Speedcubing

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• Speedsolving a puzzle

- Speedsolving a puzzle
- Collecting Puzzles

- Speedsolving a puzzle
- Collecting Puzzles
- Modders

Puzzles

• World Cube Association

- World Cube Association
- Organizes Competitions

- World Cube Association
- Organizes Competitions
- Award official records

• 3×3×3

- 3×3×3
- 2×2×2

- 3×3×3
- 2×2×2
- 4×4×4

- 3×3×3
- 2×2×2
- 4×4×4
- $5 \times 5 \times 5$

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

• 3×3×3

Clock

- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

- Clock
- Megaminx

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

- Clock
- Megaminx
- Pyraminx

- 3×3×3
- 2×2×2
- 4×4×4
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- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

- Clock
- Megaminx
- Pyraminx
- Skewb

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

- Clock
- Megaminx
- Pyraminx
- Skewb
- Square-1

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

- Clock
- Megaminx
- Pyraminx
- Skewb
- Square-1
- 4×4×4 BLD

- 3×3×3
- 2×2×2
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- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

- Clock
- Megaminx
- Pyraminx
- Skewb
- Square-1
- 4×4×4 BLD
- 5×5×5 BLD

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- 7×7×7
- 3×3×3 BLD
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- 3×3×3 OH

- Clock
- Megaminx
- Pyraminx
- Skewb
- Square-1
- 4×4×4 BLD
- 5×5×5 BLD
- 3×3×3

Multi-BLD

- 3×3×3
- 2×2×2
- 4×4×4
- 5×5×5
- 6×6×6
- 7×7×7
- 3×3×3 BLD
- 3×3×3 FMC
- 3×3×3 OH

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- Pyraminx
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- 4×4×4 BLD
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- 3×3×3

Multi-BLD



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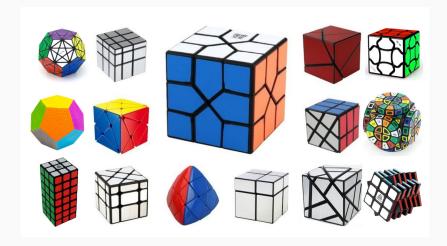








non WCA puzzles



Solving methods

 $\bullet~\mbox{Slow} \rightarrow~\mbox{not}$ meant for speedsolving

- $\bullet~\mbox{Slow} \rightarrow~\mbox{not}$ meant for speedsolving
- Easy to learn

- ullet Slow o not meant for speedsolving
- Easy to learn
- Procedure:



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- Easy to learn
- Procedure:
 - Cross

- $\bullet~\mbox{Slow} \rightarrow~\mbox{not}$ meant for speedsolving
- Easy to learn
- Procedure:
 - Cross
 - First two layers



- ullet Slow o not meant for speedsolving
- Easy to learn
- Procedure:
 - Cross
 - First two layers
 - Orient edges of LL







- ullet Slow o not meant for speedsolving
- Easy to learn
- Procedure:
 - Cross
 - First two layers
 - Orient edges of LL
 - First Layer









- ullet Slow o not meant for speedsolving
- Easy to learn
- Procedure:
 - Cross
 - First two layers
 - Orient edges of LL
 - First Layer
 - Permute edges of LL









- $\bullet~\mbox{Slow} \rightarrow~\mbox{not}$ meant for speedsolving
- Easy to learn
- Procedure:
 - Cross
 - First two layers
 - Orient edges of LL
 - First Layer
 - Permute edges of LL
 - Permute corners of LL











- ullet Slow o not meant for speedsolving
- Easy to learn
- Procedure:
 - Cross
 - First two layers
 - Orient edges of LL
 - First Layer
 - Permute edges of LL
 - Permute corners of LL
 - Orient edges of LL













- Slow \rightarrow not meant for speedsolving
- Easy to learn
- Procedure:
 - Cross
 - First two layers
 - Orient edges of LL
 - First Layer
 - Permute edges of LL
 - Permute corners of LL
 - Orient edges of LL















• Used by some of the best speedsolvers in the world

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- Easy to learn

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- Easy to learn
- Procedure:



- Used by some of the best speedsolvers in the world
- Easy to learn
- Procedure:
 - Cross



- Used by some of the best speedsolvers in the world
- Easy to learn
- Procedure:
 - Cross
 - F2L





- Used by some of the best speedsolvers in the world
- Easy to learn
- Procedure:
 - Cross
 - F2L
 - OLL







- Used by some of the best speedsolvers in the world
- Easy to learn
- Procedure:
 - Cross
 - F2L
 - OLL
 - PLL







• Used by some of the best speedsolvers in the world

- Used by some of the best speedsolvers in the world
- Quite intuitive

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- Procedure:

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- Quite intuitive
- Procedure:

- Used by some of the best speedsolvers in the world
- Quite intuitive
- Procedure:
 - first block



- Used by some of the best speedsolvers in the world
- Quite intuitive
- Procedure:
 - first block
 - second Block



- Used by some of the best speedsolvers in the world
- Quite intuitive
- Procedure:
 - first block
 - second Block
 - Orient and perumte corners of LL



- Used by some of the best speedsolvers in the world
- Quite intuitive
- Procedure:
 - first block
 - second Block
 - Orient and perumte corners of LL
 - Orient last edges



- Used by some of the best speedsolvers in the world
- Quite intuitive
- Procedure:
 - first block
 - second Block
 - Orient and perumte corners of LL
 - Orient last edges
 - Permute last edges



 $\bullet \;\; \mathsf{Kociemba} \to \; \mathsf{Computer}$

- ullet Kociemba o Computer
- $\bullet \ \ \mathsf{ZZ} \to \ \mathsf{Speedsolving}$

- ullet Kociemba o Computer
- ullet ZZ o Speedsolving
- ullet Petrus o Old speedsolving method

- ullet Kociemba o Computer
- \bullet ZZ \rightarrow Speedsolving
- ullet Petrus o Old speedsolving method
- ullet Old Pochmann method ightarrow BLD

Other methods

- ullet Kociemba o Computer
- \bullet ZZ \rightarrow Speedsolving
- ullet Petrus o Old speedsolving method
- ullet Old Pochmann method o BLD
- ullet 3-Style ightarrow BLD

Other methods

- ullet Kociemba o Computer
- \bullet ZZ \rightarrow Speedsolving
- ullet Petrus o Old speedsolving method
- ullet Old Pochmann method o BLD
- 3-Style \rightarrow BLD
- Variations of each one

• Started in November 2020

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- Speedsolver

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- Main events:

- Started in November 2020
- Speedsolver
- Main events:
 - $1. 3 \times 3 \times 3$

- Started in November 2020
- Speedsolver
- Main events:
 - $1. 3 \times 3 \times 3$
 - 2. $3\times3\times3$ OH

- Started in November 2020
- Speedsolver
- Main events:
 - $1. 3 \times 3 \times 3$
 - 2. 3×3×3 OH
 - $3. 2 \times 2 \times 2$

- Started in November 2020
- Speedsolver
- Main events:
 - $1. 3 \times 3 \times 3$
 - 2. 3×3×3 OH
 - $3. 2 \times 2 \times 2$
- \bullet Average around 16 seconds \rightarrow Official Ao5 17.01

- Started in November 2020
- Speedsolver
- Main events:
 - $1. 3 \times 3 \times 3$
 - 2. 3×3×3 OH
 - $3. 2 \times 2 \times 2$
- ullet Average around 16 seconds o Official Ao5 17.01
- PB $10.18s \rightarrow Official PB 12.11$

- Started in November 2020
- Speedsolver
- Main events:
 - $1. 3 \times 3 \times 3$
 - 2. 3×3×3 OH
 - $3. 2 \times 2 \times 2$
- ullet Average around 16 seconds o Official Ao5 17.01
- PB 10.18s → Official PB 12.11
- WCA ID → 2021LOFF01

Thank you for listening