Common Core Math in Kindergarten

The main focus in kindergarten is very basic number sense. Of course they'll work on counting as part of this. One aspect that will be new for some classrooms is counting starting from numbers other than one. This helps with addition and subtraction later.

Kindergarteners will compare groups of things to decide which is bigger. They will combine groups together or take some away from a group. Eventually they'll use written numbers to describe what's going on.

Kindergarteners will usually have "rug time" discussion of math as well as play games. A change (for some) is that all of this investigation is carefully directed to develop skills important for later grades.

One of the most important skills in math that students begin in kindergarten is putting things together and taking them apart in various ways. They'll think about different ways that a number can be made from two other numbers as they begin to think about addition and subtraction. The geometry kindergarteners learn reinforces this idea of putting together and taking apart, too. For example, students may be asked to make two triangles from a square or to put together shapes to form a new one.

Examples:

The ideas in "My Book of Five" (see reverse) help kids understand what it means to add and subtract. An important application of this idea comes in representing the "teen" numbers as ten and some more ones (So that 13 means 10 and 3 more ones) because it is the foundation for regrouping/ exchanging (what most of us learned as "borrowing and carrying"). Recognizing the various combinations of numbers that "make up" the numbers from 1 to 10 is a critical building block in learning multi-digit arithmetic.

Tips for parents:

Even though you may not have been taught math in this way, you can still help your child.

- If you count with them, work on starting from any given number.

- Play games that encourage breaking apart numbers in different ways.

- For teen numbers, you may even count in the unit-form way that emphasizes the ten
(e.g. eight, nine, ten, ten-and-one, ten-and-two, ten-and-three, ...) as well as with standard names.

Example: My book of five

Materials:

- Double sided counters
- Markers that are the same colors as the counters
- Teacher-made "My Book of 5" (see below for detailed directions)

Action:

Students will be given double sided counters/dots (see picture of counters at right). It is important for the markers to match the colors on the counters.

Students take five counters in their cupped hands (or a cup), shake them around, and pour them onto the desk. Next, they count how many counters are yellow and how many are red. Students then record the numbers in their book and write a corresponding equation. For example, if the counters landed so that 1 was yellow and 4 were red, then the student would draw one yellow dot and four red dots and then write "1+4=5" under the drawing. The student would then collect the counters and roll them again. For each combination of colors, the students record with a picture and an equation. Students continue until they fill their book of 5. The teacher can choose how many pages to put in, somewhere between five and eight is a good number so that students get a chance to see multiple combinations.

After the students have completed their books, the teacher should have a whole-group discussion to make the number relationships explicit. One way to do this is to write each of the two addends into a table and to discuss possible patterns and reasons for the pattern. The teacher can ask specific questions such as, "What do you notice about the numbers in the table?" Or "Why is it that as one number gets bigger, the other number gets smaller?"