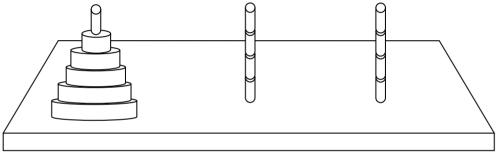
Mathematics, Grade 8

Model: **Tower of Hanoi**



There is a legend in Vietnam that Buddhist monks are involved in a process of moving golden disks from one peg to another in a temple in Hanoi. The legend states that when all the disks have been transferred the world will end.



Construct a model of a simple version of the tower of Hanoi. Predict how many moves are necessary to move all five disks from one peg to another. Record your prediction. You may move only one disk at a time and must always place a smaller disk atop a larger disk. Document your moves. Analyze your data. Repeat the procedure until you can formulate a rule. Use your rule to predict how many moves it would take to do a tower of three or six disks. Test your new prediction.

Share the model with the class and explain your findings.