

## **Board games, Maths and recycling. What do they have in common?**

We're presenting three board games that enable students to learn Maths and that are made with recycled material (such as cardboard, carton screw caps, cork stoppers, metal boxes, and so on).

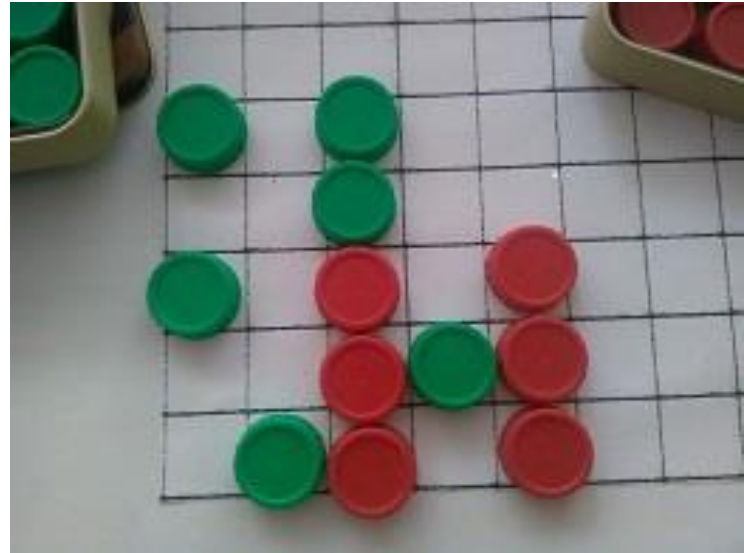
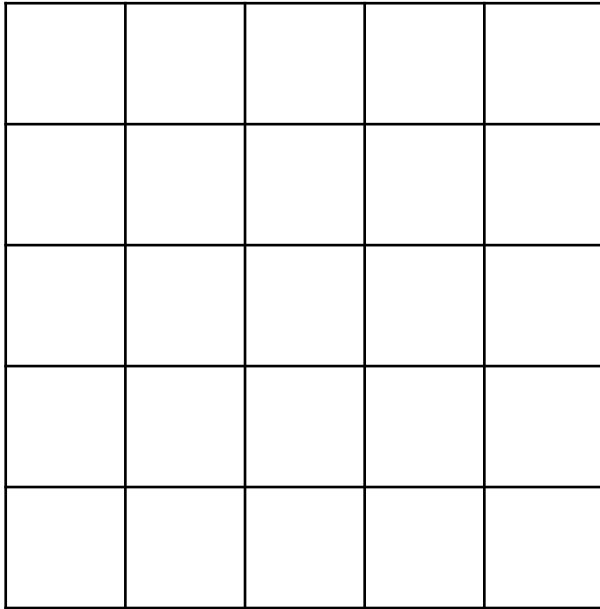
## *Board games + Maths*

### **What do you have to do to win?**

- Run: the first one to arrive wins.
- Capture: the rival counters have to be eliminated.
- Block: the rival has to be blocked.
- Align: the pieces have to be aligned.

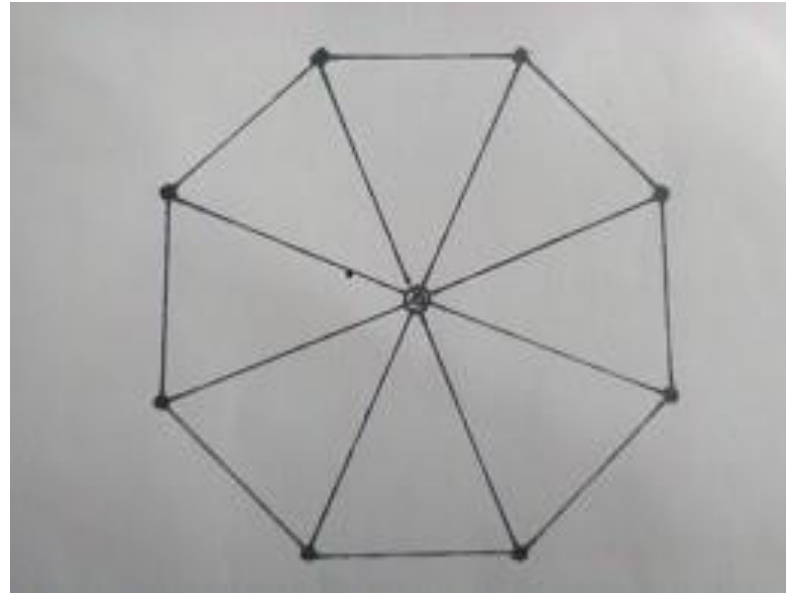
# 1st Game

**Grille** (from France)

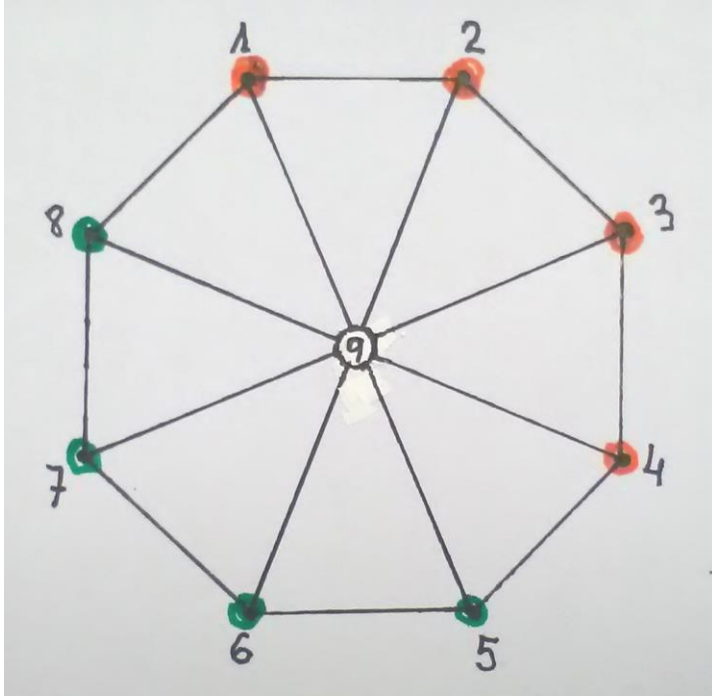


# 2nd Game

**Mu Torere** (origin: New Zealand)



*Kewai* = octagon vertex  
*Putahi* = octagon centre



## Toss sequence in a round:

The green counters start:

5 -> 9 , 4 -> 5

9 -> 4 , 3 -> 9

4 -> 3 , 9 -> 4

3 -> 9 , 2 -> 3

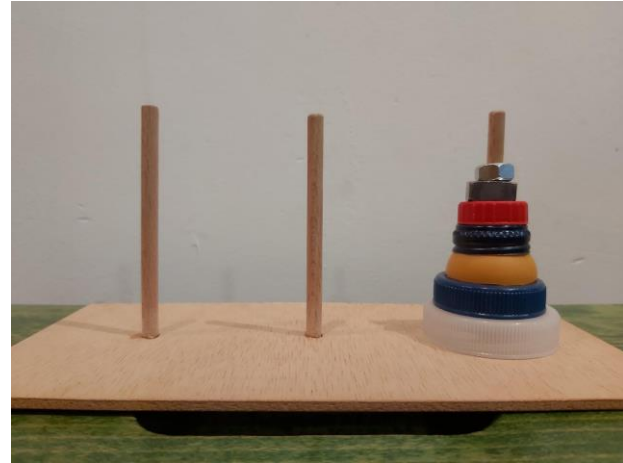
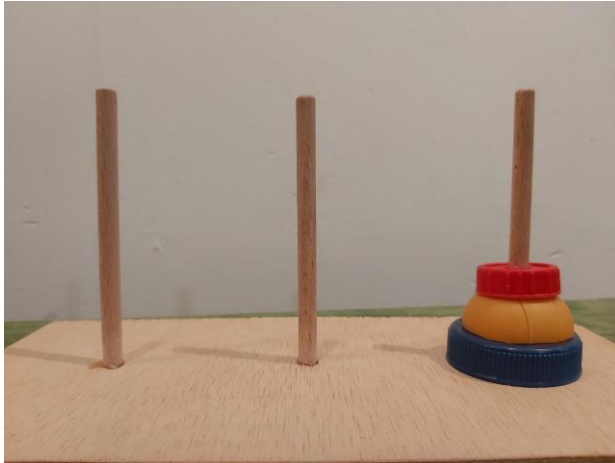
9 -> 2 , 1 -> 9

2 -> 1 , 3 -> 2

The red counters win.

# 3rd Game

## Hanoi towers (from France)



*“Even in the games of children there are things to interest the greatest mathematician.”*

Gottfried Wilhelm Leibniz (1646 - 1716)