

# Stacking Dice



Earn the most points by winning stacks of four dice.

## What you need

Dice (8 per person)

Stacking Dice Mat

## What to do

1. Each player gets one set of 8 dice of the same color. Decide who goes first.
2. All players now gently roll all eight dice.
3. The first player stacks one of their dice on top of another player's die that has the same number on top. For example, if you have a 2 on your die, you can place it on top of another player's die that also has a 2 on top.
4. You cannot start a stack with 2 of your own dice.
5. The stack is then moved into one of the 5 circles on the Stacking Dice Mat.
6. The next player can either start a new stack on the mat or add to a stack already on the mat.
7. To add to a stack, you place another die with the same number on top as the others in the stack.
8. Once all 5 circles on the mat have stacks in them, you cannot create a new stack until one is removed.
9. You capture and remove a stack when you place the 4th die on top of the stack.
10. You may roll one die to try to get a different number.
11. Whatever number comes up, you must play it if you can.
12. If you cannot add to a stack, create a new stack, or rolling a die doesn't give you a number to use, you pass.
13. The game ends when all players are out of dice.
14. Add up the numbers on top of your captured stacks to determine your total points. The person with the most points wins.

## What to ask

1. How many dice are on one stack throw?
2. What are the odds of stacking the same number on the first throw?
3. What would happen if you used only four dice?



## Did you know?

Making decisions during games allows children to see the effects of their decisions and the resultant consequences without pressure. Young children who don't recognize number symbols can play this game by counting the dots.





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## What's next?

- Change one of the rules.
- Play the game with several new rules.
- Do the rule changes affect the outcome of the game? Why or why not?

## To learn more

### Stacks of Trouble

by Martha F. Brenner

Mike decides to hide stacks of dirty dishes instead of washing them. Not only do they pile up in the basement, but he must also use math to keep track of the dishes that are being used.

## How it helps with school

### Texas Essential Knowledge and Skills (TEKS) Standards

Number, Operations and Quantitative Reasoning: 3.1A-B, 3.3A; 4.1A, 4.3A; 5.1A, 5.3A

Probability and Statistics: 3.14C, 4.13A; 5.12B

Underlying Processes and Mathematical Tools: 3.15, 3.17B; 4.14, 4.16B; 5.14, 5.16B

### National Council of Teachers of Mathematics (NCTM) Standards

Number and Operations, Data Analysis and Probability, Problem Solving, Reasoning and Proof

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