

BIG CUBES - 4x4 and 5x5

Reduce: build the 6 centers → pair the 12 edges → solve it as a 3x3. Rw = 2 layers wide. 3Rw = 3 layers. 2R = 2nd LAYER ONLY — never widen it.

last 2 edges

R U R' F R' F' R slice out, run it, slice back — both cubes
2R2 U2 2R2 Uw2 2R2 Uw2 2 edge pairs swapped · half the time

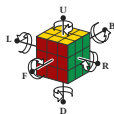
4x4 OLL parity — 1 edge pair flipped · half the time

Rw U2 x Rw U2 Rw U2 Rw' U2 Lw U2 Rw' U2 Rw U2 Rw' U2 Rw'

5x5 edge parity — 1 edge pair flipped · half the time · **one move** differs; 5x5 has no PLL parity

Rw U2 x Rw U2 Rw U2 3Rw' U2 Lw U2 Rw' U2 Rw U2 Rw' U2 Rw'

Fix parity during the last layer, before OLL and PLL — both parity algorithms move corners.

NOTATION

Each letter turns that face clockwise, seen from outside the cube — so from your seat L, D and B look counter-clockwise. ' = counter-clockwise. 2 = half turn.

M = middle slice, turning the way L turns. x y z = the whole cube, turning the way R, U and F turn. Lowercase r f = that face plus the layer behind it, turning together.

BEGINNER SHORTCUT

· use it until you know Sune
 Twist a yellow corner four turns at a time, turning ONLY the top face between corners.

yellow faces RIGHT **R'D'RD x2**
yellow faces FRONT **D'R'DR x2**

WORDS

algorithm = a fixed sequence of turns · trigger = a short algorithm your hands run as one unit · sexy move = the R U R' U' trigger · sledgehammer = the R' F R F' trigger · parity = a case a 3x3 cannot have · edge pair = two edges glued into one, on a 4x4 or 5x5

■ **RUR'U'** sexy move ■ **RUR'U** Sune ■ **R'FRF'** sledgehammer gap = change grip

THE LADDER

1/3 FIRST SOLVE · 9 algorithms · unlock: five solves, card face down.

2/3 TWO-LOOK · +13 · unlock: fifteen last layers in exactly two algorithms.

3/3 ONE-LOOK PLL · +15 · done: all 21 named, twice on separate days.

After that: full OLL, F2L, cross planning, look-ahead — in the app, not on card stock.

WHY THERE ARE ONLY THREE

A card is good at a closed set of cases you tell apart by sight. It is bad at a skill you drill. F2L, cross planning and look-ahead are drills with no finite case list. Full OLL is 57 cases, 22 of which differ only in a sliver a fifth of a millimetre wide at this size. All of them are in the app, with a real cube and randomised setup. This set stops where the medium stops.

PRINT AND VERSION

Every ALGORITHM on these cards is expanded from machine-verified data and checked against a cube simulator at build time; if one were wrong the build would fail rather than ship. Recognition wording is generated from the same permutation the diagram is drawn from. Set v1.0 · reprint any single card at cubepath-six.vercel.app/print · print at 100% / Actual size, never 'Fit to page'.

Not a tier, no unlock, no order. Use it when you buy a 4x4.

20 mm

WORDS

OLL = make the whole top face yellow · PLL = slide the top pieces home · Sune = the one-yellow-corner algorithm, used on every card after Card 1 · sexy move = the $R U R' U'$ trigger · sledgehammer = the $R' F R F'$ trigger · headlights = two matching corners on one face · trigger = a short algorithm your hands run as one unit · AUF = the free top turn that lines a case up

parity = a case a 3x3 cannot have · edge pair = two edges glued into one, on a 4x4 or 5x5 · F2L = first two layers, solved as pairs · look-ahead = watching the next piece while your hands finish this one · adjacent corner swap = the swapping corners share an edge · diagonal corner swap = the swapping corners sit opposite