

## Random sample experiment with tokens (information for teachers)

Task: "Pull a token from each cup."

Divide the class into five groups for this experiment. The students must not know the contents of the cups.

### 1 Materials

- 5 cups (dice cups, paper cups, or similar)
- 5 socks
- 5 numbered cards
- 20 red tokens (alternative: balls, marbles, or similar)
- 20 blue tokens (alternative: balls, marbles, or similar)



Materials for the experiment (1 set).

### 2 Preparing and running the experiment

- Before class starts, place the tokens into five cups. The number of red and blue tokens differs for each cup (see table). Pull a sock over each filled cup. Distribute the cups to five different tables. Assign a number to each cup (it is best to glue the numbered card to the cup).

Cup no.	Red tokens	Blue tokens
1	8	0
2	0	8
3	4	4
4	6	2
5	2	6

- Divide the students into five groups. Each group goes to a different table. Each child in the group may pull a token from the cup and replace it. The group notes the results in the table provided on the worksheet.
- When each child has pulled a token, the group goes to the cup at the next table and repeats the procedure. At the end, each group should have completed the exercises at all five cups.