

**MyMath Chapter 2 (continued): Add and Subtract Whole Numbers**  
**Monday, September 30, 2013-Friday, October 4, 2013**

Standards

- CCSS Math Content Standard 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- CCSS Math Content Standard 4.NBT.3: Use place value understanding to round multi-digit whole numbers to any place.
- PA Mathematics Standard 2.4.4.A: Use models, number facts, and properties to make conjectures, draw conclusions and explain reasons for conclusions.
- PA Mathematics Standard 2.1.4.F: Understand the concepts of addition and subtraction and their inverse relationships; understand the concepts of multiplication and division; use the four basic operations to solve problems, including word problems and equations

	<b>Monday 09/30/13</b>	<b>Tuesday 10/01/13</b>	<b>Wednesday 10/02/13</b>	<b>Thursday 10/03/13</b>	<b>Friday 10/04/13</b>
O B J E C T I V E S	Given the use of manipulatives and instruction on subtraction of whole numbers, TSWBAT accurately subtract multi-digit subtraction problems to 80% accuracy.	Given modeling with manipulatives and direct instruction, TSWBAT accurately subtract across zeros to 80% accuracy.	Given a review of the UPS Check Problem Solving Method and practice implementing the strategy as a class, TSWBAT use the problem solving approach to solve 4/5 problems correctly.	Given prior math knowledge and number sense, TSWBAT think critically and advance through levels on the ST Math program to teacher satisfaction.	Given a review of the problem solving approach and practice with multi-step math problems, TSWBAT use a problem solving approach to solve multi-step equations to 80% accuracy.
	Lesson 6: Subtract Whole Numbers	Lesson 7: Subtract Across Zeros	Lesson 8: Problem-Solving Investigation	ST Math & 24 Math	Lesson 9: Multi-Step Word Problems
P R O C E D U R E S	Use virtual base 10 blocks to demonstrate how numbers can be represented in different ways  Math In My World- use base ten blocks while solving example 1  Guided practice- students come to the board to solve some problems and explain how they solved  Independent Practice #6-18  Closure- review which place value we subtract first and the order in how to solve  <i>Math Intervention</i> <hr/> HW: pp. 97-98	Model the math- show the students how you can take a number, change the value of each place-value, and not change the number overall (take away 10 from the ones and add 1 to the tens, etc.) using base 10 blocks to reinforce regrouping concept  Solve a problem using K9 Cash ( <i>see Evaluation of Day 2 for more details</i> )  Guided practice- students come to solve problems on the board  Independent Practice- #3-12 (pause and review); 13-17  <i>Math Intervention</i> <hr/> HW: pp. 103-104	Review Vocab: equation, unknown  Turn & Talk: try to remember problem solving method steps (UPS Check)  Today- strategy they want us to use is to "draw a diagram"  Learn/Practice/Apply the strategy For apply #1-2, have students come to the board to solve and explain  Independent Practice- "Review the Strategy" <hr/> HW: pp. 117-118	ST Math with the iPads (in the computer labs if the iPads are not available)  24 Math Challenge Competition	Review vocab: equation, unknown, variable  Discuss word problems and what students need to look for when solving; discuss vocab to look for  Math in My World- examples 1-3  Guided Practice- Students come up to write different parts of UPS Check on board and class works together to solve  Independent Practice #2-5; 8-9 <hr/> HW: pp. 117-118

## Math: Daily Reflections

- Day 1
  - All but one student did exceptionally well with subtracting multi-digit numbers today. I noticed one student struggling. This student often would go to regroup and would regroup tens into ones, but would forget to take away a ten while solving (he would only add the 10 ones). I did not want to hold up the whole class for one student when everyone else was flying through the lesson. I continued the lesson at the regular pace and then allowed students to do math centers during intervention time.
  - During this time, I met separately with this student to practice subtraction skills and allow him to use manipulatives and not just watch me use them. This seemed to help. I think some of his error was just trying to work quickly and forgetting to complete a step in doing so.
  - Students continue to enjoy solving problems at the board.
- Day 2
  - Students continue to do well with subtraction. I changed my plans slightly to use “K9 cash to help teach subtraction across zeros. I printed out fake money with 1s, 10s, 100s, and 1000s. The money had pictures of my dog inside the zeros. The kids really found the dog on the money humorous. Then, we tried to solve a problem such as,  $1,000 - 287$  and worked through the problem using the cash as a class. I called students up to be my “bank.” I asked questions such as, “can we take away 8 ones from this 1,000 K-9 cash dollar?” The class worked through the question by going to the bank to regroup so we could take away what we needed to. Students enjoyed this and by solving multiple problems like this, many students were able to be involved. I would like to use this activity if ever teaching subtracting across zeros again.
- Day 3
  - Students did well remembering the steps to the problem solving method and coming up with various ways to check their work.
  - Students did not love completing the box diagrams and were reluctant to draw them when they knew they could solve the problems without them.
  - I taught this lesson because it was in the book, but I am not sure I personally loved it. I do not think the box/bar diagrams helped the students in solving the problem at all. I think this only made it harder for them to solve problems they could have simply solving by setting up a number sentence. I would want to figure out if learning this strategy was important or beneficial to these students before spending a whole class period on it.
- Day 4
  - ST Math and 24 math champion went well.
  - I implemented the changes I wanted to from 24 math last week and saw the benefits (having students keep track of their dots).
  - I think there has to be a better way to organize the students who are “out” of the competition. Many students then continue to play 24 math, but in groups of 3s, leaving some students without partners. I need to more clearly state my expectations after someone loses a round.
- Day 5
  - Today’s lesson went fairly well, but students were incredibly reluctant to use variables or solve the problems how instructed. The students seemed to grasp that variables represent unknown numbers and did not struggle with that understanding.
  - The big issue today came from having students write the number sentences and equations in the style we wanted them, too. I think providing them with examples of how writing it in the way Mrs. Hostetler and I want them to will benefit them in the future would be a good way to help combat some of their reluctance to adopt our method of doing things. I also think it is important to emphasize having an open mind in math class. I think a lot of the frustration today came from the fact that today’s lesson was the first lesson that introduced something completely new to them and everything up until this point has been a review.