Unit: Cooking With The Family
Lesson #2 of 7
Oops, Someone Went Shopping for Tortillas!
Mathematics
By Lourdes Zamora

Introduction
In this lesson, students will learn the concept behind probability. Students will learn that when dealing with probability games such as loteria, rueda de la fortuna, or bingo, the outcomes can be different each time they draw a card or spin a wheel.

Outcomes
1. Upon completion of this lesson, the students, as a class, will have the opportunity to participate in a probability game. They will keep track of a class tally, collect the data, and make a class graph.

Standard
- 2M-R2 Perform simple activities involving probability, collect the data and graph it.

Resources And Materials
- A copy of the book entitled, “Tortillas Para Mama.”
- Overhead projector
- Game spinner
- Sticky notes
- 3-5 individual chalkboards (slates)
- Markers
- Several packages of tortillas (different brands)

Process
1. Begin the lesson by reading, “Tortillas Para Mama.” After reading the story, create a small discussion about tortillas. Questions may consist of the following: "Why do you like/don't like tortillas? What's the best brand of tortillas in the stores? Are all tortillas the same? What can you make with tortillas?"
2. After you've engaged the students in this topic, present the following situation: “Many times, someone in the house can't make tortillas because she/he has other things to do. Because of that, someone may have to buy the tortillas at the store. But if everyone is busy, then someone needs to volunteer to go to the store. Right? What would happen if your Mom or Dad or Aunt, or Grandfather sent someone to the store to buy tortillas for the first time?” At this time, accept any possible answers!
3. Tell your class they will be playing a probability game to find out what kind of tortilla the family member will most likely bring home.
4. Show and explain the class the purpose for the spinner and slates. Demonstrate the process of spinning the wheel and make a tally mark on the appropriate slate. It would be wise to do some practice trials before starting. Once your kindergartners understand the process, begin the spinning. Ask them what they think the arrow will face each time.
Have 3-5 class members keep track of the tally for you. When the spinning is over, direct students to the tally charts. Have them count each tally mark. Perhaps you can have them count by 2's! Ask your students, "Which tortilla has the most tallies? Least? Why is that? Is it possible that someone will bring home the tortillas with the least number of tallies? Are you certain that someone will bring the tortillas with the most tallies?" Once that discussion is over, have students place their sticky notes on the bar graph to show the data collected.

Assessment

As part of their assessment, make observations of students' responses. The next day, have them do a similar activity with tamales! Read the book entitled, “Too Many Tamales,” before beginning the activity. Make sure you discuss the different types of tamales (e.g., tamales de carne-meat, tamales de dulce-sweet, tamales de queso-cheese) and ways they are prepared. Grade their work according to the following rubric:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>All work is complete and accurate</td>
</tr>
<tr>
<td>3</td>
<td>Work is complete with some minor errors</td>
</tr>
<tr>
<td>2</td>
<td>Part of the work is done with some errors</td>
</tr>
<tr>
<td>1</td>
<td>Student makes an attempt</td>
</tr>
</tbody>
</table>

Extensions / Modifications

- For the older students, have students create a tally, label it themselves, and keep track of their own tally. Later, they can construct any type of graph (picture, bar, pie, line, etc.) with the data collected. As part of their assessment, have students make an oral presentation of their work, explaining their findings and the reason behind it.

Multiple Intelligences:

- Logical/ Mathematical
- Kinesthetic
- Spatial
- Verbal/Linguistic