



Math Strategies Fourth Grade

NOTE: As the child is sharing his/her thinking the teacher will use labels to name the strategies the child used during a number talk. The follow are strategy terms most often used at this grade level as students are developing mathematically. Please remember that it is **not about specifically teaching** these strategies' rather it is about **naming the strategies** for students to think of their own work.

KEY: Previous years = regular font, **Current year = Bolded Font**

- Counting all
- Counting on
- Counting back
- Instant Recognition of Groups
- One more, one less
- Two more, two less
- Just Know (basic facts)
- Combinations to 5, 10, 20, 100
- Rearranges numbers (Ex: $4+2$, moves 1 from 4 to make $3+3$)
- Doubles
- Doubles plus one
- Doubles plus two
- Doubles minus one
- Doubles minus two
- Near Doubles
- Fact Families
- Commutative Property (aka Turn Around Facts $3+4=7$ so $4+3=7$)
- Sequence Counting by 2s, 5s, 10s, 100s (aka Skip Counting)
- Adding 10
- Adding 9 (If $10+6=16$ then $9+6=15$)
- Subtracting -10
- 100 more, 100 less
- Use a Number Line to add or subtract
- Use a Hundred Chart to add or subtract
- Ten Frames
- Sums (Combinations) to Ten, to 100
- Organizing numbers into 10's and leftovers
- Add the Tens and then the Ones
- Estimation
- Visualize Place Value Blocks
- Decomposing Numbers (aka Breaking Apart Numbers, Partial Sums and differences **and products**)
- Uses sums to 10 to solve problems using larger numbers $2+6=8$ $20+60=80$ (**aka Zero Strategy**)
- Counting up to find the difference ($47-28$; $28+2=30$ and $47-30=17$ and $17+2=19$)
- Uses compensation $42 - 18 = 44 - 20$ (Add 2 to both numbers)
- Uses related combinations $75 - 25 = 50$ so $75 - 26 = 49$
- Rearranges numbers $29 + 31 = 30 + 30$
- Use arrays for multiplication

- Use repeated addition for multiplication
- Draw pictures to solve multiplication problems
- Use doubles in multiplication
- Fact families and commutative property for multiplication
- **Inverse operations(working backwards)**
- **Find a pattern or a rule**

For examples of these number-talk strategies, see page 42 of the Math Perspectives white Professional Development book. For general information about how to do number talks, see pages 44-57 of the same book.