# Recognizing Numerals and Numbers

## Summary

This activity will help students to connect the numeral (symbol) to the number (quantity in a set).

### Main Core Tie

Mathematics Kindergarten

Strand: COUNTING AND CARDINALITY (K.CC) Standard K.CC.4.

### Additional Core Ties

Mathematics Kindergarten

Strand: COUNTING AND CARDINALITY (K.CC) Standard K.CC.1.

Mathematics Kindergarten

Strand: COUNTING AND CARDINALITY (K.CC) Standard K.CC.3.

Mathematics Kindergarten

Strand: COUNTING AND CARDINALITY (K.CC) Standard K.CC.5.

### Materials

 Numbers All Around Me by Trisha Callella Jones Television and VCR

- Number Flips master (pdf)

**Scissors** 

Paper punch

One chicken ring for each participant

One dot cube

One numeral cube

One numeral spinner (1-9)

Beans

- Roll and Cross Out (pdf)

handout

- Spot Number Dots (pdf)

masters

#### Additional Resources

- Numbers All Around Me
  - , by Trisha Callella Jones (Creative Teaching Press); ISBN 1-57471-377-9
- Looking for Numbers
  - , by Margie Burton, Cathy French and Tammy Jones; ISBN 1-58344-208-1

## **Background for Teachers**

Number sense is a way of thinking about numbers and quantities that is flexible and must be developed by each individual student. One author calls it "friendliness with numbers." Number sense grows as students are exposed to activities that cause them to think about numbers in many ways and in different contexts. A person has "number sense" if s/he has an intuitive feel for number size and combinations, as well as the ability and facility to work with numbers in problem situations in order to make sound decisions and reasonable judgments. Helping students to develop number sense requires appropriate modeling, posing process questions, encouraging thinking about

numbers, and creating a classroom environment that nurtures number sense.

## **Intended Learning Outcomes**

- 1. Demonstrate a positive learning attitude.
- 4. Develop physical skills and personal hygiene.
- 5. Understand and use basic concepts and skills.
- 6. Communicate clearly in oral, artistic, written, and nonverbal form.

### Instructional Procedures

Invitation to Learn

Read the following prompt from the overhead projector: "Close your eyes and try to remember places where you have seen numerals."

Instructional Procedures

Say, "As I read this story, raise your hand when you hear a place where you have seen numerals."

Read Numbers All Around Me.

Discuss places we see numbers. Ask: "Have you thought of anything that I did not read in this story?"

Students can work with numbers easily during daily opening meetings. Use <u>Number Flips</u> (pdf) and attach them to daily concepts.

## Connecting Numeral to Number

It is important for students to connect the numeral (symbol) to the number (quantity in a set). This has to be done in many different ways with kindergarten students.

For individual assessment, use <u>Number Flips</u> (pdf) with paper plates that have colored dots on them. Say, "Show me the

numeral."

Games are wonderful ways for students to make connections to numerals before they have to write them.

Play the following games:

Roll My Number

All students stand up.

Each student has a number cube.

Teacher says a number and when a student rolls that numeral, s/he may sit down.

### Cross out your telephone number

Teacher will have each child's telephone number written on a card with the child's name.

Using a 0-9 numeral spinner, the student takes a turn and spins. If the spinner lands on a numeral that is in his/her

telephone number, it may be crossed out.

When the entire telephone number is crossed out, the student can move to another activity. (If the child does not have a telephone, perhaps a relative's number could be used.)

## Mary Lou's Roll and Cross Out

Using the Roll and Cross Out (pdf) handout, each player uses a dot cube (die) and rolls it when it is his/her turn.

Whatever number comes up, the student puts an X in a box above the numeral.

When s/he gets one column of the same number crossed out, the worksheet is considered complete.

## Jumbled Numbers

(Similar to Math Their Way Crazy Mixed Up Numbers.)

This game can be played with partners or with four students at a table.

Using the <u>Spot Number Dots</u> (pdf) masters, students draw a card from the set of shuffled numeral cards in the center of the table.

The card is placed over the dots that match the numeral.

The winner may be determined by the first to get three in a row, or the first to get the entire card covered.

### Extensions

Attach numerals to everything that is done during the day: Count how many words are in a sentence; count how many letters are in the word, etc. Ask: "How many more or less?" When graphing, be sure to attach a numeral to each column.

## Adaptations for students with special needs

The numerals could be tactile so in addition to seeing the numeral, students could trace and feel it with fingers.

Put the dots under the numeral to allow students to count to know what the numeral is.

## **Family Connections**

Send a note asking parents to go on a number hunt with their child and write down or draw all the places they see numbers.

Using a take-home note, have students look at their house and copy the numerals on their house, copy the numerals on their car's license plate, and any other numerals they see at home.

Encourage parents to allow their children to freely explore a calculator to see how numbers work. Encourage parents to use an old telephone, or unplug their phone, and let their child punch in the numbers of their phone number.

## Assessment Plan

Teacher assessment in kindergarten is primarily by keen observation of the students as they interact with the teacher. Can the child identify a specific numeral when asked? Can the child tell the difference between a numeral and an alphabet letter? Can the child point to the correct numeral when asked? However, an easy pencil/paper assessment may be done by printing the numerals 1-10 on a sheet of paper in random order and asking the child to touch each numeral and tell you its name. This is done in August on the state kindergarten pre-assessment test and again in May on the state post-assessment test. This kind of assessment should be done at the end of each term.

### **Authors**

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