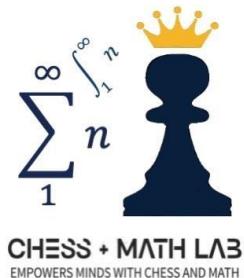


Special Issue
August 24, 2024

by Derek Jin

Summer Chess

Boston Center for Youth and Families (BCYF) | August 12 – August 13, 2024



In August 2024, Chess+Math Lab was honored to offer a free pilot chess program at BCYF Hyde Park. The invigorating two-day program taught basic chess rules and tactics to an enthusiastic group of 18 students aged 8-12. Whether new to the game or a seasoned player, the kids enjoyed the thrill of strategizing together. With the warm support from BCYF Hyde Park Director Kindell, Chess+Math Lab hopes to collaborate with BCYF in future chess programs including coaching the BCYF youth chess team to enrich and empower inner city communities.

Boston Center for Youth and Families manages over 30 facilities with a mission to enhance the quality of life of Boston's youth and families. It is the City of Boston's largest human service agency.

Chess+Math Lab offers free chess and math activities to empower underserved populations in Boston and Cambridge.

Coaches
Derek Jin
Alex Meng



Coach Alex explaining how pieces move

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Chess Fun

An exciting game for
the players and
spectators



Coach Derek's first visit to
BCYF Hyde Park

A sensational game!



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Chess Fun



Calculating the best move



Fight for the center



Teamwork

Recommendations

We want to express our gratitude to Ms. Small and Mr. Kindell at BCYF for providing us with this wonderful opportunity, as well as to the enthusiastic and engaging students in the class.

Recommendations for our young chess players

Continue the practice

By dedicating a short amount of time each day to play and practice, you will witness remarkable progress in your skills. Consistency is the key to unlocking the full potential of your strategic thinking, problem-solving, and patience. Remember, every move is a step towards becoming a better player.

Websites

Chess.com and lichess.org are excellent options to explore. Both platforms offer free sign-up and the opportunity to play games against opponents from around the world. Additionally, chess.com provides complimentary lessons to further enhance your skills.



Coach Derek (left) and Mr. Johnnie Kindell, Director of BCYF @Hyde Park (right)

Concept Review

Castle A special move in chess. It consists of moving the king two squares toward a rook on the same rank and then moving the rook to the square that the king passed over. Castling is permitted only if neither the king nor the rook has previously moved; the squares between the king and the rook are vacant; and the king does not leave, cross over, or finish on a square attacked by an enemy piece. Castling is the only move in chess in which two pieces are moved at once.

En Passant The capture by a pawn of an enemy pawn on the same rank and an adjacent file that has just made an initial two-square advance. The capturing pawn moves to the square that the enemy pawn passed over, as if the enemy pawn had advanced only one square. The rule ensures that a pawn cannot use its two-square move to safely skip past an enemy pawn.

Fork A tactic in which a piece attacks multiple enemy pieces simultaneously. The attacker usually aims to capture one of the forked pieces. The defender often cannot counter every threat.

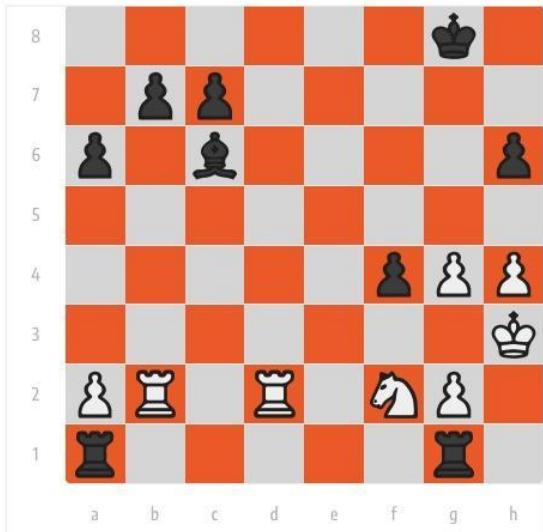
Pin A tactic in which a defending piece cannot move out of an attacking piece's line of attack without exposing a more valuable defending piece.

Skewer An attack upon two pieces in a line. In a skewer, the more valuable piece is the one under direct attack and the less valuable piece is behind it. The opponent is compelled to move the more valuable piece to avoid its capture, thereby exposing the less valuable piece which can then be captured.

Backrank Mate A checkmate delivered by a rook or queen along the opponent's back rank (that is, the row closest to them) in which the mated king is unable to move up the board because the king is blocked by friendly pieces (usually pawns) on the second rank.

Discovered Attack A direct attack revealed when one piece moves out of the way of another.

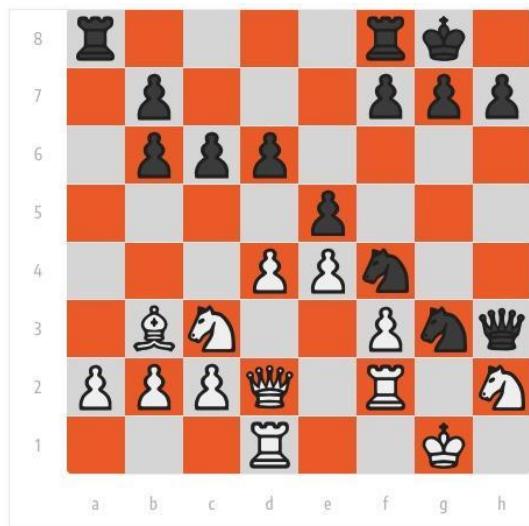
Puzzles



Mate in two. Black to move



Mate in two. Black to move



Mate in two. Black to move



Mate in two. Black to move

Math Food for Thought

The Knight's Tour Problem

How can a knight visit every square on the chessboard exactly once?

History

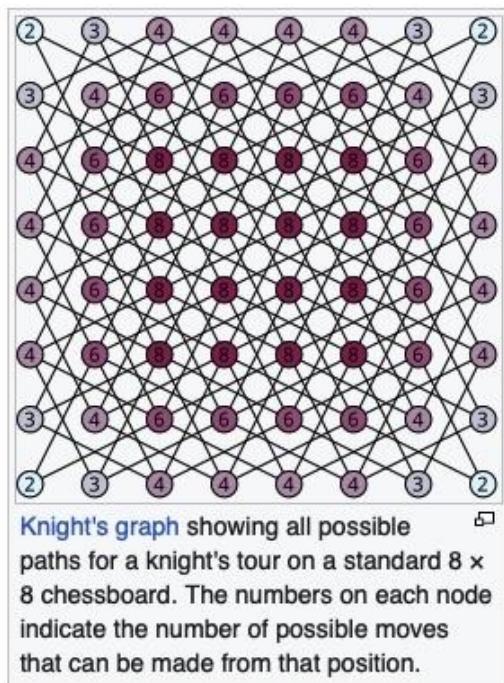
Earliest known reference traces back to an elaborate poem read by following the path of the knight on tour in the 9th century AD. (Rudrata *Karyalankara* (5.15))

Number of tours

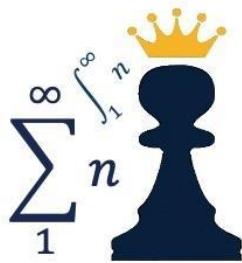
There are 26,534,728,821,064 directed tours on a 8x8 board.

One of the Most Well-known Math-chess Problems

The Knight's Tour is an example of the Hamiltonian path problem.



Source: https://en.wikipedia.org/wiki/Knight%27s_tour



Our Team

Derek Jin



President & Co-Founder
Instructor
U.S. Chess Federation
National Master

Alexander Meng



Vice President & Co-Founder
Instructor
U.S. Chess Federation
Expert & Candidate Master
Certified Chess Tournament Director

Eric Feng



Vice President & Co-Founder
Instructor
U.S. Chess Federation
National Master

Justin Li



Director
Instructor
U.S. Chess Federation
Expert

Ethan Qiao



Director
Instructor
Nationally ranked
scholastic player

Frank Cao



Instructor
U.S. Chess Federation
Expert