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Home Connection

In this chapter, your child will extend their knowledge of addition and subtraction from a horizontal format using mental math strategies, to using the vertical algorithms with regrouping.   In class students will use place-value discs to enrich their conceptual understanding of the algorithm as they gain procedural fluency.

A sample of what your student will experience in class is given here:

Addition   Subtraction

66 + 57

66
+ 57

6 ones + 7 ones = 13 ones
Regroup 13 ones as 1 ten and 3 ones.
Students will write the digit 3 in the ones column and the digit 1 at the top of the tens column to represent the regrouped ten:

1
66
+ 57
    3

1
66
+ 57
123

Then add the tens:
6 tens + 5 tens + 1 ten = 12 tens
Regroup 12 tens as 1 hundred and 2 tens.

As with addition, students will learn the subtraction algorithm with no regrouping first and then with regrouping:

53
− 17

There are not enough ones to subtract 7 ones.
Regroup 1 ten as 10 ones.

4 13
5̸3̸
− 17

There are now 13 ones.
13 ones − 7 ones = 6 ones

413
5̸3̸
− 17
    6

4 tens − 1 ten = 3 tens

413
5̸3̸
− 17
  36

Teachers will use the term "regrouping" rather than "borrowing" and will emphasize the place value language. For example: 6 tens plus 5 tens plus 1 more ten equals 12 tens.

What can we do at home?

Automatic recall of addition and subtraction facts to 20 is critical for students' ability to successfully use the addition and subtraction algorithms.   Nightly math fact practice will help your child develop the necessary fluency.   Here are some ideas:

- **Last Out**
  Materials: deck of playing cards with the face cards removed
  - This game can be played with 2 to 5 players
    o Deal each player 5 cards. Flip the top card face-up to start the pile.
    o Red cards are subtraction cards
    o Black cards are addition cards
  - Player One lays down a card and adds or subtracts that number on their card. They then draw another card.
  - Player Two lays down a card and adds or subtracts that number on their card. They then draw another card.
  - Play continues but may not go above the number 30 or below zero. If a player cannot play any card in their hand, they are out. The last player to go out, wins.
    For Example:
    o The start card is 5.
    o Player One lays down a black 8, they say 5 plus 8 is 13.
    o Player Two lays a black 10 and say 13 plus 10 is 23.
    o Player three lays a red 4 and says 23 minus 4 is 19.
- **There are many online programs to practice facts.** Here are 2 suggestions:
   https://xtramath.org   or   www.varsitytutors.com/aplusmath
- **501 UP**
  Materials: deck of playing cards with the face cards and 10 cards removed, paper and pencil for recording
  - Each player starts with 100 written at the top of their paper as their start number
  - Player one draws 2 cards and makes the least two-digit number they can make with the cards. They add that number to their start number to create a new start number.
  - Player two draws 2 cards and makes the least two-digit number they can make with the cards. They add that number to their start number to create a new start number.
  - Play continues until one player's total exceeds the number 501
  - This game can also be played by using 501 as the start number and then subtracting.

Example play: Player 1 starts with 100 and draws:

He makes the number 39 and adds that to his starting number of 100. His new starting number on his next turn is 139.