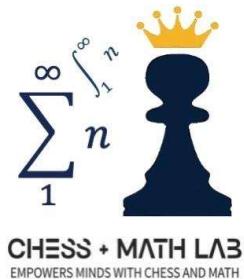


Special Issue
August 26, 2023

Summer Chess



by Derek Jin
Alexander Meng
@ Chess+Math Lab

Teaching chess at the STEC summer camp over the past two weeks has been an incredibly rewarding experience for us. During the initial week, we covered the movement of chess pieces and key rules such as castling and en passant, and introduced the concepts of check and checkmate. During the second week, we studied forks, pins, skewers, back rank mates, discovered attack, knight tour, double check and how to play with a clock.

As the program progressed, we delved into fundamental opening principles and strategies. Our daily routine culminated with the students enjoying friendly matches during the final 30 minutes. The two-week lesson concluded with a chess tournament to celebrate the strategic thinking, problem-solving, and sportsmanship of the young players, skills that have been proven instrumental to the success of young students inside and outside classrooms.

August 7 –
August 18, 2023

@ Sportsmen
Tennis and
Enrichment Center



Concept Review

Chess is a game
of choices.

of atoms in
the observable
universe:

10^{78} to 10^{82}

of chess
variations
(including illegal
moves):

10^{111} to 10^{123}

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.

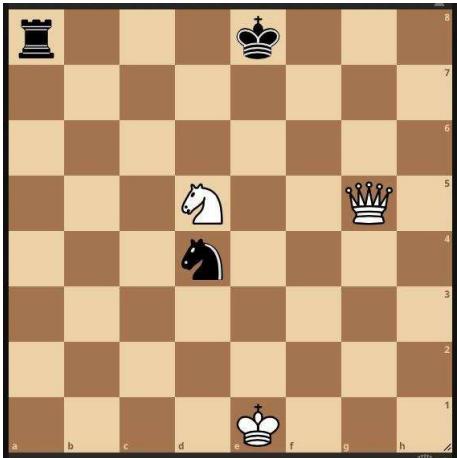
Source: Wikipedia

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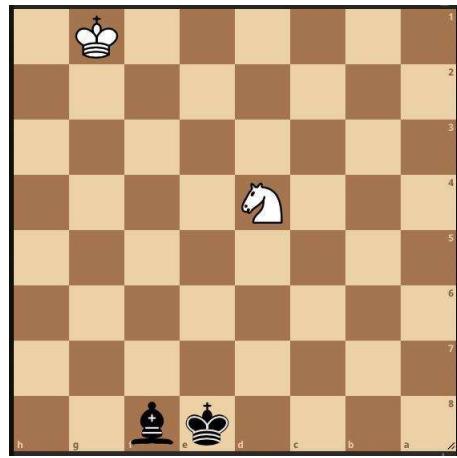
Puzzles

Think before
you move!

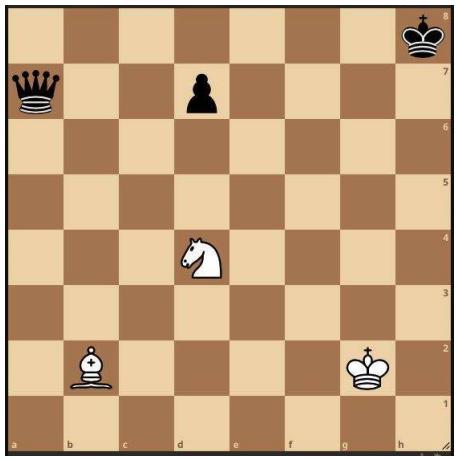
The goal is to be able
to make a good
decision in a position
you've never seen
before.



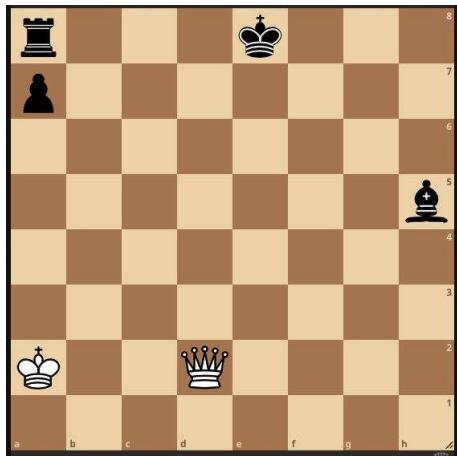
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Chess Fun



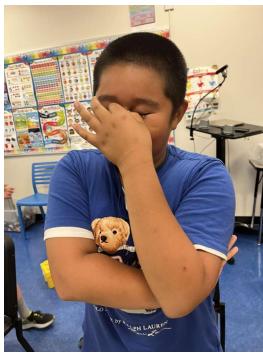
It is a PIN!



Top three tournament winners



Why castle?



The champion's tears



I won my 1st game!



How to fill the board with a knight?



My 1st chess win!



What is the best move?



A tough fight for the 2nd place



Computer pairing



Tournament



Finding the discovered attack

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Recommendations

We want to express our gratitude to Ms. Wiley and Ms. Mines-Smart for providing us with this wonderful opportunity, as well as to the enthusiastic and engaging students in the class. A special appreciation goes to KJ for contributing to the class's direction and overall organization.

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.

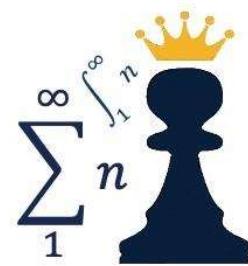
Websites

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.



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CHESS + MATH LAB
EMPOWERS MINDS WITH CHESS AND MATH



Our Team

Derek Jin



President & Co-Founder

USCF National Master
10th Place, 2023 National Grade Championship
1st Place, National K-12 & 1st in MA (all ages), 2023 World Amateur East Team Tournaments
3rd Place, 2023 Invitational Spiegel Cup
2nd Place, 2021 Invitation Spiegel Cup
2nd Place, 2020 Invitation Spiegel Cup
1st in MA (Benjamin Award), 2019 World Amateur East Team Tournaments
2018 All American Chess Team

AIME Qualifier Honor Distinctions
2023 AMC 12 A&B
AIME Qualifier Distinction 2022, 2021, 2020 AMC 10 A&B
Program in Mathematics for Young Scientists, 2023 Summer

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President & Co-Founder @Chess+Math Lab since 2023

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Vice President & Co-Founder

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USCF Chess Tournament Director
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5th Place, 2020 John D. Rockefeller III National Tournament of Elementary School State Champions
16th Place, 2018 National Grade Championship
3rd Place, 2017 Invitational Spiegel Cup
AIME Qualifier, 2022, 2023
MIT PRIMES STEP Math Program, 2022-2024

Chess Tournament Director, Boylston Chess Club
Assistant Director of Massachusetts Operation, Impact Chess
Chess Instructor, Belmont Free Lessons
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1st Place, 2023 Weeramantry National Blitz Tournament (U2200)
1st Place, National K-12 & 1st in MA (all ages), 2023 World Amateur East Team Tournaments
1st Place, 2023 Invitational Spiegel Cup
1st Place, 2022 Invitational Spiegel Cup
3rd Place, 2021 Invitation Spiegel Cup
1st Place, 2020 Invitational Spiegel Cup
2nd Place, 2021 North America Youth U14 Blitz

Volunteer for teaching elementary school students math @Fun Learning Place in 2023

Director, TD @ChessInspire since 2023
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