The Old Lady and Probability

Summary

This activity uses the song There was an Old Lady to help students understand probability.

Materials

The Old Lady Spinner Activity

- There Was an Old Lady songcards
- Listen! music CD, by the artist CJ

The CD and songcards are available for purchase at National Educational Network

For each student or group:

- The Old Lady Probability Spinner (pdf)
- The Old Lady Data Collection Sheet (pdf)
- The Old Lady Graph (pdf)

Choose the Animal Activity

For each student or group:

- The Old Lady Animal Cards (pdf)
 Brown paper bag
- The Old Lady Data Collection Sheet (pdf)
- The Old Lady Graph (pdf)

The Hungry Old Lady Activity

For each student or group:

- The Old Lady Puppet (pdf)
 Brown paper bag
- The Old Lady Animal Cards (pdf)
- The Old Lady Prediction Sheet (pdf)

Additional Resources

- The Old Lady Who Swallowed a Bat
- , by Lucille Colandro; ISBN 0-439-36863-4
- There Was a Cold Lady Who Swallowed Some Snow
 - , by Lucille Colandro; ISBN 0-439-47109-5
- There Was an Old Lady Who Swallowed a Trout
 - , by Teri Sloat; ISBN 0-439-13949-X
- I Know An Old Lady Who Swallowed a Pie
 - , by Alison Jackson; ISBN 0-439-36551-1

Background for Teachers

This activity is designed to be taught and used over several lessons. Under instructional procedures, you will find ideas for different activities. No more than one activity should be taught in a day. Some activities may take several days to complete.

Intended Learning Outcomes

- 2. Develop social skills and ethical responsibility.
- 6. Communicate clearly in oral, artistic, written, and nonverbal form.

Instructional Procedures

Invitation to Learn

Start by having the class sing the song *There Was an Old Lady* using the song cards and *Listen!* music CD.

Instructional Procedures

The Old Lady Spinner Activity

Before starting this activity, show the class <u>The Old Lady Probability Spinner</u> and ask the following questions: Which animal are you more likely to spin? Which are you less likely to spin? What does equally likely mean? Each student or group should spin the spinner an equal number of times and using tally marks record the outcomes on <u>The Old Lady Data Collection Sheet</u>. Following this, students or groups graph their findings on <u>The Old Lady Graph</u>. Students should be provided with the opportunity to share their findings with the class. The data should be compared and a class discussion on less likely, more likely, and equally likely should be facilitated.

Choose the Animal Activity

First, students need to cut out The Old Lady Animal Cards and place them in the brown paper bag. Then have students draw one card out of the bag and put a tally mark on The Old Lady Data Collection Sheet. Have students place the card back into the bag, mix them up and draw another animal card. Have them continue drawing, placing a tally mark in the appropriate place, for a set number of times. Students graph their data on The Old Lady Graph and share it with the class. Another way to do this activity would be to have the students leave the card out after they draw it. Discuss how this would change the probability. Make sure students understand the terms, less likely, more likely, and equally likely.

The Hungry Old Lady Activity

Have students make <u>The Old Lady Puppet</u> and cut out <u>The Old Lady Animal Cards</u>. As the teacher, you direct the activity. Have students lay their animal cards out on their desks. Instruct the students on how many cards to put in the puppet. For example, the teacher might say, "I know an Old Lady who swallowed two dogs." The students would then put two dog cards in their puppet. Before going on the teacher should ask a probability question. For example, "If I were to reach into the Old Lady's stomach right now would I be less likely, more likely or equally likely to choose a dog?" Then have students make a prediction on <u>The Old Lady Prediction Sheet</u> Following that, have students reach into the bag and see what animal they choose. Have them mark on their paper if their prediction was correct. This activity is great for building number sense along with probability understanding.

Extensions

There are many different children's books that are a play on *The Old Lady Who Swallowed a Fly*. Under *Additional Resources* you will find a list of some of these books. After exposing students to some of these stories, they could write their own version. This writing activity is also great practice for students to write in rhyming form. This activity could also be done as a whole class shared writing activity.

Family Connections

All of these activities are great for students to do at home with their families. Ideally, students should do the activities in class first, and then take them home and teach their family how to do the activity. A short explanation of the activity should be sent home so that parents or other family members understand the concept that should be emphasized.

Assessment Plan

The Old Lady Spinner Activity and Choose the Animal Activity

One form of assessment for both of these activities would be to listen to the students as they share their findings from the activity with the class. Another assessment would be to observe the students work on the data collection sheet and graph.

The Hungry Old Lady Activity

Observing the students as they complete this activity is a great way to assess their understanding. Another way to assess this activity would be to observe the students' work on the prediction sheet.

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