



NOIRLab Cube/Dice Game

Object of the game

Be the first to complete a “NOIRLab,” with a token representing each of the five individual programs (CTIO, KPNO, CSDC, Gemini, and Rubin) and NOIRLab itself.

Details

Number of players: 1–4+ (4 recommended but can be played with more)

Age: 6+

Playtime: 5–30min

Set up

1 [NOIRLab cube](#) (aka NOIRLab Dice)

1 program tracker per player (at the bottom of your origami cube sheet)

6 tokens (or coins/buttons) per player (these will be placed on your program tracker)

How to play

Take turns rolling the NOIRLab dice. During your turn, you may roll as many times as you want, covering a program (or NOIRLab) on the program tracker with a token on each roll. The first person to roll a complete NOIRLab set wins the game (but be careful not to “go bust”, as explained below)!

Rolling

Keep track of your rolls on the program tracker by placing a token over each program (or NOIRLab) that you roll. If you roll a program more than once (there is already a token on that program), you go bust and must clear your board; it is then the next player’s turn. However, if you have a token on the NOIRLab spot you are saved! The NOIRLab face has special rules, as explained in the next section.

NOIRLab Face — Special Rules

The NOIRLab face plays a special role. It acts as both a “safety net” to save you from going bust, and also as a wild item to take the place of any missing tokens. But remember, it must also be filled (along with the five programs) in order to win the game.

When you roll a NOIRLab face you play it on the NOIRLab spot, both fulfilling one of the win conditions (filling all six spots), and holding it in **reserve** for later. If you already have a token on the NOIRLab spot, rather than go bust you must choose a different program spot to fill (as if you had rolled that face naturally) and continue play.

In addition, if you have a NOIRLab token and roll a duplicate program (Rubin, Gemini, KPNO, CTIO, CSDC), the NOIRLab token acts as a "safety net," meaning you do not have to clear your board. Instead, your NOIRLab token is removed from the board and returns to your pool of tokens; then your turn continues.

EXAMPLE: You have rolled a CSDC, a Gemini, and a KPNO. On your next roll you get a NOIRLab, and you press your luck with another roll. You roll another KPNO, but instead of going bust you can use your NOIRLab token to negate that extra KPNO. You have used your NOIRLab (and can't win the game till you fill that spot), but the second KPNO doesn't count against you.

Passing

You may continue to roll as long as you want until you win or go bust, or you can choose to pass. If you pass with two or fewer spots filled, your turn ends and the next player begins.

If you have filled at least three slots on your program tracker, you may bank a free NOIRLab token when you pass. This is the only time you are allowed to have an extra NOIRLab token (i.e., two). On your next turn you roll as normal, but if you get a duplicate the extra NOIRLab token is used to remove it.

You may not pass if you already have two NOIRLabs in reserve. You may not pass in order to gain another NOIRLab token until you have rolled at least three more times. You can not win the game by passing; your last program token must be completed from a dice roll (this includes using a NOIRLab you just rolled as a wild).

Winning the game

In order to win you must have a token on each of the five programs (Rubin, Gemini, KPNO, CTIO, and CSDC) plus the NOIRLab slot. Game play stops immediately once someone has achieved the winning condition. Stay tuned for optional modes of play!