

Statistics: Activity # 3:

Towers of Hanoi

Standards: CCSS- Conditional Probability and the Rules of Probability S-CP

Objective: The object of the activity is to use permutations and combinations and move all the disks onto a different pole. You can only move one disk at a time and you must follow size order -- a bigger disk can't go on a smaller disk. [Hint: try it with 3 disks to start with.]

History

The "legend" which accompanied the game stated that in Benares, during the reign of the Emperor Fo Hi, there was a temple with a dome which marked the center of the world. Within the dome, priests moved golden disks between diamond needlepoints, a cubit high and as thick as the body of a bee. God placed 64 gold disks on one needle at the time of creation. It was said that when they completed their task, the universe would come to an end.

Resources:

<http://www.superkids.com/aweb/tools/logic/towers/>

<http://www.mazeworks.com/hanoi/>