# Communities for Immunity <br> <br> Probability Machine 

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## To Do

Turn the board over so all of the beads are at the top.
Turn the board so the beads begin to fall. Watch the distribution of the beads.

## Mess Around

How often does a colored bead land in an outer column? How about in a center column?

## What's Going On

As a ball hits a peg, it has equal odds of bouncing left or right. The odds that a ball ends up in a given column is related to the number of different ways the ball can reach that column, like left-left-right and left-rightleft. Therefore, balls have a higher probability of reaching the center columns.

This board is designed to demonstrate the binomial distribution described by Sir Francis Galton.

