

FAMILY MATH

Simplifying Strategies to Find Sums and Differences

Dear Family,

Your student is using familiar simplifying strategies from earlier grades to add or subtract two-digit and three-digit numbers. Students build their number sense to recognize that some strategies may be more efficient than others depending on the numbers in the problem. They also use addition and subtraction to solve problems with data they represent in scaled bar graphs.

Key Term

scaled bar graph

Simplifying Strategies

Students can break apart numbers by place value and then add or subtract like units.

$$\begin{array}{r} 27 \\ \wedge \\ 20 \quad 7 \end{array} + \begin{array}{r} 22 \\ \wedge \\ 20 \quad 2 \end{array} = 49$$

$$20 + 20 = 40$$

$$7 + 2 = 9$$

$$\begin{array}{r} 76 \\ \wedge \\ 70 \quad 6 \end{array} - \begin{array}{r} 24 \\ \wedge \\ 20 \quad 4 \end{array} = 52$$

$$70 - 20 = 50$$

$$6 - 4 = 2$$

Students can break apart numbers to make or take from a multiple of ten or hundred.

$$\begin{array}{r} 17 \\ \wedge \\ 15 \quad 2 \end{array} + 98 = 15 + 100 = 115$$

$$15 + (2 + 98)$$

$$\begin{array}{r} 50 \\ \wedge \\ 30 \quad 20 \end{array} - 17 = 33$$

$$20 - 17 = 3$$

$$30 + 3 = 33$$

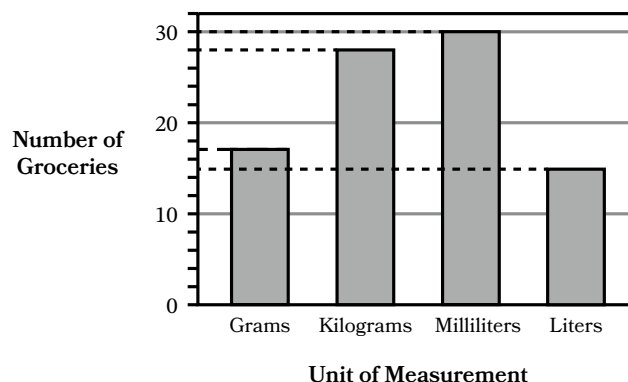
Students can add a benchmark number (such as 50 or 100) and subtract the difference.

$$98 + 56 = 154$$

$$56 \xrightarrow{+100} 156 \xrightarrow{-2} 154$$

Scaled Bar Graph

Unit of Measurement on Grocery Labels



How many grocery labels use the units of measurement grams and kilograms?

$$\begin{array}{r} 28 \\ \wedge \\ 20 \quad 8 \end{array} + 17 = 30 + 15 = 45$$

A scaled bar graph has numbers on one side that skip-count by a number other than 1, such as by 2 or by 5. Students use scaled bar graphs to answer questions such as, “How many altogether?”

At-Home Activity

Authentic Addition and Subtraction

You can find opportunities to add and subtract all around! Consider trying the following examples.

- Gather two or three packages of familiar food items that your student enjoys. Many packages are labeled with a whole-number measurement, sometimes listed in grams. Find the measurements and ask your student questions that encourage adding and subtracting, such as, “Which item weighs more, a package of pasta or a jar of spaghetti sauce? How much more does it weigh? How much do they weigh together?” Ask your student what strategy they used to find the answer.
- Ask your student to find a chapter book. If your student is currently reading the book, ask, “How many pages are left to read in this book?” If not, invite your student to open the book to any page near the middle. Write down the page number. Then ask them to open the book to a different page near the end and write down that page number. Ask your student to practice adding and subtracting the page numbers. You can also ask, “How many pages are between the two pages you chose?” Ask your student what strategy they used to find the answer.