



Addition & Subtraction Strategies

Grades 3-5:
Providing “Hope”

Lori Williams, Ph.D.
dr.loriwilliams@sbcglobal.net

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)

57 Known Facts
64 Facts to Go

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3									12
3	3	4									13
4	4	5									14
5	5	6									15
6	6	7									16
7	7	8									17
8	8	9									18
9	9	10									19
10	10	11	12	13	14	15	16	17	18	19	20

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)
4. Doubles

65 Known Facts
56 Facts to Go

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4								12
3	3	4		6							13
4	4	5			8						14
5	5	6				10					15
6	6	7					12				16
7	7	8						14			17
8	8	9							16		18
9	9	10								18	19
10	10	11	12	13	14	15	16	17	18	19	20

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)
4. Doubles
5. Commutative Property

65 Known Facts
28 Facts to Go

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4								12
3	3	4		6							13
4	4	5			8						14
5	5	6				10					15
6	6	7					12				16
7	7	8						14			17
8	8	9							16		18
9	9	10								18	19
10	10	11	12	13	14	15	16	17	18	19	20

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)
4. Doubles
5. Commutative Property
6. + 2 (Counting On)

79 Known Facts
21 Facts to Go

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4	5	6	7	8	9	10	11	12
3	3	4	5	6							13
4	4	5	6		8						14
5	5	6	7			10					15
6	6	7	8				12				16
7	7	8	9					14			17
8	8	9	10						16		18
9	9	10	11							18	19
10	10	11	12	13	14	15	16	17	18	19	20

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)
4. Doubles
5. Commutative Property
6. + 2 (Counting On)
7. Subitizing on 10 Frame /
Combos to Make 10

83 Known Facts
19 Facts to Go

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4	5	6	7	8	9	10	11	12
3	3	4	5	6				10			13
4	4	5	6		8		10				14
5	5	6	7			10					15
6	6	7	8		10		12				16
7	7	8	9	10				14			17
8	8	9	10						16		18
9	9	10	11							18	19
10	10	11	12	13	14	15	16	17	18	19	20

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)
4. Doubles
5. Commutative Property
6. + 2 (Counting On)
7. Subitizing on 10 Frame /
Combos to Make 10
8. Go through 10

113 Known Facts
4 Facts to Go

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4	5	6	7	8	9	10	11	12
3	3	4	5	6				10	11	12	13
4	4	5	6		8		10	11	12	13	14
5	5	6	7			10	11	12	13	14	15
6	6	7	8		10	11	12	13	14	15	16
7	7	8	9	10	11	12	13	14	15	16	17
8	8	9	10	11	12	13	14	15	16	17	18
9	9	10	11	12	13	14	15	16	17	18	19
10	10	11	12	13	14	15	16	17	18	19	20

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)
4. Doubles
5. Commutative Property
6. + 2 (Counting On)
7. Subitizing on 10 Frame /
Combos to
Make 10
8. Go through 10
9. + 5 / Go
through 5
(Visualize the 10 frame)
- 119 Known Facts
1 Fact to Go

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4	5	6	7	8	9	10	11	12
3	3	4	5	6	7	8	9	10	11	12	13
4	4	5	6	7	8	9	10	11	12	13	14
5	5	6	7	8	9	10	11	12	13	14	15
6	6	7	8	9	10	11	12	13	14	15	16
7	7	8	9	10	11	12	13	14	15	16	17
8	8	9	10	11	12	13	14	15	16	17	18
9	9	10	11	12	13	14	15	16	17	18	19
10	10	11	12	13	14	15	16	17	18	19	20

1. Zero Property
2. + 1 (Counting On)
3. + 10 (teen numbers)
4. Doubles
5. Commutative Property

6. + 2 (Counting On)
7. Subitizing on 10 Frame /
Combos to
Make 10
8. Go through 10
9. + 5 / Go
through 5
(Visualize the 10 frame)
10. Memorize 6 + 3

121 Known Facts

+	0	1	2	3	4	5	6	7	8	9	10
0	0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10	11
2	2	3	4	5	6	7	8	9	10	11	12
3	3	4	5	6	7	8	9	10	11	12	13
4	4	5	6	7	8	9	10	11	12	13	14
5	5	6	7	8	9	10	11	12	13	14	15
6	6	7	8	9	10	11	12	13	14	15	16
7	7	8	9	10	11	12	13	14	15	16	17
8	8	9	10	11	12	13	14	15	16	17	18
9	9	10	11	12	13	14	15	16	17	18	19
10	10	11	12	13	14	15	16	17	18	19	20

-	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0	0	1	2	3	4	5	6	7	8	9	10										
1		0	1	2	3	4	5	6	7	8	9	10									
2			0	1	2	3	4	5	6	7	8	9	10								
3				0	1	2	3	4	5	6	7	8	9	10							
4					0	1	2	3	4	5	6	7	8	9	10						
5						0	1	2	3	4	5	6	7	8	9	10					
6							0	1	2	3	4	5	6	7	8	9	10				
7								0	1	2	3	4	5	6	7	8	9	10			
8									0	1	2	3	4	5	6	7	8	9	10		
9										0	1	2	3	4	5	6	7	8	9	10	
10											0	1	2	3	4	5	6	7	8	9	10

- -0 & number minus itself
- -1 & -2 /close together numbers (Count back a couple or count on a couple)
- Back 10 / Back to 10 (The teen numbers)
- Up through & Back through 5 (e.g., "it takes 2 to get from 3 to 5 and one more to get to 6, $2 + 1$ is 3" OR $6 - 3 = 6 - 1 - 2$) (visualize the 10 frame)
- Back through 10 (e.g., $13 - 4 = 13 - 3 - 1$)
- Up through 10 (e.g. $13 - 9$ "count on 1 to get 10 and 3 more to get to 13, so 9 is 4 away from 13")
- Think addition / Think addition doubles ($13 - 9 = ?$ Is the same as $9 + ? = 13$)