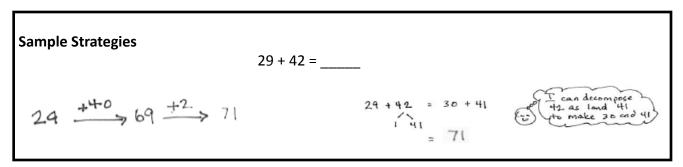# Second Grade Math Parent Letter - Module 4

Module 4 connects to and builds upon students' work with place value in previous modules. Students' understanding of place value will enable them to compose and decompose place value units to add and subtract in this module. There are three major parts of Module 4:

- building fluency in two-digit addition and subtraction within 100
- applying that fluency to solve one- and two-step word problems of varying types within 100
- developing students' conceptual understanding of addition and subtraction of multi-digit numbers within 200 as a foundation for work with addition and subtraction within 1,000 in Module 5

In Module 4, students continue to develop their understanding of the base ten system and their prior knowledge of place value strategies. They will work with place value strategies to fluently add and subtract within 100 (see below). In time, students see numbers in terms of place value units, such as 54 - 10 is 5 tens 4 ones minus 1 ten. Overall, students will discover and use relationships between the numbers to develop a variety of strategies they can use to solve problems.

Sample Strategies

In addition, students' increasing fluency with calculations within 100 allows for word problems to become opportunities for them to see and analyze the relationships between quantities. As students focus on one- and two-step word problems within 100, they will apply their place value reasoning, mental strategies, and understanding of composition and decompositions to negotiate different problem types with unknowns in various positions. Because two different problem types (e.g., add to, take from, put together/take apart, compare) are often combined in two-step word problems, some quantities will involve single-digit addends.

As the module progresses, the problems in the unit become increasingly complex as students compose or decompose numbers to develop their conceptual understanding of addition and subtraction of multi-digit numbers within 200. Like earlier in the module, students will use different place value strategies to solve such problems. Students will explain why these strategies work using place value language, properties of addition and subtraction, and models. Throughout the module, students will be encouraged to be flexible in their thinking and to use multiple strategies in solving problems. The unit culminates with students applying their knowledge of addition and subtraction strategies to solve more complex two-step word problems, such as comparison problems.