

LETTER HOME

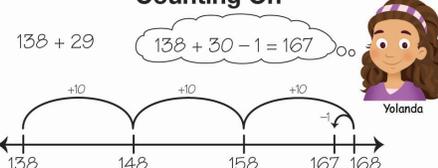
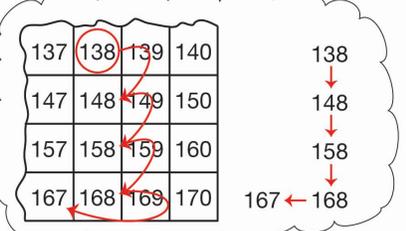
Adding Larger Numbers

Dear Family Member:

Students are developing a deeper understanding of place value and applying those concepts to their experiences to add larger numbers. Students develop several different strategies: direct modeling, reasoning (mental math) strategies, and paper-and-pencil procedures. Many of these strategies are supported with tools: base-ten pieces or shorthand, drawings, number lines, and number sentences. A person may choose one or more of these strategies for a particular situation. For example, to find the sums of $25 + 27$ and $68 + 2$, a mental math strategy is much more efficient than using a paper-and-pencil method.

Students invent their own strategies from class discussions. The figure below shows both mental math and paper-and-pencil methods used in this unit.

Addition Strategies Menu

Paper-and-Pencil	Mental Math
<p>Finding Friendly Numbers</p> <p>$138 + 29$</p> <p>$140 + 30 = 170$ 170 is a reasonable estimate.</p>  <p>Levi</p>	<p>Using Base-Ten Pieces</p> <p>68 $+ 55$ 123</p>  <p>Peter</p> <p>Trade 11 skinnies and 13 bits for 1 flat, 2 skinnies, and 3 bits</p>
<p>Counting On</p> <p>$138 + 29$</p> <p>$138 + 30 - 1 = 167$</p>  <p>Yolanda</p> 	<p>Using Expanded Form</p> <p>$68 = 60 + 8$ $+ 55 = 50 + 5$ $110 + 13 = 123$</p>  <p>Tara</p>
	<p>Using All-Partials</p> <p>68 $+ 55$ 110 13 123</p>  <p>Josh</p>
	<p>Using the Compact Method</p> <p>$\begin{array}{r} 1 \\ 68 \\ + 55 \\ \hline 123 \end{array}$</p>  <p>Julia</p>

As we explore addition strategies in class, you can provide additional support at home.

- Home Shopping Spree.** Choose some inexpensive items, such as canned goods, fruit, or paper products, in your home and price them for amounts under a dollar. Your child can choose two or more items to “buy” and figure out their total cost. After each “purchase,” encourage your child to tell the strategies he or she used to solve the problem.

- **Play Add to 100.** This game helps develop students' abilities to estimate sums. This game is for two players and they will need 4 sets of digit cards 0–9. If you use playing cards, use only the 1–9 cards. After shuffling the cards, give each player four cards. Each player uses the four cards to make an addition problem. The player whose answer is closest to 100 takes all the cards. Keep playing until all the cards are gone. The player with the most cards wins.

$$\begin{array}{r} \boxed{5} \ \boxed{2} \\ + \boxed{4} \ \boxed{7} \\ \hline 9 \ \ 9 \end{array} \qquad \begin{array}{r} \boxed{1} \ \boxed{0} \ \boxed{2} \\ + \qquad \qquad \boxed{3} \\ \hline 1 \ 0 \ 5 \end{array}$$

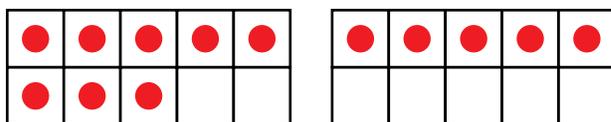
Math Facts and Mental Math

Addition Facts. This unit continues the development of the addition facts and related subtraction facts in Group E (5 + 7, 8 + 4, 8 + 5, 9 + 3, 9 + 4, 9 + 5, 10 + 1, 10 + 2, 10 + 3).

You can help your child review these facts using the flash cards that were sent home or by making a set of flash cards from index cards or scrap paper. Study the facts in small groups each night. As your child goes through the flash cards, put the cards in three piles: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out. Making ten and using ten are good strategies for the facts in Group E.

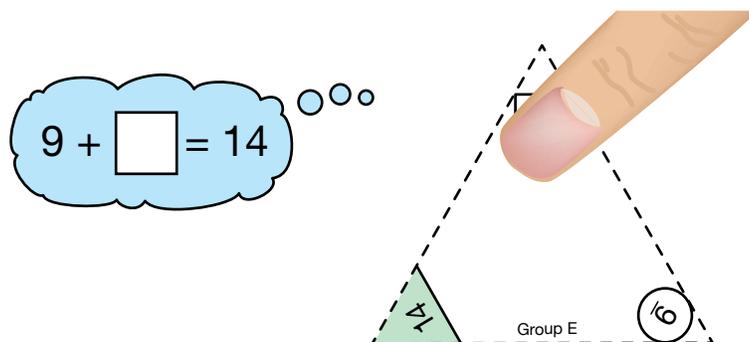
$$8 + 5 = (5 + 5) + 3 \text{ or } 13.$$



For Facts I Need Can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use mental math strategies to add 10s related to the addition facts: 15 + 7 (to practice 5 + 7) or 80 + 50 (to practice 8 + 5).

Related Subtraction Facts. You can help your child develop strategies for the related subtraction facts also using the flash cards. Cover one of the addends (smaller numbers) on the flash cards and ask your child to figure out what number you are covering.



Thank you for supporting your child's math activities at home.

Sincerely,