

Unit 6: Addition and Subtraction Within 1,000

Unit #:	APSDO-00017520	Duration:	16.0 Day(s)	Date(s):	02-27-2016 to 02-27-2016
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Team:
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Grades:
 2

Subjects:
 Mathematics

Unit Focus

In this unit, students will focus on adding and subtracting within 1,000. Students will learn how to read and write numbers to 1,000 using base ten numerals, number names and expanded form. Upon completion of the unit, students will be able to compare two 3-digit numbers using the symbols $>$, $=$, and $<$, and add and subtract within 1,000 using concrete models and drawings. Students will also be able to mentally add or subtract 10 and 100 from a given number. Primary instructional materials for this unit include On Core and Everyday Mathematics.

Stage 1: Desired Results - Key Understandings

Established Goals	Transfer	
<p>Common Core <i>Mathematics: 2</i></p> <ul style="list-style-type: none"> • Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. <i>CCSS.MATH.CONTENT.2.NBT.A.3</i> • Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons. <i>CCSS.MATH.CONTENT.2.NBT.A.4</i> • Add and subtract within 1000, using concrete models or drawings and strategies based on place value, 	<p>T1 (T12) Compose and decompose numbers to establish relationships and perform operations.</p> <p>T2 (T13) Move from one representation to another without changing the quantity.</p> <p>T3 (T14) Perform operations within the real and complex number system.</p> <p>T4 (T50) Based on an understanding of any problem, initiate a plan, execute it and evaluate the reasonableness of the solution.</p> <p>T5 (T53) Articulate how mathematical concepts relate to one another in the context of a problem or in the theoretical sense.</p> <p>T6 (T51) Examine alternate methods to accurately and efficiently solve problems.</p> <p>T7 (T52) Use appropriate tools strategically to deepen understanding of mathematical concepts.</p>	
	Meaning	
	Understandings	Essential Questions

<p>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.</p> <p><i>CCSS.MATH.CONTENT.2.NBT.B.7</i></p> <ul style="list-style-type: none"> Mentally add 10 or 100 to a given number 100900, and mentally subtract 10 or 100 from a given number 100900. <i>CCSS.MATH.CONTENT.2.NBT.B.8</i> Look for and make use of structure. <i>CCSS.MATH.MP.7</i> Make sense of problems and persevere in solving them. <i>CCSS.MATH.MP.1</i> Model with mathematics. <i>CCSS.MATH.MP.4</i> 	<p>U1 (U101) When objects/numbers are combined, mathematical rules guarantee the resulting quantity.</p> <p>U2 (U102) The value of a number is quantified by the placement of its digits.</p> <p>U3 (U502) Effective problem solvers identify and apply an appropriate model, tool, or strategy.</p> <p>U4 (U530) Every problem belongs to a category of problems that has a similar structure and set of characteristics; which means it can be solved using a similar model.</p> <p>U5 (U562) Mastery of basic facts and rules maximizes conceptual and procedural fluency.</p>	<p>Q1 (Q102) What rule do I know OR what pattern can I recognize to help me make a prediction/solve this problem?</p> <p>Q2 (Q104) How do I use my number sense to perform operations?</p> <p>Q3 (Q503) What strategies/approaches are best for this problem?</p> <p>Q4 (Q501) What do I picture/visualize when I look at this problem?</p> <p>Q5 (Q530) Is this problem similar to a problem I have solved before?</p> <p>Q6 (Q531) What values, numbers, quantities, and/or symbols can be used to solve a problem?</p> <p>Q7 (Q563) How does being fluent with basic facts and rules help me solve a complex problem?</p>
Acquisition of Knowledge and Skill		
Knowledge		Skills
		<p>S1</p> <p>Write the number represented by base 10 blocks in expanded notation and standard form</p> <p>S2</p> <p>Draw a pictorial representation of numbers as a strategy to add</p> <p>S3</p> <p>Add and subtract within 1000</p> <p>S4</p> <p>Solve addition and subtraction number stories within 1000</p> <p>S5</p>

		<p>Write the number within 1000 that is 10 more and 10 less than the given number</p> <p>S6</p> <p>Write the number within 1000 that is 100 more and 100 less than the given number</p> <p>S7</p> <p>Count by 10s and 100s within 1000</p> <p>S8</p> <p>Explain strategies used for solving addition and subtraction number stories within 1000</p>
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