



CENTER FOR
SCIENCE & MATH
EDUCATION

Questions



Is it better to switch or keep your original cup? Does your frequency distribution support this?

How likely are you to win the game? Are there things you can do to increase your probability of winning?

Do you think your parents could figure out the trick to playing this game?



Six Cup Game



Wins	Losses
Player switched cups.	

Wins	Losses
Player kept their cup.	

Rules

- The host has **six** cups now.
- The player looks away (**no peeking**), and the host puts a prize under one cup.
- The player selects one cup.
- The host takes away **four** of the remaining cups which **do not** contain a prize.
- The host asked the player if they want to keep their cup or switch to the other cup.
- The player then looks what's under their cup and if they got the prize!

Questions

- Is it better to switch or keep your cup?
- What is your probability of winning the game using either strategy?