Dear Families:

We’ve been working on solving addition and subtraction equations in class. In doing this, we have learned the different types of addition problems and strategies below to help us. Here are examples and explanations of each to help support practice at home.

Addition

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| **Type of Fact/Strategy** | **Examples** | **Explanation** |
| Add zero facts | 0 +5  6+0  0+9 | Any number plus 0 equals that number. |
| Count on facts | 1+7  9+2  7+1  2+5 | When you add 1 or 2 to a number, start with the other number and count on/up. |
| Doubles facts | 1+1  2+2  3+3 | Whenever you add a number to itself the sum is even. |
| Doubles facts plus or minus one. | 5+6  7+8  2+3 | Think of a doubles fact with one of the numbers and add or subtract one to find the sum. For example, if you know 6+6=12, then 6+5 would be one less. |
| Make 10 facts | 1+9  2+8  3+7 | Two numbers that add together to make 10. |
| Add 10 facts | 10+2  10+5  4+10 | When you add 1- to any single digit number, You keep the 1 from the 10s in the tens place and the single digit number is in the ones place. |
| Add 9 facts | 9+2  8+9 | If you know the add 10s facts, you just take one away to find the sum for the add 9 facts. |
| Commutative property of addition | 4+1  1+4 | When adding two numbers together, the order of the numbers can be switched and the sum stays the same. |

Subtraction

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| **Type of Fact/Strategy** | **Examples** | **Explanation** |
| Zero Facts | 5-0  8-0 | Any number minus 0 equals itself. |
| Count Back Facts | 5-1  7-2  9-3 | Counting back works best with 1, 2, and 3. Start at the largest number and count back. |
| Take All Facts | 4-4  17-17 | Any number minus itself equals 0 |
| Neighbor Facts | 7-6  7-5 | When the two numbers in a subtraction equation are in consecutive order, the difference will always be 1. |
| Take Away Ten Facts | 12-10  15-10  18-10 | When you take away 10 from a number, you just remove one from the 10s place. |
| Back to Ten Facts | 14-4  16-6  19-9 | When the number in the ones place is the same in both the first and second number in the equation, the difference is 10. |
| Take Half Facts | 8-4  6-3  4-2 | You can use the doubles you know to identify these. Since you know half is taken away, then the difference is the same as the amount taken away. |
| Up to Ten Facts | 17-9  15-8 | When the second number is an 8 or 9, imagine the difference for 10 and then add 1 or 2. |