

Addition Strategies

$$583 + 147$$

$$500 + 100 = 600$$

$$80 + 40 = 120$$

$$3 + 7 = 10$$

$$600 + 120 + 10 = 730$$

In this strategy you break the number apart by place value (known as expanded form) and add the hundreds together, then the tens, and finally the ones.

place value
(Break it Down)

Compensation

(Give & Take to make a Friendly Number)

$$583 + 147$$

$$-3 \quad +3$$

$$580 + 150 = 730$$

In this strategy, take a "3" away and add it to the other side. This makes both numbers "friendly". A friendly number is usually a multiple of 10.

$$583 + 147$$

$$583 - 3 = 580$$

$$580 + 100 = 680$$

$$680 + 40 = 720$$

$$720 + 7 = 727$$

$$727 + 3 = 730$$

Sometimes it is easier if you add/take away the the other number later to keep it balanced.



Addition Strategies

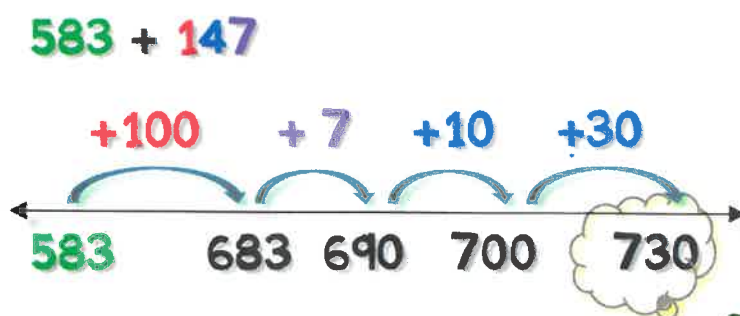
Traditional Algorithm (Stack & Regroup)

$$\begin{array}{r} 11 \\ 583 \\ + 147 \\ \hline 730 \end{array}$$

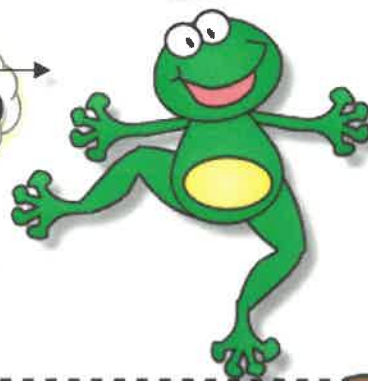
The "0" is a place holder. The "1" must be added to the tens place.

This strategy begins on the far right (one's place) and add the numbers together. $3+7$ makes 10. If the two numbers equal 10 or more, the group of "ten" must be added to the tens place.

Open Number Line



Number lines are a visual way to add numbers by place value.



Addition Strategies

Expanded Form

(Stretch it out by place value)

$$583 + 147$$

$$500 + 80 + 3$$

$$100 + 40 + 7$$

$$600 + 120 + 10 = 730$$

This strategy is similar to the Place Value strategy because it breaks down the problem into easier to manage numbers.

Partial Sums also known as Front End

$$583 + 147$$

$$600 + 120 + 10 = 730$$

$$583$$

$$+ 147$$

$$600$$

$$120$$

$$+ 10$$

$$730$$

In this strategy, you start from the left to the right and then you add the partial products together



Addition Strategies

$$\begin{array}{r} 583 \\ + 147 \\ \hline \end{array}$$

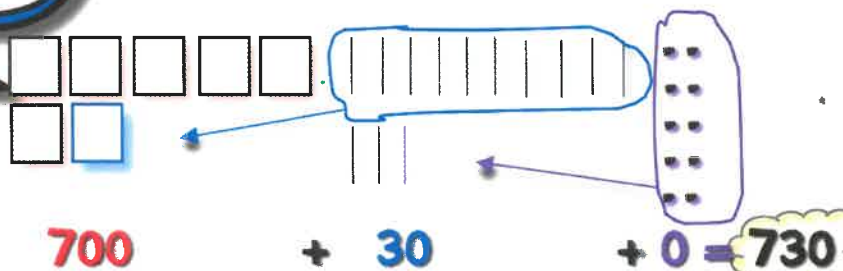
600
680
720
723
730

Keeping a
Running Total
similar to Front End

This strategy is similar to the Front End because you'll add from left to right. Just keep a running total in your mind as you add each number.

Base 10
Place Value Model

$$583 + 147$$



This strategy uses a visual to solve problems. This represents the manipulatives we can use in class. The $\square = 100$, the $| = 10$, and $\cdot = 1$. Once you have 10, you "regroup" to add one to the next place.

