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description: History of MGLS for Rubik's Cube.

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import AnimCube from "@site/src/components/AnimCube";

# MGLS

<AnimCube params="buttonbar=0&position=lluuu&scale=6&hint=10&hintborder=1&borderwidth=10&facelets=lylyyylylwwwwwwlwwdbbdbbdbldggdggdggdddoooooodrldrrdrr" width="400px" height="400px" />

## Description

MGLS is a system for orienting last layer while solving the last slot of the first two layers.

\*\*Proposer:\*\* [Shotaro Makisumi](CubingContributors/MethodDevelopers.md#makisumi-shotaro), [Lucas Garron](CubingContributors/MethodDevelopers.md#garron-lucas)

\*\*Proposed:\*\* 2004

\*\*Steps:\*\*

1. Insert the last slot edge while orienting all last layer edges.

2. Insert the last slot corner while orienting all last layer corners.

[Click here for more step details on the SpeedSolving wiki](https://www.speedsolving.com/wiki/index.php/MGLS)

## Origin

Shotaro Makisumi started developing the idea in 2004 [1].

![](img/MGLS/Makisumi1.png)

## Development

From 2006-2007 Lucas Garron completed development and the set of steps were named MGLS after the last names of Makisumi and Garron [2] [3]. MGLS is similar to one of the original forms of the Heise method [4].

![](img/MGLS/Development1.png)

![](img/MGLS/Development2.png)

![](img/MGLS/Development3.png)

## Other MGLS Information

### Makisumi's Algorithms

![](img/MGLS/MakisumiAlgs.png)

[Source](https://cubefreak.net/speed/mgls/f2lc\_llco.php)

### Google Sheets

![](img/MGLS/GoogleSheets.png)

[Source](https://docs.google.com/spreadsheets/d/1e9tPQ0Fl61KkzEkCh3FIkUSUmXtxlpGPp0fMmTipxoM/edit#gid=0)

### Sarah Strong's Algorithms

![](img/MGLS/Sarah1.png)

![](img/MGLS/Sarah2.png)

[ELS](https://sarah.cubing.net/3x3x3/els)

[CLS](https://sarah.cubing.net/3x3x3/cls)

### Pronunciation

In June, 2010, Garron declared the official pronunciation of MGLS to be "muggles" [5].

![](img/MGLS/Pronunciation.png)

## Credit

Thanks to Lucas Garron for providing links to the sources on this page.

# References

|  |  |
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| [1] | S. Makisumi, "F2L Last Corner + LLCO," Makisumi's Website, 2004. [Online]. Available: https://web.archive.org/web/20070913114107/http://cubefreak.net:80/f2lc\_llco.html. |
| [2] | L. Garron, "MGLS - Makisumi-Garron Last Slot," Garron's Website, 2007. [Online]. Available: https://cube.garron.us/MGLS/. |
| [3] | L. Garron, "[Speed cubing group] MGLS speedcubing method," Yahoo! Groups - Speed Solving Rubik's Cube, 15 June 2007. [Online]. |
| [4] | R. Heise, "Re: [Speed cubing group] MGLS speedcubing method," Yahoo! Groups - Speed Solving Rubik's Cube, 15 June 2007. [Online]. |
| [5] | L. Garron, "MGLS: Now with pronunciation!," SpeedSolving.com, 16 June 2010. [Online]. Available: https://www.speedsolving.com/threads/mgls-now-with-pronunciation.21922/. |