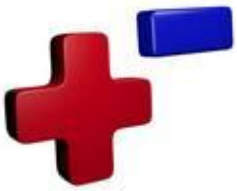

Addition and Subtraction

Fact Fluency Strategies

Strategies are based on addition and to learn subtraction facts, students relate the subtraction fact to the known addition fact.

Count on by +1/+2

These facts students can mentally add on one or two more. Students should practice putting the greater number "in their head" and then counting on 1 or 2.

Examples:

7 + 1 = 8	1 + 4 = 5	6 + 2 = 8	2 + 5 = 7
8 – 7 = 1	5 – 4 = 1	8 – 2 = 6	7 – 5 = 2

Plus 0

These are facts where students need to understand that any number plus 0 is the same number.

Examples:

4 + 0 = 4	0 + 7 = 7	10 + 0 = 10
4 – 0 = 4	7 – 7 = 0	10 – 0 = 10

Add 10

These facts use place value. Students should understand that when you add 10, you add 1 ten to the tens place.

Examples:

10 + 2 = 12	4 + 10 = 14	10 + 10 = 20
12 – 10 = 2	14 – 4 = 10	20 – 10 = 10

Doubles

These facts often have to be "memorized", but students know all doubles have an even sum because there are two equal groups.

Examples:

4 + 4 = 8	6 + 6 = 12	8 + 8 = 16
8 – 4 = 4	12 – 6 = 6	16 – 8 = 8

Ways to Make 10

These facts are the ways to make ten or "friends of ten". Students need to learn these (with the help of a number line) because understanding ways to make ten is the foundation for many math strategies.

Examples:

7 + 3 = 10	4 + 6 = 10	5 + 5 = 10
10 – 7 = 3	10 – 4 = 6	10 – 5 = 5

Using Ten

These facts use the student knowledge of ways to make ten to help them solve facts that are close to ten.

Examples:

7 + 4 = 11 (Think 7 + 3 = 10 and add 1 more) 11 – 4 = 7

9 + 5 = 14 (Think 10 + 5 = 15 and one less is 14) 14 – 9 = 5

8 + 4 = 12 (Think 6 + 4 = 10 and add 2 more) 12 – 8 = 4

8 + 5 = 13 (Think 10 + 5 = 15 and 2 less is 13) 13 – 5 = 8

Using Doubles

Students use their knowledge of doubles to solve facts that are close to doubles.

Examples:

7 + 8 = 15 (7 + 7 = 14 and one more is 15) 15 – 8 = 7

6 + 8 = 14 (6 + 6 = 12 and two more is 14) 14 – 8 = 6

5 + 6 = 11 (6 + 6 = 12 and one less is 11) 11 – 5 = 6

5 + 7 = 12 (7 + 7 = 14 and two less is 12) 12 – 7 = 5

These strategies are based on the
Mastering Basic Math Facts: Addition and Subtraction
by Susan O'Connell and John SanGiovanni