Unit Map 2012-2013

Monroe #2 - Orleans BOCES (Regional Collaboration)

Collaboration / Math 2* / Grade 2 (Math Regional Curriculum)

Monday, October 15, 2012, 2:44PM

Standard/Module: Proficiency with Operations 2.NBT.6 (Week 15, 9 Weeks)

Stage 1: Desired Results

Standards Focus

- Major (70%) connects with 2.NBT.2,5,7,8,9; 2.OA. 1-4; 2.MD.5; 2.G2

Gr. 2 Proficiency Map

Standards

NYS: CCLS:Mathematics, NYS: 2nd Grade , Number & Operations in Base Ten
2.NBT Use place value understanding and properties of operations to add and subtract.

- 6. Add up to four two-digit numbers using strategies based on place value and properties of operations.

Enduring Understandings	Essential Questions
1. Two-digit numbers are computed using basic computation strategies, knowledge and skills. 2. Base ten rules apply when adding more than 2 numbers a. Composing (regrouping) is necessary when reaching a bundle of 10. b. Only one digit can be placed in a place value	1. Explain how you would add "these" four two-digit numbers. 2. What happens when digits added together are greater than 9?

Critical Content

1. Basic number facts
2. Add two-digit numbers without composing (regrouping).
3. Add two-digit numbers with composing
4. Properties of operations:

Order or group digits into familiar addition facts when adding more than 3 digits in a place value.

Skills	Vocabulary
1. Students fluently add two or more one digit numbers. 2. Students will add up to four two-digit numbers, without regrouping, accurately using appropriate strategies. 3. Students will add up to four two-digit numbers, with regrouping, accurately using appropriate strategies.	Tier two: strategies, bundle Tier three: composing (in lieu of regrouping), place value, ones, tens, hundreds Digit, one-digit, two-digit numbers

Stage 2: Assessment Evidence

<u>Assessments</u>

Add It Up!
Formative: Test: Written

Students add up numbers (up to four two-digit numbers within a problem) and justify their answers using precise language referencing the properties.

Stage 3: Learning Plan

Learning Activities	Resources
Example: **43 + 34 + 57 + 24 = __** <u>*Associative Property*</u> I saw the 43 and 57 and added them first, since I know 3 plus 7 equals 10. When I added them 100 was my answer. Then I added 34 and had 134. Then I added 24 and had 158. <u>*Place Value Strategies*</u> I broke up all of the numbers into tens	www.illuminations.nctm.org www.illustrativemathematics.org

and ones. First I added the tens. 40 + 30 + 50 + 20 = 140. Then I added the ones. 3 + 4 + 7 + 4 = 18. Then I combined the tens and ones and had 158 as my answer. <u>*Place Value Strategies and Associative Property*</u> I broke up all the numbers into tens and ones. First I added up the tens. 40 + 30 + 50 + 20. I changed the order of the numbers to make adding easier. I know that 30 plus 20 equals 50 and 50 more equals 100. Then I added the 40 and got 140. Students demonstrate addition strategies with up to four two-digit numbers either with or without regrouping. Problems may be written in a story problem format to help develop a stronger understanding of larger numbers and their values. Interactive whiteboards and document cameras may also be used to model and justify student thinking.	

Differentiation Opportunities

Problems may be written in a story problem format to help develop a stronger understanding of larger numbers and their values.

Interactive whiteboards and document cameras may also be used to model and justify student thinking.

Students may think that the 4 in 46 represents 4, not 40. Students need many experiences

representing two-and three-digit numbers with manipulatives that group (base ten blocks) and

those that do NOT group, such as counters, etc.

When adding two-digit numbers, some students might start with the digits in the ones place and record the entire sum. Then they add the digits in the tens place and record this sum. Assess students' understanding of *a ten* and provide more experiences modeling addition with grouped and pre-grouped base-ten materials.

<< Previous Year

Last Updated: Friday, September 28, 2012, 1:56PM

Atlas Version 7.2.6
© Rubicon International 2012. All rights reserved