Making 10
7 + 5
10 + 2 = 12

Counting Down/Back
(When taking away 1-5)
17 - 5
17...16, 15, 14, 13, 12

Part Whole
(Decomposing #s)
Number Line

+10 +10 +10

48 58 68 78

48 + 37 = 85

Partial Sums

48 + 37

(Associative Property)

40 + 30 = 70
8 + 7 = 15
70 + 15 = 85

Making 10

48 + 37

(Associative Property)

48 + 2 = 50
50 + 35 = 85

Number Bond

(Associative Property)

48 + 37

40 8 30 7

40 + 30 = 70
8 + 7 = 15
70 + 15 = 85

Number Bond

Make a 10

(Associative Property)

48 + 37

40 8 35 2

40 + 35 = 75
8 + 2 = 10
75 + 10 = 85
Unit Form
48 + 37
4 tens + 8 ones
3 tens + 7 ones
7 tens + 15 ones
= 8 tens and 5 ones
= 85

HTO chart
(Hundreds, Tens, Ones Chart)
48 + 37

HTO chart
(Hundreds, Tens, Ones Chart)
50 - 24

Document Created by Brandy Dermitt & Sloan Young
**Expanded Form**

\[
\begin{align*}
48 + 37 &= 70 + 15 \\
40 + 8 &= 46 \\
+ 30 + 7 &= 70 + 15 \\
70 + 15 &= 85
\end{align*}
\]

**Part Whole**

\[
\begin{array}{|c|c|c|}
\hline
& 84 & \\
\hline
46 & ? & \\
\hline
\end{array}
\]

\[
\begin{array}{|c|c|c|}
\hline
84 & \\
\hline
46 & 20 & ? \\
\hline
\end{array}
\]

\[
\begin{array}{c}
76 \\
6 \\
70
\end{array}
\]
Number Line

50 - 24 = __
24 + ___ = 50

OR

50 - 20 = 30
Count down to 26,...29, 28, 27, 26

Tape Diagram

25 + 17 = ? (n)

25 + n = 42
42 - 25 = n
42 - n = 25

Use with word problems, missing addend and subtraction
<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Grid" /></td>
<td><img src="image" alt="Bars" /></td>
<td><img src="image" alt="Block" /></td>
</tr>
</tbody>
</table>
Put any 3 numbers on the board. (Use two-digit numbers if those are more appropriate for the children.

With these three numbers as referents, ask questions such as the following, encouraging discussion of all responses:

(Example numbers to write: 219, 364, 457)

- Which two numbers are closest? How do you know?
- Which number is closest to 300? To 250?
- Name a number between 457 and 364.
- Name a multiple of 25 between 219 and 364.
- Name a number that is more than all of these numbers.
- About how far apart are 219 and 500? 219 and 5000?
- If these are “big numbers,” what are some small numbers? Numbers that are about the same? Numbers that make these seem small?
Numbers, Squares, Lines, and Dots (Van de Walle Activity 11.24 3rd Edition)

Use the Square, Line, Dot Activity page to introduce children to the use of small squares (hundreds), lines (tens), and dots (ones) as a quick way to represent base-ten pieces with simple drawings. Then as illustrated in Figure 11.14, display addition (or subtraction) problems using a number along with a quantity represented using squares, lines, and dots. Children are to mentally compute the totals (or differences). Figure 11.15 is a take-away version of the same activity. Note that the subtraction problems with the removed amount represented by the numeral will be easiest to start with.
Crossing A Decade (Van de Walle Activity 12.1 2nd Edition/ 12.3 3rd Edition)

Quickly review the Up Over 10 and Down Over 10 strategies from basic facts using ten frames. Then pose an addition or subtraction story problem that crosses a decade number and involves a change or difference of less than 10. The following problems are examples:

- Tommy was on page 47 of his book. Then he read 6 more pages. What page did he end up on?
- How far is it from 68 to 75?
- Megan had 42 cents. She bought a small toy for 8 cents. How much money does she have left?

Two children can work together to determine how to quickly find the total.
Printables for “Arrow Cards (10 to 9,999)”

KNPIG ID # Ni 1125.5 – PURPLE

This file contains printables for a small group of students.

For each additional group of students print 1 set of Arrow Cards.

- Ones Arrow Cards – Numbered 0-9.
- Tens Arrow Cards - Numbered 00-90.
- Hundreds Arrow Cards - Numbered 000-900.
- Thousands Arrow Cards - Numbered 0000-9000.

Teacher Notes: See teacher note for activity Ni 125.1. Teacher may initially need to model that numbers are built from arrows of different colors, placed so the arrows overlap and all numerals are visible. The arrow cards* for "ten thousands" and "hundred thousands" may be included. Students may be asked to write the expanded form for each number (i.e. 3,456 = 3,000+ 400 + 50 + 6). Teacher may ask questions such as "What is 1 more/ 1 less than the number you created?" Similarly, teacher may ask about 10 more/less, 100 more/less, 1000 more/less, etc (targeting KCAS standard 2.NBT.8). Use the print link for Ni 125.3 for 0 to 999 arrow cards.
Cut arrows on the dark lines. If desired, print each place value on a different color.
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<th>one</th>
<th>two</th>
<th>three</th>
<th>four</th>
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Brandy Dermitt (use these in place of playing cards if you don’t have them)
Brandy Dermitt (use these in place of playing cards if you don’t have them)

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