

Addition and Subtraction Strategies

Strategy	Examples	When It's Best
Counting On	$5+2$ $14+3$ $8+1$ $17+2$	When adding one, two, or three
Counting Back	$5-2$ $14-3$ $8-1$ $17-2$	When subtracting one, two, or three
Doubles Addition	$4+4$ $9+9$ $7+7$ $2+2$	When both addends are the same.
Doubles Subtraction	$8-4$ $18-9$ $14-7$ $4-2$ $10-5$ $16-8$ $6-3$ $12-6$	When the greatest number (the minuend) is the sum of the other number (the subtrahend) and its double. This requires KNOWING doubles!
Doubles Plus 1 or Minus 1	$4+5$ $2+3$ $8+7$ $9+8$ For example, I know that $4+4=8$, so if I add one more ($4+4+1$) it equals 9. $4+5=9$. $8+8=16$, so if I add one less (7 is one less than 8) it equals 15. $8+7=15$.	Once again, this requires KNOWING doubles! Doubles Plus/Minus 1 is best when one addend is one more or one less than a double.
Make a Ten Addition and Subtraction	First: $6+4$ $2+8$ $7+3$ $9+1$ $13-3$ $17-7$ Next: $7+4$ Because I know that $7+3=10$, plus one more is 11. $14-5$ Because I know that $14-4=10$, minus one more is 9.	Make a Ten is best when you are able to work towards making the number 10. 10 is an important benchmark number. First, make a ten is knowing what makes our most "friendly" number, 10. Next, we use that information to help simplify more complicated equations. We make the ten and then count on or back additional spaces.

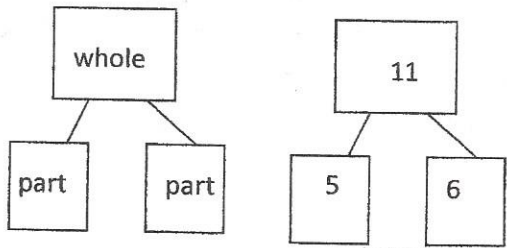
First Grade Math Terminology

Parents, in an attempt to clarify math terminology, we have sent home this paper to help explain current math concepts.

Number Bonds

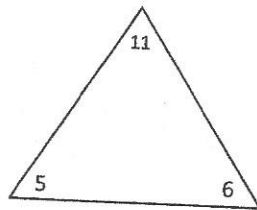
A number bond is a mental picture of the relationship between a number and the parts that coming to make it. The concept of number bonds is very basic, an important foundation for understanding how numbers work. A whole thing is made up of parts. If you know the parts, you can put them together (add) to find the whole. IF you know the whole and one of the parts, you can take away the part you know (subtract) to find the other part.

Number bonds let children see the inverse relationship between addition and subtraction. Subtraction is not a totally different thing from addition; they are mirror images. To subtract means to figure out how much more you would have to add to get the whole thing.



Fact Family Triangles

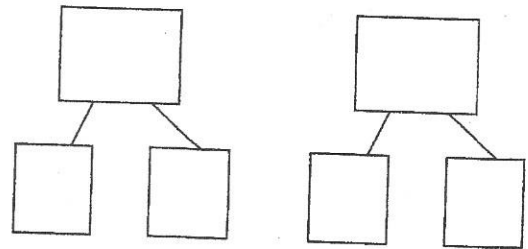
Children will be given 3 numbers within the fact triangle. They will write 2 addition and 2 subtraction facts using **ONLY** the 3 numbers included within the triangle. (Note that doubles will only have 1 addition and 1 subtraction fact.) It is important that the children understand that the greater number of the 3 is the "whole" and the other 2 numbers are the "parts".



$$\begin{aligned} \underline{5} + \underline{6} &= \underline{11} \\ \underline{6} + \underline{5} &= \underline{11} \\ \underline{11} - \underline{6} &= \underline{5} \\ \underline{11} - \underline{5} &= \underline{6} \end{aligned}$$

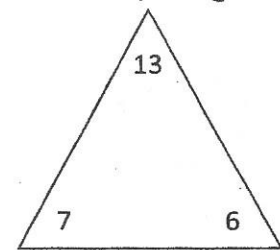
Number Bonds Practice

Fill in the missing number to complete the number bonds.



Fact Family Triangle Practice

Fill in the missing numbers to complete the fact families. Use numbers from the fact family triangle.



$$\begin{aligned} \underline{\quad} + \underline{\quad} &= \underline{\quad} \\ \underline{\quad} + \underline{\quad} &= \underline{\quad} \\ \underline{\quad} - \underline{\quad} &= \underline{\quad} \\ \underline{\quad} - \underline{\quad} &= \underline{\quad} \end{aligned}$$