- Dividing circles and rectangles into halves, thirds, or fourths
- Solving addition, subtraction, and comparison word problems using information presented in a bar graph
- Writing equations to represent addition of equal numbers

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

- ✓ Play math games with your child. For example, "I'm thinking of a number. It has 5 tens, 3 hundreds, and 4 ones. What is the number? 354." Or, using a deck of cards, deal two cards and ask your child to add the two numbers. You can also identify a target number and ask your child to either add or subtract to obtain that target number (use a target of 20 or less).
- ✓ Have your child explain the relationship between different numbers without counting. For example, 147 is 47 more than 100 and three less than 150.
- ✓ 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.