K.CC Guess the Marbles in the Bag

Alignments to Content Standards:  K.CC.C.7

Task

This activity can be done as an entire class or in small groups.

Materials

Paper bags and marbles (or some other counter, as long as it is relatively noisy).

Actions

(Whole-class version) The teacher secretly places between 1 and 10 marbles in a paper bag, then shows the bag to the class. After shaking it enough times for students to hear the marbles inside, and 4 or 5 students guess how many marbles are in the bag. The teacher writes the guesses on the board. Afterwards the contents of the bag are revealed and counted out. The teacher writes the number representing the total on the board, and the students then help sort their guesses into less than, greater than, or equal to the number of marbles in the bag. The game repeats until everyone has had a chance to guess at least once.

(Small group version) This works like the class version but one student in a group fill the bag with marbles themselves and the rest of the group tries to guess the number. With this variation it is practical to allow the students to both hear and feel the marbles inside the bag before they make their guess.

IM Commentary
The iteration of greater than, less than, and equal to with a specific "target number" will help strengthen the concept. It is important that all the numerals used in the game are written down both to aid in comparison and to meet the standard.

For an even more physical experience with the whole-class version, the students can write their answers on index cards and line up on one or the other side of the teacher depending if they were greater than or less than the target number.