

Relatives

In this strategy if you know an addition or subtraction sentence, you really know 4 sentences as many facts are related.

$$9 - 3 \qquad 6 + 3$$

$$9 - 6 \qquad 3 + 6$$

Make it Addition

In this strategy you change the question if you find addition easier.

$$12 - 4 \text{ can change to } 4 + \underline{\quad} = 12$$

Doubles

In this strategy you can change the question to make it a double.

$$6 + 8 \text{ can be manipulated to } 7 + 7$$

$$4 + 6 \text{ can be manipulated to } 5 + 5$$

Near Doubles

In this strategy you can make a near double into a double by adding or subtracting 1.

$$6 + 7 \text{ could be}$$

$$6 + 6 + 1 \text{ or}$$

$$7 + 7 - 1$$

Know Zero

In this strategy any time you add or subtract 0 the number will remain the same.

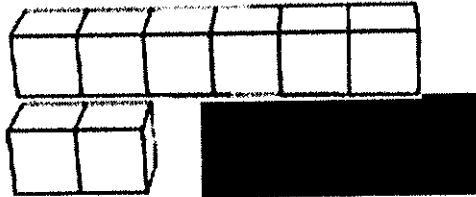
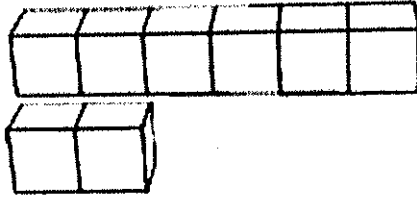
$$9 - 0 = 9$$

$$4 + 0 = 4$$

What is the difference?

In this strategy you are comparing two numbers to find the difference between them. Subtraction is understood as a comparison between numbers or a difference between. We try to get away from "take away" in grade 2.

$$6 - 2$$



The comparison is a difference of 4.

Double Digit Addition and Subtraction

Now we move to the big numbers. By the end of grade 2 students will be able to add and subtract numbers to 100. By manipulating numbers and using mental math strategies students will complete addition and subtraction questions, even with regrouping or borrowing.

The Way We Were Taught

Many parents remember adding and subtracting by starting in the ones column, then borrowing or carrying, then finishing the tens column. This way may work for some children, but it may not be the most efficient strategy for your child.

$$\begin{array}{r} 1 \\ 36 \\ + 24 \\ \hline 60 \end{array}$$

$$\begin{array}{r} 412 \\ \cancel{5}2 \\ - 26 \\ \hline 26 \end{array}$$

What is happening now?

With the new curriculum, children are encouraged to develop strategies that are most efficient for them given the question. Students are encouraged to try different strategies throughout the year. I have realized that there are many ways for students to do addition and subtraction. The best way I have found to work on this is to have the student try the question and then ask "How did you get that answer?" If they have made an error they usually pick up on it while they are explaining or by being questioned by others. I ask questions like

"Where did that group of 10 go?"

"Can you have more than ten in the ones place?"

"Can you show me how you got 4 for 2 - 6?"

"Could you show me 2 and take 6 from it?"

Here are some of the strategies I have seen.

Breaking the numbers down (addition)

$$36 + 24$$

Break down the numbers into tens and ones

$$30 + 6 + 20 + 4$$

Add the tens

$$30 + 20 = 50$$

Add the ones

$$6 + 4 = 10$$

Add the tens and ones together regrouping if necessary.

$$50 + 10 = 60$$

Breaking the numbers down (subtraction)

$$52 - 26$$

Break down the numbers into tens and ones

$$50 + 2 - 20 + 6$$

subtract the tens

$$50 - 20 = 30$$

subtract the ones

2 - 6 (cannot be done - need to break a 10)

30 becomes 2 tens and 10 ones so becomes

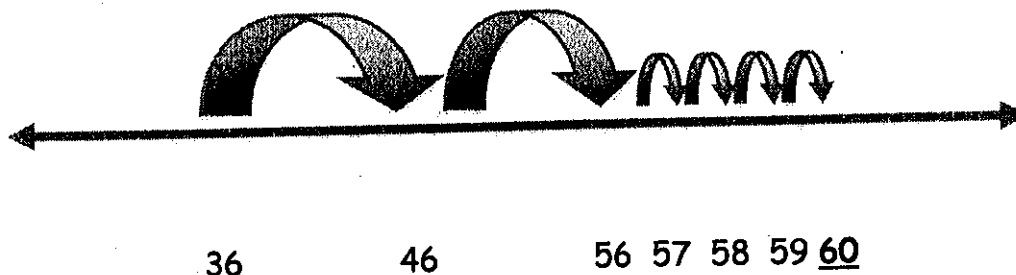
$$20 + 10 + 2 - 6$$

$$20 + 12 - 6$$

$$20 + 6 = 26$$

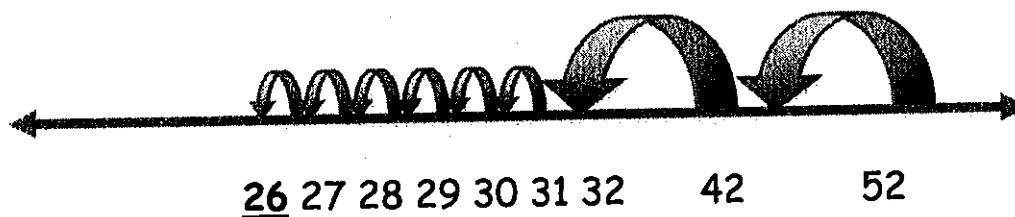
Counting on by 10s and 1s

$$36 + 24$$



Counting back by 10s and 1s

$$52 - 26$$



Make it 10

$$36 + 24$$

take 4 ones from 24 to 36 to make

$$40 + 20 = 60$$

$$52 - 26$$

move it along the number line to make

$$50 - 24 = 26$$

Hopefully this gives you some ideas of how to help with homework. I put in examples with regrouping as that is where it gets the most challenging. So have fun, ask your child lots of questions and keep an open mind! Thanks!