



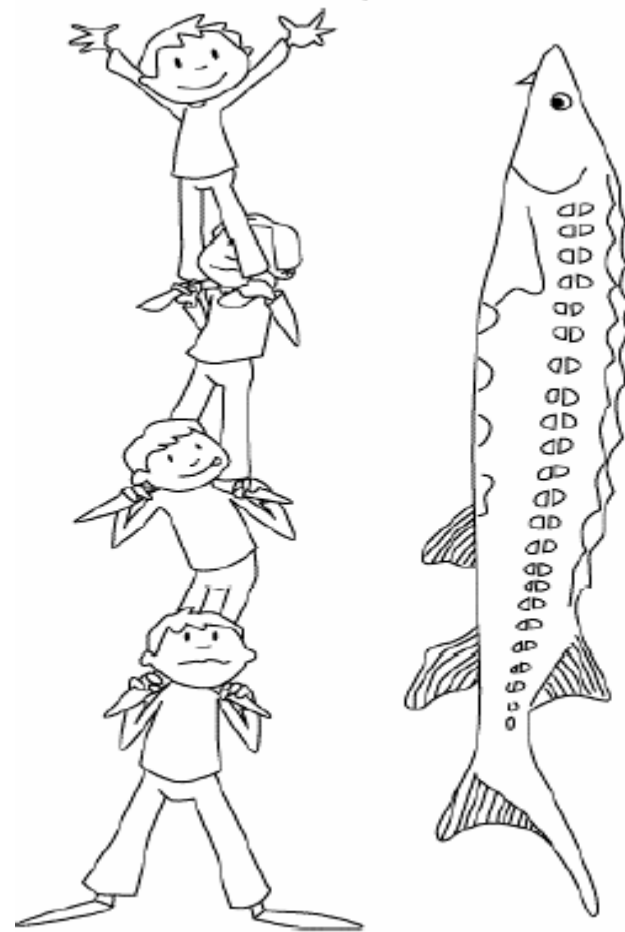
Maggie's Activity Pack

Name _____

Great BIG Numbers!

Sometimes we have to use BIG numbers. We see something big. It might be a big fish. How big is the fish? We might see many ants. How many ants do we see? We might see one million ants! That's a lot of ants.

A googol is the name of a very BIG number. This number has a one. Then there are 100 zeros after it. Now that's a BIG number!



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Dear Colleague,

I find young children relish learning terms they see as important and unusual. They love to go home and “teach” their parents something. You may be teaching/reviewing place value and what a fun extension the term, googol will be for your class. (You may learn more about this term by reading the intermediate activity of this same number.) I usually ask my students to go home and “be a teacher” by explaining an unusual term to their families. This helps “cement” the meaning of the word in their young minds, and it has the added benefit of keeping parents informed about your course of study. And...by the way, parents are usually SO impressed at the “extras” you are teaching their children!

I also want to share with you one of my favorite place value/writing big numbers activities for the younger crowd. I first saw Claire Nichols, first grade teacher at The Hill School, present this fun long-term project. She collected toilet paper rolls, cut poster-size graph paper into columns of four squares and taped these to each toilet paper roll. Each child received one of these with the instructions to begin at 0 and write the numbers in order. Each time a zero was written, the child had to bring the roll to the teacher for checking. The child read the numbers, “0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10” and received either a stamp or a punch-out on their graph roll for correctly writing them. If a mistake was made, it was simply erased and rewritten. The children went back to continue their project after their brief “teaching time” with Claire. She used clothespins with children’s names to identify the owner of each roll and to keep the rolls clipped together. This is a school-year long activity, and it is amazing how long (and how high!) these rolls become. Children begin to see patterns in numbers and are better able to write BIG numbers correctly (how many of you see one hundred written as 10001?). They learn they need to move from the use of one square to the use of two squares and 99 then requires the use of only 3 squares. It also helps children to practice writing numerals correctly – how many of you see seven written backwards so many times that you begin to think that the backwards form is correct? Claire always enlisted the help of parent volunteers to cut apart the graph paper so she had a ready supply.

This is just one of a googol of great math teaching tips! Let us know YOUR favorite!
Happy teaching,
Kathy

Goals:

Information about big numbers, including the term googol is presented using age-appropriate reading vocabulary. A chart is presented so children can write the number one googol. Follow-up place value activities are suggested. The activity correlates with the National Principles and Standards Number and Operations Strand: Understand numbers, ways of representing numbers, relationships among numbers, and number systems.