

What's This Number?

Summary

Students will learn the correct way to write numbers.

Main Core Tie

Mathematics Kindergarten

[Strand: COUNTING AND CARDINALITY \(K.CC\) Standard K.CC.3.](#)

Materials

- Magic Bag (draw string fabric bag or brown paper bag!)
- [Number Cards](#) (pdf)
- 2 fly swatters
- Gold star stickers
- [Magic Cards](#) (pdf)

Background for Teachers

Kindergarten teachers must insist on some basics! Students must be taught to hold their pencils correctly. Is there a "correct" way? Yes! (Use your district's adopted writing curriculum.) Kindergarten students need be told on the first day of school that since they are now in school they need to do things the "school way." They must hold their pencils the "school way." Whew! This is a hard one, but so critical! A lefthanded student should hold their pencil as if a mirror image of the righthanded student. If kindergarten teachers do not insist on this, students will struggle with writing for the rest of their educational careers. A helpful hint is to have students gently hold a wadded up tissue in their fingers as they are writing.

Is there a correct way to "write" numbers? Yes! Check with your school district first and then be firm! Demand that your students follow the basic moves so that all other writing will be uniform and correct. Remember, we are not farmers when we write, our letters do not grow up out of the bottom line! We always start at the top of numbers (and letters for that matter). Students' writing strokes will eventually lead into cursive writing strokes, so why not give your students the best opportunities possible to be successful at writing. Remember you are their *first* teacher! You set their course! If you allow your students to write numbers any way they choose, you are allowing their bad habits to become solidified. We all know how hard it is to change a habit!

Studies show that having students "say and write" numerals is not enough. This does not guarantee that students understand what numerals are and what amount they actually represent.

Intended Learning Outcomes

5. Understand and use basic concepts and skills.

Instructional Procedures

Invitation to Learn

What do you think I've got in my Magic Bag? Hmmmm... do you think it is a pig? No, I don't hear any oinking! Do you think it's a tractor? No, my bag is definitely too small for a tractor.

Look at this! Can you tell what this is? I'm not really sure. I thought it looked like an ice cream cone at first, but then... show just a part of a picture sticking out from your Magic Bag. (Continue to pull the picture out of your bag, letting the students call out what they think it is until the whole picture is out of the bag. This should be a picture of something common, maybe even a picture of something in your classroom. Continue to pull out a few more pictures of items they are familiar with.)

You are such a smart class. Now let's see if you can figure out what this is... (Slowly begin to pull out one of the [Number Cards](#), allowing students to call out guesses. Tape the numbers to your board in a random fashion after you have pulled them out. Continue until you have pulled out the numbers 0 to 9.)

9.) Instructional Procedures

Pull pictures of familiar items from your Magic Bag.

Pull out pictures of the numbers from 0 to 9 ([Number Cards](#)). Tape them to your board.

After the numbers are all taped to the board, call on two students. Hand them each a fly swatter. See who can "swat" the number that you call out first!

Tell students that these are "magic" numbers ([Magic Cards](#)). There is a magic place where people start when writing each number. Pass out star stickers and guide students where to place them on their *Magic Cards*. This is a magical place to begin!

Ask students if they can tell where the magic place to start is. It is where the star is.

Tell students you want them to use their finger and trace each number as you walk around and observe. Tell them you want them to see if they can memorize each number.

Walk around your classroom to see if students are beginning in the correct place. Keep track of those not starting correctly.

Have students guess what number you are drawing in the air. Tell them to look at their cards and try to figure it out. Do this several times. Have a student come up and close his/her eyes.

Have him/her try to figure out what number s/he is feeling on a fur-embossed card. Guide his/her finger to the star and begin.

Extensions

Materials

Mini Mat

Extensions

Glue Embossed Numbers: Have students work in small groups tracing over glue embossed number cards (felt, sandpaper, fake fur, etc.).

Pie Tin Numbers: Have students work in small groups to trace the numbers in a pie tin of sand. Remember, students must start in the correct place.

Shout Out: Roll large foam dice. Students shout out the number of how many dots are showing. They could also hold up the correct numbered spoon.

Dot Flashes: Show students paper plates with dots on them arranged like on a die. Tell them that you want them to memorize how many dots are on each plate. Flash a plate at different groups or individual students. They must quickly tell you how many dots. Students need to become automatic at this. Why? When they don't know what they're supposed to be counting, then they will have a "picture" to help them remember.

Numbered Spoons: Write the numerals 1 through 10 on the back of 10 spoons. Students use their spoons when they need to quickly count items. Have students use their numbered spoons during Dot Flashes or when you are showing different pictures. (Clip art books and computer programs are great for making "dot cards" out of shapes and characters rather than just dots.) They should start to recognize the order of the dots. Students should not have to continue to count them.

- [Dot Bingo](#)

: Play Dot Bingo to learn to recognize the written numeral, the amount of dots, and the number of fingers representing that numeral.

Students can practice stringing numbered tiles onto a pipe cleaner in the correct order.

12 Cups: Show students 12 cups and 78 Popsicle sticks. The cups are numbered from 1 to 12.

Explain that they must look at the number on the cup and then put the correct number of sticks in each cup. If they put the correct amount in each cup they will not have any sticks left over.

Do It All: Students roll dice, show the number card for the matching number, and then put that amount of items on their *Mini Mat*.

Family Connections

12 Toothpicks: Repeat the 12 Cups activity, but send home 12 squares of paper and 78 toothpicks.

Assessment Plan

Assessment is an integral part of instruction. Ongoing assessment is the best foundation for instruction. Teachers must plan ahead and know what questions they are going to ask.

As you are doing the activity, keep track of students who respond incorrectly. Write on a clipboard immediately so you do not forget which student was struggling with the concept.

After the activity, call on individual students to come and participate in the activity with just you. Listen to the words they use. Record and provide feedback if they use the words correctly.

Bibliography

Research Basis

Fischer, F.E., (1989). A Comparison of Curricula Used in Kindergarten for the Development of Number Concept.

Fischer studied two curricula for teaching number concepts to kindergarten children. She found that using a curriculum where students simply “counted, said, and wrote” numbers did not improve a child’s number concept, even when this program was upgraded to include many manipulative experiences. She found that where students studied numbers in a part-part-whole curriculum their abilities to solve addition and subtraction word problems were enhanced.

Kamii, C. (2000). Teachers Need More Knowledge of How Children Learn Mathematics. NCTM.org. Kamii believes that teachers need to allow children more time to explore and manipulate the parts of numbers before prematurely teaching a mathematical “rule” such as “adding on.” When children are not allowed enough time to explore putting together two parts to make a new whole they will never understand that addition creates a “larger” amount. Just as children begin crawling before they are off and running, so it is that children need to count “all” before they count “on.”

Authors

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