Who's On First?

Summary

Various activities help kindergarteners understand and use simple numbers.

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.

Group Size

Large Groups

Materials

Invitation to Learn

Fishing net

Fishing line

Stand in Line

Ordinal Numbers Cards

Seven Blind Mice

- Seven Blind Mice
- Seven Blind Mice Pattern
- Elephant pattern

Colored pencils or crayons

Envelope

Where's Harley?

- Where's Harley?
- Harley the Rabbit Pattern
- Children Pattern

Apartment Building Floor Mat

Index cards

Construction Paper

Markers

Additional Resources

Books

10 Little Rubber Ducks, by Eric Carle; ISBN 0-060-74075-2 First, Second, by Daniel Kharms; ISBN 0-374-32339-9 Henry the Fourth, by Stuart J. Murphy; ISBN 0-06-446719-8 On the Stairs, by Julie Hofstrand Larios; ISBN 1-886910-34-0 Seven Blind Mice, by Ed Young; ISBN 0-329-04408-7

The Hat, by Jan Brett; ISBN 0-399-23101-3 The Mitten, by Jan Brett; ISBN 0-590-44015-2

The Twelve Days of Christmas, by Jack Kent; ISBN 0-590-06163-1

The Twelve Days of Kindergarten, by Deborah Lee Rose; ISBN 0-8109-4512-6

The Twelve Days of Summer, by Jan Andrews; ISBN 1-55143-365-6
The Twelve Days of Winter, by Deborah Lee Rose; ISBN 0-439-92932-6

Where's Harley?, by Carol and Amanda Felton; ISBN: 1-57565-132-7

Organizations

National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502 (703) 620-9840, www.nctm.org

National Association for the Education of Young Children, 1509 16th St. N.W., Washington, DC 20036 (202) 232-8777 or (800)424-2460, naeyc.org

Background for Teachers

Integrating curriculum is easy when it comes to math and literature. There are so many wonderful books available that cannot only enlighten students in literacy but strengthen math skills as well. Using literature is one of the easiest ways to teach students the use of ordinal numbers. We are constantly asking our students, "What happened first in the story?"

As Marilyn Burns, the creator and founder of Math Solutions Professional Development says, "Evidence shows that teaching math through children's books motivates children to learn math in exciting new ways, encourages students to think and reason mathematically and builds students' appreciation for math and literature."

Many literature books today are written with an emphasis on mathematics. Teachers need to build a library of literature books with a mathematical connection. Using literature is a way to engage students in learning mathematics. It helps students understand that mathematics is connected to the real world and can solve real world problems.

Intended Learning Outcomes

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

Instructional Procedures

Invitation to Learn

Use a fishing net and spread it out on the floor. Then go fishing for students. Pretend to throw out your fishing line and catch a student by name. Reel them in! Have the students stand in a row on the net in the order that they were caught. Ask questions: Who was the first fish to be caught? Who was the third fish to be caught? Continue asking questions. Upon completion of the questions, pretend to throw the fish back into the water. The game can continue by having a new angler.

Instructional Procedures

Stand in Line

Choose several students to stand in a line in front of the class.

Have the class count how many students are in the line.

Ask: Who's first? Second? Third?

Now, have the students turn the other direction so that the person that was last is now the leader.

Ask: Now, who's first? Second? Third?

Discuss how their places are different and why.

Students could also hold up cards with 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, and 10th.

This activity can be done anytime that the class is lined up. Use this activity all year to help reinforce ordinal counting.

Seven Blind Mice

Day One:

Read the book Seven Blind Mice, by Ed Young.

Integrate prediction strategies before reading the story (e.g., what will this story be about?).

As the story is read, point out the order in which the colored mice appear.

Once the story is read, have the students recall the different colors of the mice.

Post the colored mice (that you have colored from the *Seven Blind Mice Pattern*) as the students recall the colors.

Ask the students which colored mouse came first, second, third, fourth, fifth, sixth, and seventh.

Move the mice into the correct order in which they appear in the story.

This is a great introduction to ordinal numbers.

Day Two:

Read the story again. Put the mice in order and write the ordinal numbers next to the colored mice (1st, 2nd, 3rd, 4th, 5th, 6th, and 7th).

Day Three:

Read the story again. Ask the students which days of the week each mouse appeared in the story.

Write the days of the week next to each mouse.

Day Four:

Pass out a copy of the *Seven Blind Mice Pattern* and have the students color each mouse according to the colors in the book and then cut out each mouse. Students can write the correct ordinal number or number on the back of the mice.

Pass out a copy of the *Elephant Pattern*. Have students color the elephant and then cut it out. Use a large envelope to store the cutouts.

Day Five:

Read the Seven Blind Mice story to the class.

Have the students use their mice and elephant to follow the story.

Students then retell the story to a friend using their cutouts.

Students should be using ordinal numbers when retelling the story.

Where's Harley?

Day One:

Read the book *Where's Harley?*, by Carol and Amanda Felton.

Use prediction strategies before reading the story.

As the story is read, point out the different floors in the apartment building where Harley and the children can be found.

Day Two:

Display the apartment building floormat.

Write 1st-10th on the index cards and label the floors of the apartment building.

Explain that in an apartment building the number of floors starts at the bottom and goes to the top.

What other things can you think of where the numbers start at the bottom and go to the top? Stairs, elevators, escalators, buildings, etc.

Identify on the apartment building mat where Harley started in the story and where he was finally found.

Have *Harley the Rabbit Pattern* colored, cutout, and laminated. Move Harley from where he started to where he was found.

Day Three:

Have the *Children and Harley Patterns* colored, cutout, and laminated ready to use.

Display the apartment building floormat.

Read the story.

Retrace the route that Harley took through the apartment building and post the location of the children as you read the story. This will allow students to see why Harley was so difficult to find.

Day Four:

Give each student his/her own copy of the *Children and Harley Patterns*. (Make smaller) Have students color and cut out the patterns.

An apartment building is made out of construction paper and markers. Make sure there are 10 floors in the apartment building.

Have the children put their cutouts and apartment building in a large envelope.

Day Five:

Have students remove their cutouts and apartment building from the envelope.

Read the story Where's Harley?

Have students move their cutouts to the appropriate place on the apartment building as the story is read.

Extensions

Literature books are the perfect extension for ordinal numbers. Students can recall the order of events from any book (e.g., ask the students what happened first, second, third, etc.).

Everyday events in the classroom can be discussed using ordinal numbers (e.g., the first thing we do when we get to school is?).

The fishing net, from the invitation to learn, could be used to have students identify attributes or patterns.

Have a classroom contest and give prizes using the words first place, second place, third place, etc.

Use stuffed animals and have the students line them up. Ask students which animal is first? Second? Third? Turn the animals around and ask the same questions.

The calendar is a perfect way to introduce ordinal numbers. Point out to students that when we say the date, we are using ordinal numbers.

Sequencing activities lend themselves nicely to the use of ordinal numbers.

Family Connections

Send home the envelope containing the cut out mice and elephant from the *Seven Blind Mice* book and the cutouts from *Where's Harley?* Have the students retell these stories to their parents using the ordinal numbers.

Check out the book *Where's Harley?* and have the students explain to their parents how Harley moves from floor to floor. Encourage the students to use the ordinal number vocabulary to explain what is happening in the story. The activities at the back of the book could also be done at home.

Have the students fill out a paper explaining their routines at home using ordinal numbers (e.g., getting up in the morning, after school, and getting ready for bed).

Send home a monthly calendar and encourage the students to use ordinal numbers when explaining the dates on the calendar.

Assessment Plan

For Seven Blind Mice, check to see if students have written the correct ordinal number on the back of each mouse.

Watch while the stories *Seven Blind Mice* and *Where's Harley?* are recreated by the students. Make sure that each student is putting items in the correct order/place.

Student watching is the observation and recording of student's interactions during an instructional activity. These observations can be recorded on small sticky notes or an <u>Observation Sheet</u>.

Bibliography

Research Basis

Sutton, J. & Krueger, A.(Eds.). (2002). ED Thoughts: What We Know about Mathematics Teaching and Learning. Aurora, Co: *Mid-continent Research for Education and Learning*, p. 54.

In real life, learning experiences are not separated into academic disciplines or subject areas. A student's classroom experiences should mirror this. Interconnections among the disciplines, when emphasized at all grade levels, will support learning by making the mathematics curriculum more meaningful.

Burns, M. (2005). Lessons by Marilyn Burns Using Storybooks to Teach Math. *Instructor Magazine*. 27-30.

For many of us, the storybook shelf isn't the first place we go to when we start to plan a math lesson. But children's books can be a great math-teaching tool. They spark students' imaginations in ways that exercises in textbooks or workbooks often don't. When I visit classrooms, I find that connecting math to literature can boost the confidence of those who love books but are "Math-wary." And students who love the abstraction of math can learn to appreciate stories in a whole new way. Caskey, M. (2001). A Lingering Question for Middle School: What is the Fate of Integrated Curriculum? *Childhood Education*, Vol.78.

A truly integrated curriculum enables teachers and their students to make connections between their school learning experiences and real life, while the separate subject approach leaves students with a disconnected view of knowledge that fails to reflect the way that real people attack problems in the real world.

Authors

Utah LessonPlans Rebecca Moffat