Mental Math Strategies

**Strategy one: Adding doubles and near-doubles.**

Students often pick up on doubles facts early. They may use this knowledge to find other facts.

For example: If they know 4+4=8 and need to solve 4+5 then they may think

 4+4=8 so 4+5 must be one more than double 4.

 That means 4+5=9.

Use what you know about doubles to solve the following questions.

6 + 5 = 5 + 4 =

3 + 2 = 8 + 7 =

9 + 9 = 9 + 8 =

6 + 6 = 4 + 5 =

3 + 4 = 7 + 7 =

**Strategy 2: Relating to 5 or 10 (Nice Numbers).**

It is very important for students to be able to name the “Friends of 10” or numbers that add together to make 10. Once they have mastered these combinations, the next step is for the students to use this information to help solve other problems.

For example: If the problem is 8 + 9, take one from the 8 leaving 7 and add it to the 9, making 10. The equation can now be seen as 8 + 9 = 17 or 7 + 10 = 17. Or, you could take 2 away from 9 and add it to the 8 changing 8 + 9 to 10 + 7. It is recommended that this strategy is initially practiced using counters so that students will be able to physically rearrange number combinations.

Use what you know about Friends of 10 to solve the following questions.

 6 + 5 = 9 + 3 =

8 + 7 = 4 + 7 =

8 + 9 = 9 + 6 =

9 + 7 = 7 + 5 =

8 + 6 = 6 + 7 =

**Strategy 3: Counting on.**

When teaching addition to students they should be encouraged to start with one addend and then count on.

For example: When solving 13 + 5 students should be encouraged to put 13 “in your head” and count 5 more. So 13 + 5 is 13 – 14,15,16,17,18. In these cases it is important for the students to begin with the largest number.

Use the counting on strategy to solve the following questions.

15 + 3 = 11 + 3 =

2 + 15 = 13 + 4 =

4 + 13 = 12 + 3 =

16 + 2 = 3 + 17 =

15 + 4 = 11 + 5 =

Use the different mental math strategies that you know to solve the basic facts questions.

15 + 3 = 11 + 2 = 6 + 4 =

7 + 4 = 12 + 2 = 4 + 5 =

8 + 8 = 8 + 9 = 8 + 4 =

9 + 5 = 16 + 3 = 8 + 3 =

6 + 5 = 6 + 6 = 14 + 3 =

13 + 3 = 8 + 6 = 3 + 4 =