

Subtraction Strategies

$$352 - 128$$

$$352 - 100 = 252$$

$$252 - 20 = 232$$

$$232 - 8 = 224$$

In this strategy, you break the number you are subtracting apart by place value.

Place Value

(Break it Down)

Chunking

In this strategy, you take "chunks" away similar to the Place Value strategy but you break down the numbers even more to make them easier to work with.

$$352 - 128$$

$$352 - 100 = 252$$

$$252 - 10 = 242$$

$$242 - 10 = 232$$

$$232 - 2 = 230$$

$$230 - 6 = 224$$

$$352 - 128$$

$$\begin{array}{r} 300 \quad 50 \quad 2 \\ - 100 \quad 20 \quad 8 \\ \hline \end{array}$$

$$200 \quad 30 \quad -6$$

$$230 - 6 = 224$$

Expanded Form

(Stretch it out by place value)

This strategy is similar to the Place Value strategy because the numbers are divided up by place value and subtracted separately. If you get a negative number, just subtract it!

Subtraction Strategies

Compensation

(Subtracting friendly chunks)

$$352 - 128$$

$$352 - 128$$

$$\underline{-100} \quad \underline{-100}$$

$$252 \quad 28$$

$$\underline{-20} \quad \underline{-20}$$

$$232 \quad 8$$

$$\underline{-2} \quad \underline{-2}$$

$$230 \quad 6$$

$$\underline{-5} \quad \underline{-5}$$

$$225 \quad 1$$

$$\underline{-1} \quad \underline{-1}$$

$$224 \quad 0$$

In this strategy, the goal is to take all of the “**subtrahend**” (the number you are taking away) from the “**minuend**” (the number you started with) by taking friendly chunks away from both sides. Since you are taking all of the subtrahend away, once you get to “0”, the minuend’s number will be the answer!



Subtraction Strategies

This strategy uses a visual to solve problems. This represents the manipulatives we can use in class.

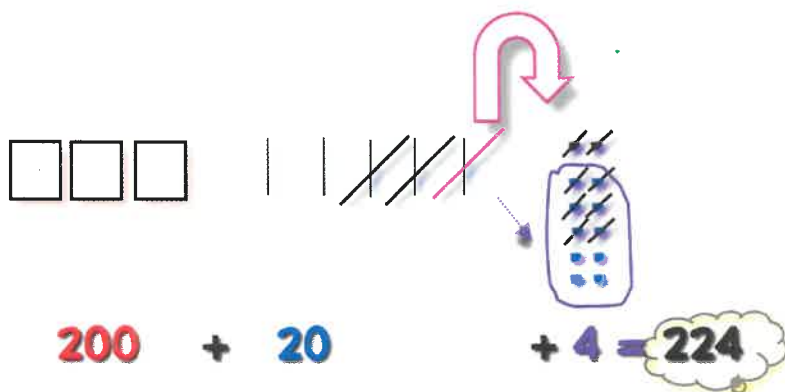
The $\square = 100$, the $| = 10$, and $\cdot = 1$.

If you don't have enough to subtract, you will need to "regroup" (think about bundling and giving 10).

Base 10

Place Value Model

$$352 - 128$$



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Subtraction Strategies

Traditional Algorithm

(Stack & Regroup)

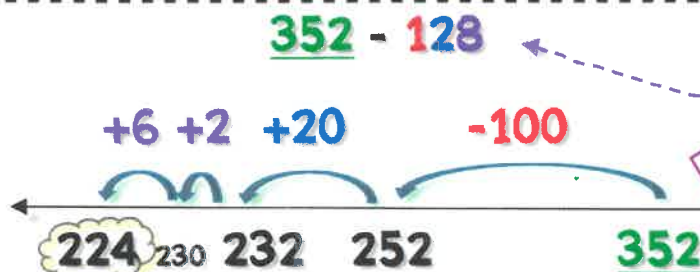
$$\begin{array}{r} 352 \\ - 128 \\ \hline 224 \end{array}$$

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

If the number on the bottom is bigger than the number on the top, you have to regroup (borrow) from the tens or hundreds. Always start with the ones place with this strategy.

Number Line

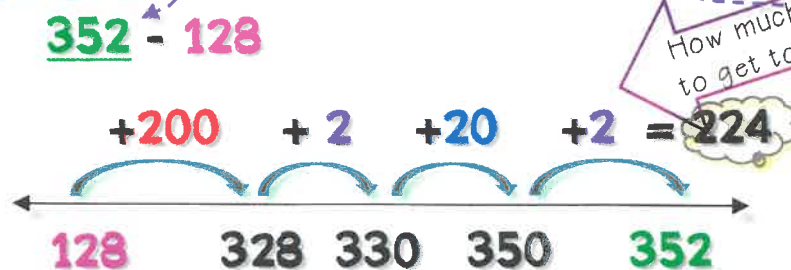
Counting Back



Go back the amount you are subtracting

Number lines allow different chunks to be taken away or added to make the problem easier. Use "friendly" numbers like 10 and 100. Some prefer to count backwards while counting up is easier for others.

Counting Up



How much did it take you to get to the minuend?

