Addition Strategy
Making Friendly Numbers

$$218+127=$$

$$218+127$$
$$+2$$
$$\overline{}$$
$$220+127=347 \quad \longrightarrow \quad 347-2=345$$

"I change one of the numbers to make it an easier number to work with. I do the opposite operation to the answer of my new equation to get the answer."

Addition Strategy
Decomposing

$$218+127=$$

$$(200+10+8) \quad + \quad (100+20+7)$$

$$200+100=300$$
$$10+20=30$$
$$8+7=15$$
$$300+30+15=345$$

"I write each number in expanded form and then add each of the place value amounts."
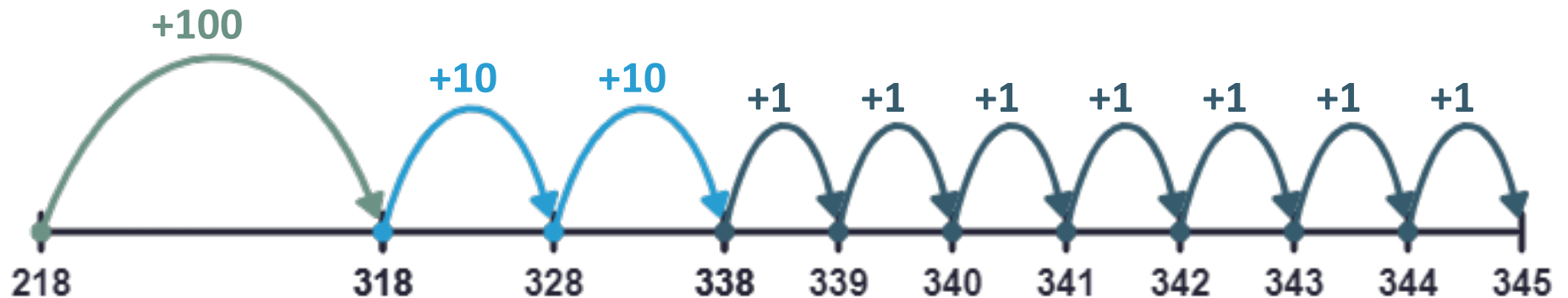
Addition Strategy
Compensation

218+127=

218+127

+2   -2

——— ———

220+125=345

OR

218   -3 | 215

+127 +3 | **+**130

————————

345

"I make 218 the friendly number of 220 by adding a 2 that I took from 127. I could also make 127 the friendly number of 130 by adding 3 that I took from 218."

Addition Strategy
Adding Up in Chunks

218+127=

"I start at 218 and count-up in place value chunks to get to the answer of 345. I can use an open number line to help me and show my work."

Addition Strategies for Grade 3 and Up

Addition Strategy
Making Friendly Numbers
218+127=

218+127
 +2
―――――
220+127=347 ➡ 347-2=345

"I change one of the numbers to make it an easier number to work with. I do the opposite operation to the answer of my new equation to get the answer."

Students are adjusting one number of the equation to make an easier problem. This is like the Compensation strategy, but students are only adjusting one number to make a friendly number and then doing the opposite operation with the answer. More information can be found on page 171 and 173 of "Number Talks: Whole Number Computation" by Sherry Parrish. Number talks supporting this strategy can be found starting on page 189.

Addition Strategy
Decomposing
218+127=

(200+10+8) + (100+20+7)

200+100=300
10+20=30
8+7=15
300+30+15=345

"I write each number in expanded form and then add each of the place value amounts."

This strategy breaks each number into its place value. Base Ten blocks may help students to illustrate or explain this strategy. More information can be found on page 165 of "Number Talks: Whole Number Computation" by Sherry Parrish. Number talks can be found starting on page 197.

Addition Strategy
Compensation
218+127=

218+127   218 -3 | 215
 +2 -2   OR +127 +3 | +130
―――――   ――――――
220+125=345 | 345

"I make 218 the friendly number of 220 by adding a 2 that I took from 127. I could also make 127 the friendly number of 130 by adding 3 that I took from 218."

This strategy is very similar to Making Friendly Numbers. The difference is that with this strategy you remove an amount from one addend and give it to the other. More information can be found on page 173 of "Number Talks: Whole Number Computation" by Sherry Parrish.

Addition Strategy
Adding Up in Chunks
218+127=

+100 +10 +10 +1 +1 +1 +1 +1 +1 +1
218 318 328 338 339 340 341 342 343 344 345

"I start at 218 and count-up in place value chunks to get to the answer of 345. I can use an open number line to help me and show my work."

This strategy is like Decomposing except it focuses on keeping one addend whole and adding the second number in easy-to use chunks. This strategy is more efficient of the two strategies. More information can be found on page 173 of "Number Talks: Whole Number Computation" by Sherry Parrish. Number talks focusing on this strategy can be found starting on page 201.