

Mastermind

· Code-breaking deduction · 2 · 10–20 min · [Code](#)

BEFORE YOU START

This is the classic 4-position, 6-colour game. Sets with more positions or colours use the same procedure.

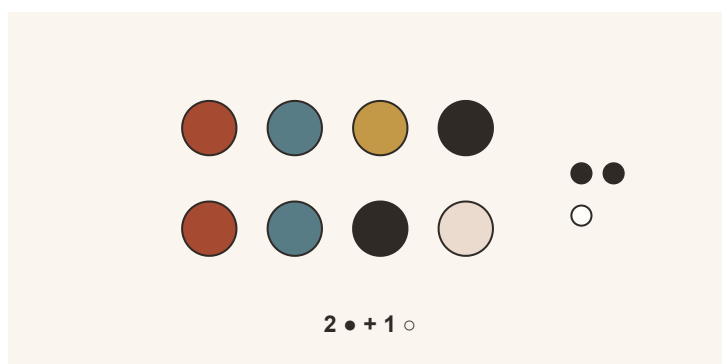
GOAL

Crack the opponent's secret four-position colour code in as few guesses as possible.

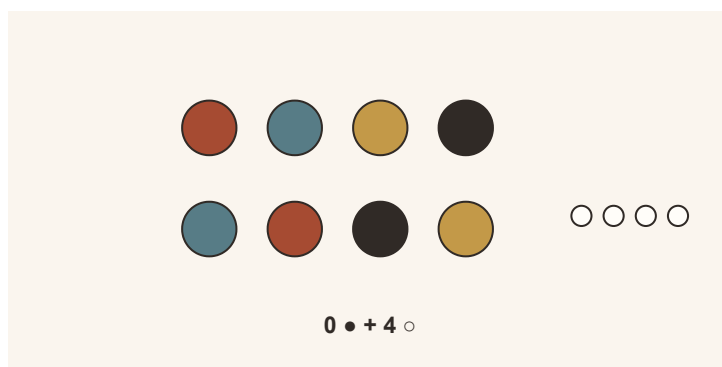
YOUR TURN

- The codebreaker places four colours in the next empty row.
- For each correct colour in the correct position, add one black key peg.
- For each other correct colour in the wrong position, add one white key peg.
- Key pegs do not identify positions. Each code peg can contribute to feedback only once.

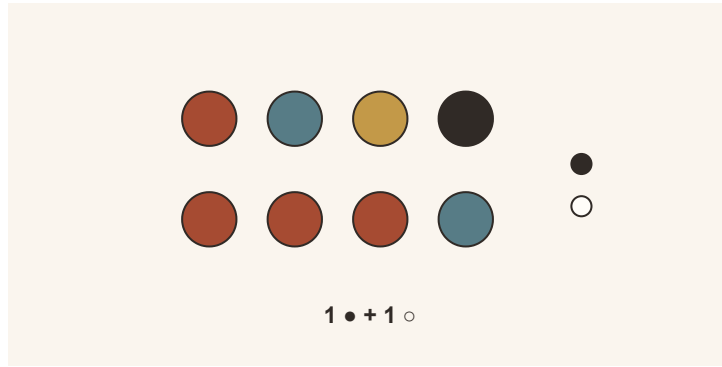
Score exact matches first, then colour-only matches. Keys do not identify positions, their order is irrelevant, and no code or guess peg may be counted twice. Repeated colours therefore cannot create extra white keys.



Example: 2 black for correct colours in place, 1 white for a correct colour in the wrong place. The diagram is original.



All 4 colours are correct but every position is wrong: 0 black and 4 white.



Duplicates do not multiply: the red is already used by a black key, so the extra reds get no whites.

Make the code

One player is codemaker, the other codebreaker. Behind the shield, the codemaker secretly places 4 coloured pegs in order. Agree before play whether colours may repeat; classic rules allow repeats.

Winning and switching roles

Four black pegs mean the code is cracked and the codebreaker wins. If all rows are used without success, the codemaker wins. For a fair match, swap roles; fewer guesses wins.

Details that matter

Duplicate example: code A–B–C–D, guess A–A–A–B. Feedback is one black and one white: first A is exact, B is misplaced, extra As do not score. Diagram colours are examples, not extra colours for your set.

Further sources: [Hasbro Mastermind](#)

Sources: [Hasbro Mastermind instructions](#)
