

Native American Guessing Game Graph

Adapted from "Hidden Bean Guessing Game" in the "North American Indians: Integrated Activities for Whole Language and Thematic Teaching". Creative Teaching Press, Inc. 1990

Time: 30 minutes

South Carolina Education Standards

- Mathematics – 1.MDA.4-5; 2.ATO.1, 2.MDA.9-10; 3.MDA.3

Materials Needed:

- An object that fits completely in the hand (See activity steps)
- Scrap paper for notes
- Pencil
- 1 Native American Guessing Game Graph per group of four (printable from this lesson or can be made using generic graph paper)

Introduction:

While Native Americans worked hard gathering food and building shelters, they also liked to play games and have fun. Guessing games were common among Native American groups all over the country. These games could be played with a wide variety of materials, including sticks, buttons, stones, bones, or pieces of fired clay. Sometimes game pieces were simple materials picked up from the forest floor. Other times the pieces were carefully made by a skilled craftsman. Games could be played as a simple way to pass the time, as practice for important skills needed in hunting or tracking, or had significant spiritual or cultural meaning for the people playing. In this activity, students will have the opportunity to play a simple guessing game and use their math skills to graph the results.

Activity Steps:

1. Students an object to hold in their hands for this guessing game. Simple materials such as beans or buttons can be used, or you can add to this activity by having students make their own with paper, stone, sticks, or clay.
2. Divide the students into groups of four. In each group have the students pair off with, two students as the guesser and two as the hider.
3. On their scrap paper, each student will be responsible for keeping track of how many times they guess correctly.
4. The guesser closes his or her eyes. The hider takes the object and puts both hands behind their back. They pass the marker back and forth between their hands.
5. Once the hider decides which hand they want the marker to be in, they make two fists and tell the guesser "ready". The hider puts both hands in front of them, so the guesser can't tell which hand the marker is in.
6. The guesser opens his or her eyes and has to guess which hand the marker is in. If they are correct, they make a mark on their paper. If they are wrong, they do nothing.
7. Rotate jobs within the group so each person has had the chance to guess 10 times.
8. On the group's graph paper, have the students make a bar graph of the correct guesses, with the players name on the bottom and number of correct guesses on the side.
9. Within their group have them discuss the following questions:
 - a. Who had the most correct guesses?
 - b. What was the total number of correct guesses?
 - c. Were there more correct guesses or wrong guesses?

10. As a class discuss the results. If there's time, create a class graph with everyone's results. Discuss the previous questions using the class data.

Conclusion

How was this game similar to games we play today, or games you play with your friends? How was it different? What is the importance of games in today's society? Think about some of the different games we play today: some have large followings such as football or soccer, some are seen as intellectual battles like chess, and others are board games played with friends or family. What are the similarities and differences between these games? Do you know any Native American games that are similar to the games listed above, or any other games you know?

Discuss any major outliers in the numbers recorded on the graphs (i.e. was there anyone who got their guesses all/mostly right or wrong?). Why might this have happened?

Native American Guessing Game Graph

Number of Correct Guesses	10				
	9				
	8				
	7				
	6				
	5				
	4				
	3				
	2				
	1				
	Player 1:	Player 2:	Player 3:	Player 4:	
	_____	_____	_____	_____	

Names of Players

1. Who had the most correct guesses?

2. What was the total number of correct guesses?

3. Were there more correct guesses or wrong guesses?
