## Rubik 3x3x3 Layered



Custom made Rubik's 3x3x3, one color per layer, purchased 2006. (plastic, 2.2 inches)
Mechanically the same as Rubik's $3 x 3 x 3$, but with each layer being a single color. Although any solution for Rubik's $3 \times 3 \times 3$ could be used, the puzzle is much easier to solve; the solution below is the same as that for the Rhombi Diamond.

## Solution:

1. Solve the middle layer.

Easy if you don't care about the rest of the puzzle.
2. Solve the top and bottom edges.

Easy by using 180 degree front rotations to exchange incorrect edges.
3. Solve the bottom back right and bottom back left corners.

It is easy to play with top rotations and 180 degree front rotations to make at least one bottom corner red; rotate this corner to the bottom back right. If the bottom back left corner is green, play some more with these rotations to make the top front left and top front middle red, then rotate the front 180 degrees to bring these two red cubes down, and then rotate the bottom 90 degrees to bring the red corner to the back right (and making the red corner that was in the back right now in the back left).

## 4. Solve the remaining incorrect corners.

This can be done with just 180 degree rotations of the front $\left(\mathbf{F}^{\mathbf{2}}\right)$ and clockwise or counterclockwise rotations of the top ( $\mathbf{U}, \mathbf{U}$-). If you want to memorize a simple transformation, this one exchanges the front top left corner with the front bottom left corner:
$\mathrm{F}^{2}$
U $\mathbf{F}^{\mathbf{2}}$
U- $F^{2}$

