

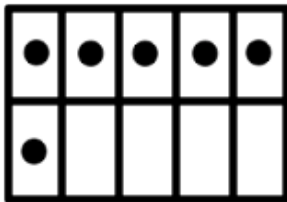
## Second Grade Math Parent Letter - Unit 1

Welcome to Second Grade math! In our first unit, we will set the foundation for students to master the sums and differences to 20 and to subsequently apply these skills to fluently (quickly and easily) add one-digit to two-digit numbers at least through 100.

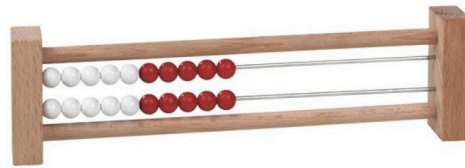
In this unit, we will have frequent activities to provide sustained practice to help students attain fluency within 20. This fluency is essential to the work of later units and future grade levels, where students must fluently add, subtract, multiply, and divide with increasingly difficult numbers. Activities such as Say Ten counting and Take from 10, and the use of tools such as ten frames, solidify student fluency. Please see our Vocabulary list for more information about terminology used in this unit.

In addition, we will emphasize the understanding of conceptual knowledge of mathematics. One way we will do so is by working on real-world application problems throughout the unit. Our goal is to move students to independent problem-solving, wherein they reason through the relationships of the problem and choose an appropriate strategy to solve.

In the beginning of the unit, we will review skills learned in earlier grades. Students will move from pictorial to abstract representations of math facts (e.g.  $2 + 3 = 5$ ). They will also use rekenreks, and ten frames to visualize the facts and to see relationships among numbers.



ten frame



rekenrek

We will also build understanding about place value, as a foundation for future learning. Students will use the phrases *make a ten* and *take from ten* to help them reason about adding and subtracting numbers in the teens.

$$\begin{array}{r} 9 + 6 = \\ \quad \swarrow \searrow \\ \quad 10 \end{array}$$

$$9 + 1 = 10$$

$$10 + 5 = 15$$

make a ten

$$\begin{array}{r} 14 - 8 = 6 \\ \quad \swarrow \searrow \\ 10 \quad 4 \end{array}$$

$$10 - 8 = 2$$

$$4 + 2 = 6$$

$$14 - 8 = 6$$

take from ten

As the unit continues, students use basic facts and place value understanding to build towards adding and subtracting to cross multiples of 10 (e.g.,  $26 + 9 = 20 + 6 + 4 + 5$ ). In the final lesson, students decompose to make a ten, and then to subtract from numbers that have both tens and ones.

$$87 + 5 = 92$$

$$\begin{array}{r} \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 80 \quad 7 \quad 3 \quad 2 \end{array}$$

$$80 + 10 + 2 = 92$$

Add basic facts to cross multiples of ten

$$91 - 5 = 86$$

$$\begin{array}{r} \swarrow \quad \searrow \\ 80 \quad 10 \end{array}$$

$$10 - 5 = 5$$

$$80 + 5 = 85$$

Decompose and subtract from the 10