Unit F - *The Ants Go Marching 10 by 10!*

Overview

This unit incorporates concepts of multi-digit addition and subtraction within story problem contexts. Students will spend time working together to solve and create story problems involving adding and subtracting 3-digit numbers within real-world applications such as a toy store and party planning. Emphasis is placed on student-invented and generated strategies, such as concrete models, drawings, and strategies based on place value through 1,000.

21st Century Capacities: Synthesizing, Collective Intelligence

Stage 1 - Desired Results

ESTABLISHED GOALS/ STANDARDS

MP1Make sense of problems and persevere in solving them
MP3 Construct a viable argument and critique the reasoning of others.

2.OA.1 Solve one- and two step addition and subtraction problems with sums and minuends to 100 involving situations of adding to, putting together, taking from, taking apart, and comparing, with unknowns in all positions

2.NBT.4 Compare pairs of 3-digit numbers, based on an understanding of what the digits in the one, tens and hundreds places represent and use >, <, = symbols to record comparisons of two 3-digit numbers.

2.NBT.7 Add and subtract within 1000, using

Transfer:

Students will be able to independently use their learning in new situations to...

1. Apply knowledge of multi-digit addition and subtraction to solve problems. (Synthesizing)
2. Work cooperatively to employ learning strategies effectively (Collective Intelligence)

Meaning:

UNDERSTANDINGS: *Students will understand that:*	ESSENTIAL QUESTIONS: *Students will explore & address these recurring questions:*
1. Generating meaningful strategies to solve problems helps to remember and extend our knowledge to other problems 2. Effective problem solvers work to make sense of the problem before trying to solve it.	A. How do I work through problems without giving up? B. Does my answer make sense and how can I explain my answer to someone else? C. How can I work with others to break a problem down into manageable parts? D. What is the best way to show my thinking?

concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. 2.NBT.8 Mentally add or subtract 10 or 100 to or from any 3-digit number between 100 and 900 2.NBT.9 Explain why strategies for adding and subtracting 2- and 3-digit numbers work, using place value and the properties of operations 2.MD.8 Solve money story problems involving dollars, quarters, dimes, nickels, and pennies; use \$ and ¢ signs appropriately	*Acquisition:*	
	Students will know… 1. Some strategies for adding and subtracting are more effective and efficient 2. The position of any individual digit determines the size of the group that the digit is counting 3. There are multiple ways we can work together to solve problems 4. <u>Vocabulary:</u> hundreds, multiples, skip-counting, tens, divide, division, equal groups, half, quarter, equal parts, fraction, half, share, third, eighth, whole, fair, predic(tion), ones, cent, dollar, decimal point, place value, story problem, strategies, compare, left over	*Students will be skilled at…* 1. Creating addition, subtraction, and money story problems in a real-world context 2. Adding and subtracting 2- and 3-digit numbers using invented/generated strategies (counting skills, number sense, open number lines, etc) 3. Recognizing the value of digits in numbers to 1,000 4. Working with a partner to solve a problem