FAMILY MATH

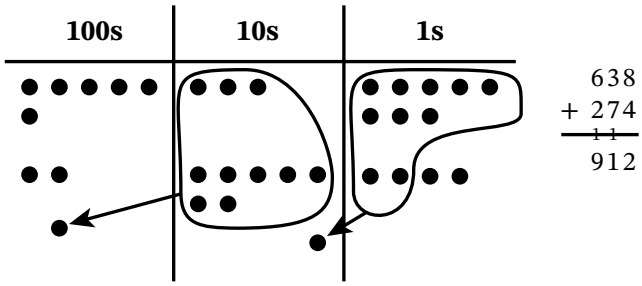
Two- and Three-Digit Measurement Addition and Subtraction

Dear Family,

Key Term

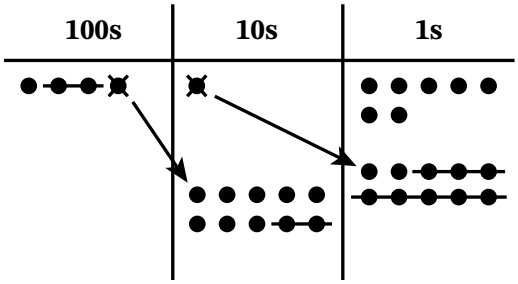
standard algorithm

Your student is using familiar place value models to solve addition and subtraction problems. When your student writes problems vertically to add or subtract in each place value, they are using the standard algorithm. Place value models support your student's understanding of how to add and subtract using the standard algorithm. They also help students determine when a simplifying strategy may be a more efficient way to add or subtract. Your student is gradually moving away from using the place value models and is showing their work in written form.



$$\begin{array}{r} 638 \\ +\ 274 \\ \hline 912 \end{array}$$

$8 + 4 = 12$, and 12 is recorded in writing as 1 ten 2 ones. The place value model represents the recording by regrouping 10 ones as 1 ten. 12 ones is renamed as 1 ten 2 ones.



$$\begin{array}{r} {}^{10}\not{3}\,{}^{1}\not{0}\,17 \\ \not{4}\not{1}\not{7} \\ -\ 228 \\ \hline 189 \end{array}$$

To subtract 8 ones, there needs to be more ones in the ones column. A place value model represents how 1 ten is unbundled into 10 ones. Now there are 17 ones to subtract from. In writing, we show how 1 ten is unbundled into 10 ones by crossing off the 1 and writing a 0 in the tens column and crossing off the 7 and writing a 17 in the ones column.

At-Home Activity

Rearranging Numbers

Write each of the digits 0–9 on slips of paper. Ask your student to choose a slip of paper without looking and lay it out on the table. Repeat until six digits have been placed on the table. Look at the digits and talk together about how to arrange them into two three-digit numbers in such a way that the sum is as close to $1{,}000$ as possible. Then ask your student to arrange three-digit numbers in such a way that the difference is as close to 0 as possible. Discuss whether you and your student could get even closer if the digits were rearranged. Consider repeating this activity with other numbers to get close to, such as 225, 500, or 750.