Math News

EAGLE MOUNTAIN SAGINAW ISD
Curriculum and Instruction

Our Learning Goals:

- Become fluent with addition combinations with sums up to 20
- Compose and decompose numbers up to 100 in more than one way including expanded form
- Use a variety of strategies to solve addition and subtraction problems with answers up to 1,000

Why Is my Child Learning Strategies?

The Texas Essential Knowledge and Skills (TEKS) are the standards Texas teachers follow to ensure a quality education for all students. Our standards specifically state that it is important for students to solve problems using multiple strategies and mathematical relationships.

"Students with good number sense can think and reason flexibly with numbers, use numbers to solve problems, spot unreasonable answers, understand how numbers can be taken apart and put together in different ways, see connections among the operations, figure mentally and make reasonable estimates." "In contrast, students with poor number sense tend to rely on procedures rather than reason, often do not notice when answers or estimates are unreasonable and have limited numerical common sense." (Marilyn Burns, About Teaching Mathematics)

Expanded Form

Expanded form is a way to write numbers that shows the place value of each digit. Examples:
236 = 200 + 30 + 6   **1,571** = 1,000 + 500 + 70 + 1

Fact Fluency

In this unit, students will continue practicing the Make 10, Plus 1 and Plus 2 combinations as well as two new strategies:

- **Doubles**: A fact that has two addends that are the same (5+5, 8+8, 3+3 etc…)
- **Near Doubles**: A fact that is 1 more or 1 less than a doubles fact (5+6, 8+7, 2+3m etc…)

Students will be creating flash cards in class to sort into two categories, "facts I know" and "facts I'm still working on." You will notice that they have a clue line at the bottom. Now, if students forget a fact, they have a way to solve it quickly and efficiently instead of counting on their fingers.

> 5 + 8
> 8 + 5
> Clue: Think 5 + 5 + 3

If you have flash cards and want to practice at home, pull out just the facts that we have been working on in class.
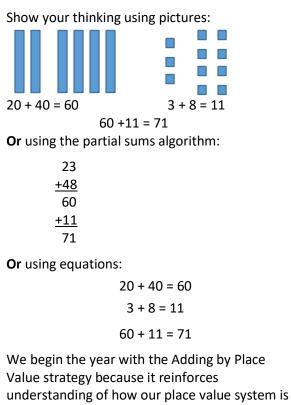
How Will My Child be Assessed?

Students will be assessed informally and formally throughout the unit with opportunities to learn from their peers and their own mistakes. An assessment will be given at the end of the unit with both open ended and multiple choice questions.

Students will not be quizzed using timed tests for their basic addition facts. Teachers will use a variety of methods to observe students including one-on-one interviews and observing games that include fact practice.

Addition Strategy #1:

Adding by Place Value

Once students understand place value, this is one of the first strategies they utilize. Each addend is broken into expanded form and like place values are combined. When combining quantities, children can work from left to right because the magnitude of the numbers is not changed.

23 + 48

Show your thinking using pictures:

20 + 40 = 60   3 + 8 = 11

60 + 11 = 71

Or using the partial sums algorithm:

$$\begin{array}{r} 23 \\ +48 \\ \hline 60 \\ +11 \\ \hline 71 \end{array}$$

Or using equations:

20 + 40 = 60

3 + 8 = 11

60 + 11 = 71

We begin the year with the Adding by Place Value strategy because it reinforces understanding of how our place value system is based on tens and ones. We will learn more strategies as the year progresses.