

Name _____

Native American Stick Game

This game is based on a Native American game of chance. In the original game, sticks were 25 cm or about 10 inches long and carved with intricate designs.

How to Play

- Decorate one side of four sticks using either symmetrical designs or Native American glyphs. Examples can be found online at <http://www.pbs4549.org>.
- Play the game in groups as directed by your teacher. Put 12 game tokens at the center of your group.
- Decide on how many points each possible toss will get. The possibilities are
 - All four sides are the same – four colored or four plain _____ points
 - Two are plain and two are colored _____ points
 - Three sides are the same (colored or plain) _____ points
- Toss your sticks up and see what sides are facing up when they land on the table. Take as many tokens from the center as you decided above. If there are not enough, you can take them from someone else in your group. Keep track of your tosses.
- The winner is the person who gets all of the tokens.

Event	Tally	Frequency	Probability*	Percent
4 sides alike				
Two plain- two colored				
3 sides colored or plain				

*Remember: Probability is the event divided by the total. For example, when tossing a coin, $P(\text{heads}) = \frac{1}{2}$.

Let's figure theoretical probability.

- Make a tree diagram that shows this problem.
- Write the sample space.
- What would a fair point system be?