



# Grade 2 - Unit F - Adding/Subtracting within 1000

## Unit Focus

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.

## Stage 1: Desired Results - Key Understandings

Standard(s)	Transfer	
<p><b>Standards</b></p> <ul style="list-style-type: none"> <li>• Common Core               <ul style="list-style-type: none"> <li>○ <i>Mathematics: 2</i> <ul style="list-style-type: none"> <li>▪ Represent and solve problems involving addition and subtraction.</li> <li>▪ Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. <i>(CCSS.MATH.CONTENT.2.OA.A.1)</i></li> <li>▪ Understand place value.</li> <li>▪ Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons. <i>(CCSS.MATH.CONTENT.2.NBT.A.4)</i></li> <li>▪ Use place value understanding and properties of operations to add and subtract.</li> <li>▪ Add and subtract within 1000, using 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. <i>(CCSS.MATH.CONTENT.2.NBT.B.7)</i></li> <li>▪ Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. <i>(CCSS.MATH.CONTENT.2.NBT.B.8)</i></li> <li>▪ Explain why addition and subtraction strategies work, using place value and the properties of operations. <i>(CCSS.MATH.CONTENT.2.NBT.B.9)</i></li> <li>▪ Work with time and money.</li> <li>▪ Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? <i>(CCSS.MATH.CONTENT.2.MD.C.8)</i></li> </ul> </li> </ul> </li> </ul>	<p><i>Students will be able to independently use their learning to...</i></p> <p><b>T1</b> Initiate a plan using a variety of methods/strategies appropriately, execute it, and evaluate the reasonableness and accuracy of the solution.</p> <p><b>T2</b> Construct viable arguments using clear and appropriate mathematical language and critique the reasoning of others.</p>	
	Meaning	
	Understanding(s)	Essential Question(s)
	<p><i>Students will understand that...</i></p> <p><b>U1</b> Mathematicians construct viable arguments to explain problems, solutions, and mathematical representations.</p> <p><b>U2</b> Mathematicians monitor progress while problem solving, change course if necessary and evaluate the reasonableness of their solution.</p>	<p><i>Students will keep considering...</i></p> <p><b>Q1</b> Have I sufficiently supported my answer and shown my work?</p> <p><b>Q2</b> What makes an effective problem solver?</p>
Acquisition of Knowledge and Skill		
Knowledge	Skill(s)	
<p><i>Students will know...</i></p> <p><b>K1</b> Some strategies for adding and subtracting are more effective and efficient</p> <p><b>K2</b> The position of any individual digit determines the size of the group that the digit is counting</p>	<p><i>Students will be skilled at...</i></p> <p><b>S1</b> Creating addition, subtraction, and money story problems in a real-world context</p> <p><b>S2</b> Adding and subtracting 2- and 3-digit numbers using invented/generated strategies</p>	

## Stage 1: Desired Results - Key Understandings

- Mathematical Practices
- Make sense of problems and persevere in solving them. *(CCSS.MATH.MP.1)*
- Construct viable arguments and critique the reasoning of others. *(CCSS.MATH.MP.3)*

**Madison Public Schools Profile of a Graduate**

- Analyzing: Examining information/data/evidence from multiple sources to identify possible underlying assumptions, patterns, and relationships in order to make inferences. *(POG.1.2)*
- Collective Intelligence: Working respectfully and responsibly with others, exchanging and evaluating ideas to achieve a common objective. *(POG.3.1)*

**K3** There are multiple ways we can work together to solve problems

**K4** Vocabulary: 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

(counting skills, number sense, open number lines, etc)

**S3** Recognizing the value of digits in numbers to 1,000

**S4** Working with a partner to solve a problem