



SOLVING THE CUBE – PT. 2

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FIRST 2 LAYERS (F2L)

Approach

- Solve F2L corner + edge “**pairs**” in any order
 - Note: This differs from “**Layer-by-Layer**” methods which solve 4 corners then 4 edges
- Use short sequences of moves consisting of **R U L** moves and rotations around the y-axis
 - Use a simple right-handed “**trigger**” and its left-handed “**mirror**” to complete the **F2L**

Benefits

- The right-handed “**trigger**” and its left-handed “**mirror**” are easy to understand
- Solving F2L “**pairs**” rather than “**layers**” will improve piece “**recognition**”
- It will be possible to improve / optimise your F2L skills with additional “**algorithms**”
- Manipulation of F2L “**pairs**” will be the approach used to solve the last layer



TERMINOLOGY

“**Pair**” – Corner + edge pieces which belong in the F2L

“**Pairing**” – Joining the corner + edge pieces

“**Slot**” – Target location for an F2L pair

“**Insert**” – Placing an F2L pair into the appropriate slot

“**Trigger**” – Short sequence of moves often of the form A B A' B'

“**Mirror**” – Reflected version of a trigger and typically right <-> left

“**Execution**” – The application of moves... i.e. turns and rotations

“**Finger Tricks**” – Smooth / efficient execution of a sequence of moves

“**AUF**” – An abbreviation of “Adjust U-Face”



SOLVING THE F2L

The basic approach is to “**pair**” a corner + edge then “**insert**” them into the appropriate “**slot**”

Step 2.1 – Temporarily “**solve**” the corner piece



Step 2.2 – “**Pair**” the corner + edge in the U-layer, ready for insertion



Step 2.3 – “**Insert**” the **F2L pair** into the appropriate “**slot**”



STEP 2.1 – SOLVING THE CORNER

A corner can be “**solved**” using the right-handed trigger **U R U' R'** or the left-handed mirror **U' L' U L**

Setup: Ensure the sticker matching the cross color is facing front before executing the trigger

Execution: Turn the U-layer with your index finger(s)



U' L' U L



U R U' R'

STEP 2.1 – TRICKY CORNERS



$U' L' U L * 2$



$U R U' R' * 2$



$U' L' U L * 3$



$U R U' R' * 3$

STEP 2.2 – PAIRING THE EDGE + CORNER

The same triggers can be used to “**pair**” an edge with its corner

Setup: Ensure the edge sticker matches the front center before executing the trigger

Execution: Turn the U-layer with your index finger(s)



U' L' U L



U R U' R'

STEP 2.2 – TRICKY EDGES

If the edge is already in the correct slot but “**badly oriented**” the pair needs to be extracted and re-solved

1. “**Extract**” the corner and edge pieces using the standard trigger(s) – see below
2. Rotate the cube and “**solve**” the corner – i.e. step 2.1
3. Rotate the cube and “**pair**” the edge – i.e. step 2.2



U' L' U L ...



U R U' R' ...

STEP 2.3 – INSERTING THE F2L PAIR

Insert an F2L pair as you would solve a corner in step 2.1

Setup: Ensure the sticker matching the cross color is facing front before executing the trigger

Execution: Turn the U-layer with your index finger(s)



$U' L' U L$



$U R U' R'$

SOLVE THE REMAINING PAIRS!



**Practice
Makes
Perfect**