

Curriculum Parent Overview (Grade 1)

MATHEMATICS

UNIT #1: BUILDING NUMBERS AND SOLVING STORY PROBLEMS (ADDITION, SUBTRACTION AND THE NUMBER SYSTEM 1)

CONTENT FOCUS:

Students are introduced to several classroom routines and engage in activities that focus on counting, representing numbers to 20 on two Ten Frames and describing attributes of 2-D and 3-D shapes. Students will play games that involve connecting counting to addition and subtraction, adding/subtracting one or two to numbers to 10 and combining two quantities. They also are introduced to and solve addition / subtraction story problems.

UNIT FOCUS:

- Understanding and extending the counting sequence: Students get repeated practice with the counting sequence, both forward and backward, and with counting, keeping track of, and representing quantities. As students count unorganized sets of objects, they are introduced to a new tool - Two Ten Frames - which helps them organize objects into rows of 5 and groups of 10. This lays the foundation for understanding that ten ones can also be seen as one ten, and for developing an understanding of place value.
- Understanding, representing, and solving problems involving addition: Students make an important transition as they begin to relate their knowledge of counting and quantity to addition. They build on their understanding that each number in the counting sequence is 1 more than the number before it and recognize that counting on 1 or 2 (or any amount) from a given number is the same as adding 1 or 2 (or any number) to that given number (e.g., 3 crayons + 3 crayons and 3 crayons + 4 crayons). While beginning first graders typically *count all* to add two number (i.e., count out the number in one group, count out the number in the second group, and then count them all from 1) many students begin to *count on* and a few may even use *numerical reasoning* (e.g., use the known combination of $4 + 4$ to solve $4 + 5$).
- Understanding, representing, and solving problems involving subtraction: As students engage in games and activities, solve story problems, make sense of numbers and discuss their strategies, the focus is on developing subtraction strategies that are based on understanding operation, the problem, and quantities. This parallels the work done with addition. The focus is on *making sense* of story problems and different strategies to solve. Many first graders *count all* to subtract - they count out the total, then count the amount that is left; some students *count back* from the total amount or *count up* from one number part to the total. Some begin to develop *numerical reasoning* (e.g., use $10 - 5$ or $6 + 4$ to solve $10 - 6$).

MATHEMATICAL PRACTICES:

MP1: Make sense of problems and persevere in solving them.

MP8: Look for and express regularity in repeated reasoning.

CONNECTIONS TO PREVIOUS CONTENT:

This unit builds on the work students did in Kindergarten. Students had many experiences counting sets of up to 20 objects, which helped them learn to say one number for each object and to develop a system for keeping track of what had been, and what remained to be counted.

They developed an understanding of the ways written and spoken numbers to 20 connected to quantities, began to think about teen numbers as being made of one group of ten and some ones, as well as developed fluencing with rote counting to 100.

CONNECTIONS TO FUTURE CONTENT:

Students apply their growing knowledge of numbers, quantities, and the operations of addition and subtraction in all of the following first grade units. In Unit 3, students count and compare larger quantities, and develop fluency with counting to 120. Students will encounter problems with more than two addends. Students will also develop writing equations throughout the unit.

MATH AT HOME:

- Play any of the following games with your child on SavvasRealize site after it has been introduced in the classroom:
 - Build It: Numbers to 20
 - One or Two More
 - Double Compare
 - Double Compare Dots
 - Five-in-a-Row
 - Roll and Record
 - One or Two Less
 - Five-in-a-Row: Subtraction
 - Roll and Record: Subtraction
- Encourage students to write the equations when playing the games.
- Review the Math Words and Ideas videos for this unit on SavvasRealize site.