



TPSD Grade 2 Math Syllabus Units 8-10, Third Nine Weeks

Unit 8: Numbers to 1,000

Unit Summary: In Topic 9, students' understanding of place value is extended to 1,000. This is a foundation for adding and subtracting within 1,000. This topic focuses on the meaning of numbers with 3 digits, beginning with using concrete and pictorial models of place value blocks. Various number forms are brought into Topic 9, as students work with standard form (293), word form (two hundred ninety three), and expanded form ($200+90+3$).

Performance Skills:

- I can understand place value and count by hundreds to 1,000.
- I can use place value blocks and drawings to model and write 3-digit numbers.
- I can tell the value of a digit by where it is placed in a number.
- I can read and write 3-digit numbers in expanded form, word form, and standard form.
- I can make and name a number in different ways to show the same value.
- I can use place value patterns to mentally count by 1's and 10's from a given number.
- I can skip count by 5's, 10's, and 100's using a number line.
- I can compare numbers using place value.
- I can compose and write a three-digit number that is greater than or less than a three-digit number.
- I can look for patterns to help me solve problems.

Academic Vocabulary/Words to Understand:

Hundred, thousand, digit, place value chart, standard form, word form, expanded form, compare, greater than $>$, less than $<$, equal to $=$, decrease, increase

Unit 9: Add Within 1,000 Using Models and Strategies

Unit Summary: Topic 10 has a focus of expanding students' understanding of addition with 3-digit numbers. Students will learn to add by tens and hundreds mentally, recognizing patterns in the tens and hundreds digits. Mental strategies will include breaking apart and compensation, which allows students to use easier numbers to perform addition. Visual models of open number lines and place value blocks are used to develop the understanding of counting on, adding up, and the understanding of partial-sums as a strategy.

Performance Skills:

- I can add 10 or 100 mentally using what I know about place value.
- I can use an open number line to add 3-digit numbers.
- I can add 3-digit numbers using mental math strategies.
- I can add 3-digit numbers using partial sums.
- I can use models to add 3-digit numbers.
- I can use different addition strategies and explain why they work.
- I can think about and check my work as I solve a problem.

Academic Vocabulary/Words to Understand:

No new vocabulary in this topic.

Unit 10: Subtract Within 1,000 Using Models and Strategies

Unit Summary: Topic 11 focuses on subtraction of 3-digit numbers using models and strategies. Students will explain why subtraction strategies work using place value and properties of operations. While students learn and practice various strategies to solve subtraction problems, the ending lessons in Topic 11 have students choosing to use whatever strategy makes sense to them. Having the flexibility to choose is the key to developing strategic math thinkers.

Performance Skills:

- I can subtract 10 or 100 mentally using what I know about place value.
- I can use an open number line to count back to subtract 3-digit numbers.
- I can use an open number line to add up to subtract 3-digit numbers.
- I can use mental math to subtract.
- I can use models to subtract 3-digit numbers.
- I can explain why subtraction strategies work using models, place value, and mental math.
- I can solve problems that take more than one step.

Academic Vocabulary/Words to Understand:
No new vocabulary in this topic.

Just as students explain and share their reasoning at school, ask your child to explain and share at home. Help start a conversation that is modeled from the classroom.

After your child has completed a problem, begin the conversation with “Did you understand how to solve that problem? Show Me.” Having your child explain the strategy used and the steps to complete the problem solidifies understanding.

A follow up question could be “Are there other ways this problem could be solved?” Guiding your child to the understanding that there can be more than one way to solve a problem is a life skill.

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