## Rubik 2x2x2 Layered



Made in China, purchased 2010.
(plastic, 1.5 inches high by 2.5 inches diameter)
A smaller version of Rubik3x3x3 Layered and mechanically the same as Rubik's $2 \times 3 \times 3$, but with each layer being a single color (and this version has been made in a circular shape).
Although any solution for Rubik's $2 \times 3 \times 3$ could be used, the puzzle is much easier to solve. It is easy to flip the sides as needed to make the centers match the edges (i.e., each side has a cross of a single color). Then corners can be fixed with just 180 degree rotations of the front $\left(\mathbf{F}^{2}\right)$ and clockwise or counter-clockwise 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:

$$
\mathbf{F}^{\mathbf{2}} \quad \mathbf{U} \quad \mathbf{F}^{2} \quad \mathbf{U}-\quad \mathbf{F}^{2}
$$

After the above transformation has been used to fix pairs of corners, such shown below on the left, a flip of the front and back sides followed by a flip of the left and right sides gives the checkerboard pattern shown below on the right.


