The Towers of Hanoi

The game itself

- Arrange your chosen number of rings on one spike, from largest to smallest, with the largest ring on the bottom.
- Your goal is to get the entire set of rings onto another spike by moving one ring at a time.
- You may <u>not</u> put a larger ring on top of a smaller one.
- The first task is to reach the goal; the second task is to do it in the least number of moves possible.
- It helps to have someone to join you in counting moves, as it is easy to get lost!



Analysing the game mathematically

Collect your results in a table, then try to predict how many moves will be necessary for 6 & 7 rings. There are several possible patterns that produce the same answer.

Then for your big finish, predict how many moves will be necessary for 25 rings. If you can do that, you can predict the number of moves necessary for *n* rings!

# of rings	1	2	3	4	5	6	7	25	п
minimum # of moves	1								