Number and Operations in Base Ten

In second grade, children extend their base ten learning to hundreds. They understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones and that 100 is the same amount as 10 groups of ten as well as 100 ones.

Children explore and discuss number patterns as they count within 1,000 by "counting on" from any number and skip-counting by 5s, 10s, and 100s. They read and write numbers to 1,000 using base ten numerals, number names, and expanded form. They compare two three-digit numbers based on the meanings of the hundreds, tens, and ones digits and use >, <, and = symbols to record the results of comparisons after having sufficient experience communicating about the comparisons with words.

In second grade, children fluently add and subtract within 100 by using strategies that make sense to them involving place value, properties of operations, and/or the relationship between addition and subtraction. They begin working with concrete models, drawings, and additional strategies to add and subtract within 1,000. Children understand that when adding or subtracting three-digit numbers it is sometimes necessary to compose or decompose tens and/or hundreds, but the standard algorithm of carrying or borrowing is not an expectation in second grade.

**The Grade 2 Common Core State Standards for
Number and Operations in Base Ten specify that children should—**

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

The following hands-on activities provide opportunities for children to use manipulatives and picture representations to make connections in the base ten number system. Children are called to explain why addition and subtraction strategies work, and use place value and the properties of operations. Children may use drawings or objects to support their explanations. The experiences with manipulatives will lead toward proficiency applying strategies to solve addition and subtraction problems.