



What's what FSKM

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UNBOXING FEELINGS:

MEASURING IPHONE
HAPPINESS THROUGH
SENTIMENT

INNOVATION COMPETITIONS:

GROWING CREATIVE
MINDS FROM PRIMARY
SCHOOL TO UNIVERSITY

LEARNING BY DOING:

ROBOTICS VERSUS
MICRO:BIT FOR STEM
EDUCATION

THE FUN SIDE OF MATH:

MAGIC TRICKS AND
PUZZLES



COLLABORATING FOR
SMARTER MOSQUES

How Chess
Sharpens Your
Mind and Math
Skills

BEYOND THE CLAIM
OF RANDOM
SAMPLING

CHECKMATE! HOW CHESS SHARPENS YOUR MIND AND MATH SKILLS

Siti Zaharah binti Mohd Ruslan

Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA (UiTM),
Cawangan Negeri Sembilan, Kampus Kuala Pilah, 72000, Negeri Sembilan Darul Khusus, Malaysia.

zaharah6435@uitm.edu.my



Chess is more than a board game. It's a mental workout that strengthens your brain and enhances mathematical your math skills. Every move requires calculation, strategy and pattern recognition, making it a perfect tool for learning logical thinking and problem-solving [1]. From counting possible moves to analyzing positions, chess is full of hidden mathematics.

Math in Every Move



Each chess piece moves in a unique way on the 64-square board, creating many possibilities. Calculating all possible moves involves combinatorics and probability. In fact, there are around 10^{120} possible chess games which is far more than the number of atoms in the universe [2].

Patterns, Geometry and Strategy



Chess is all about patterns and spatial reasoning. Recognizing diagonals, controlling the center and coordinating pieces require geometric thinking [2]. A knight's L-shaped move or a bishop's diagonal attack can be analyzed mathematically to maximize strategic advantage.

Chess as a Brain-Boosting Tool

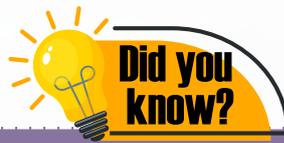


Chess helps you think ahead, plan, and solve problems [3]. Teachers often use puzzles like "checkmate in two moves" to practice analytical thinking. These exercises teach students to break problems into smaller, manageable steps just like solving math problems.

Gamifying Chess for Learning



Gamification makes learning chess and math more fun. Students earn points for solving puzzles, winning mini-games, or completing challenges. Online platforms like Chess.com and Lichess track moves and show strengths and weaknesses [4]. This encourages practice while teaching math skills like probability, planning and optimization.



Did you know?

- The first four moves of both players alone can create over 288 billion different positions!
- The quickest checkmate, called "Fool's Mate," can happen in just 2 moves.
- Chess uses math, like counting moves and patterns. A knight has 8 moves in the center but only 2 in a corner.

Historical Connections



Chess originated in India as Chaturanga and later spreading to Persia and Europe, where it evolved into the game we know today [1]. Famous mathematicians and scientists, like Emanuel Lasker, a World Chess Champion used chess to sharpen their minds. This demonstrates the timeless connection between math, logic, and strategy.

Conclusion

Chess is a game, a math lab, and a puzzle all in one! It strengthens logic, spatial reasoning, and problem-solving skills. The Next time you sit at a chessboard, remember: every move is a mini math adventure waiting to be solved.

References

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