Chess Kit

Lighthearted New Games for Your Chess Set

Introduction

I am not a strong chess player - it's always seemed to me more like study than play. However, I do like the ideas in chess: a ragtag army of pieces with different moves, battling to protect their king. I wondered if I could take those ideas that many players are already familiar with, and mix them together with some newer game mechanics from the last 500 years of board game design. This collection contains chess games I've designed with hidden information, bluffing, deduction, role selection, and yes, zombies. They can all be played with a standard chess set and common items like pencil and paper, coins, and playing cards.

Hopefully, serious chess players can enjoy these as a light break between regular chess games, and new chess players can use them as a gentler introduction to the classic game. Players of different chess abilities that might find a game of regular chess frustrating may enjoy exploring these games together.

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Zombie Chess is a game where you bury each piece you capture under one of your pieces. If you move off a buried piece, it comes back from the dead as a zombie. (2 players, chess set, coins, pencils, and paper)
Masquerade Chess is a combination of chess and deduction games like Mastermind. Pieces move regularly, except when they capture. Start the game by choosing which capture moves each of your opponent's pieces will use, then try to deduce how each of your pieces can capture. (2 players, chess set, pencils, and paper)
Chess Golf makes players race to plan the best route, as the pieces caddy each other around the board. (1 or more players, chess set, deck of cards, timer, coins, pencil and paper)
Crowded House is the only four-player game I know of on a standard chess set. (4 players and chess set)
Cooperative Chess lets you play together against the game. (2 players, chess set, and deck of cards)
Half Alice Chess moves pieces through the looking glass to a parallel universe after each move. (2 players, chess set, and checkers set)
Chessg60 is a game designed by Bobby Fischer to mix up the game opening by randomly choosing your starting position. (2 players, chess set, and deck of cards)
Appendix A shows which playing cards represent each chess piece
Solutions

Zombie Chess

Just because you've captured a piece doesn't mean you can stop worrying about it. In Zombie Chess, it can come back from the dead and shamble across the board until you destroy it permanently.

Setup

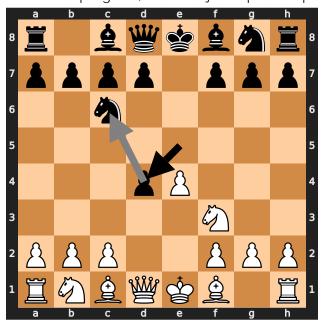
Set up the chess board normally, and gather a few coins. Four is usually enough. Each player will also need paper and pencil to draw an 8x8 grid to record where you secretly bury your opponent's pieces. Make it big enough to write a single letter on each square. You can also draw a second grid, if you want to track where your own pieces might be buried. The grids will be empty at the start of the game.

Place the coins on one side of the board to mark the graveyard of zombie pieces. The other side is the dust bin for destroyed pieces.

Play

All the normal rules of Chess apply, until you capture a piece. In addition to moving the captured piece to the graveyard of zombie pieces beside the board, you have to secretly bury it under one of your pieces. Choose one of your pieces, then find its matching square on your paper grid. Write the first letter of the buried piece there, or N for kNight. Don't let your opponent see where you buried the piece.

In this example game, Black has just captured a pawn at d4 and buried it under the knight at c6.

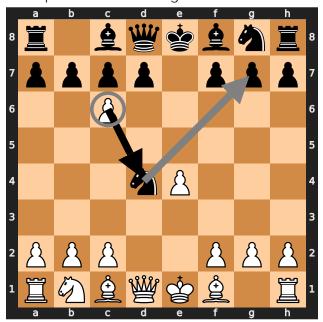


At the end of your turn, check to see whether there was a piece buried under the piece you moved. If not, say "no zombie" and say the coordinate you checked. If there is a piece buried there, bring it back from the zombie graveyard to the square on the board where it was buried. Place a coin under it to mark it as a zombie, and erase it from your grid.

The next turn in the example game, White uses the knight at f3 to capture the pawn at d4. First, they check for zombies. There are no black pieces in the graveyard, so they say "no zombies anywhere". Then, they choose where to bury the pawn. They decide to bury it under the pawn at b2, so they write a P in their hidden grid at b2.

Black responds by capturing the knight at d4 with their knight at c6. First, they check for zombies. There is a white pawn in the graveyard, so they check their secret grid for the square they just left: c6. They see the P there, so they put the white pawn back on the board with a coin under it and erase it from the grid. Then they decide to bury the knight under the pawn at g7 and write an N in

that square in their hidden grid.



Also at the end of your turn, check if you have any zombie pieces that you didn't move. If so, they are permanently destroyed, and moved to the dust bin side of the board.

If you have more than one zombie piece on the board, they form a zombie horde. You can move all of them on one turn, although each piece can only move once per turn. Any that you don't move will be destroyed at the end of your turn.

You probably don't want to bury pawns on your back rank, because they can immediately be promoted when they come back and then moved on that turn. As with regular chess, you can promote to extra queens. Either use a queen from another set, or just keep track of which pawns have been promoted.

You can't bury more than one of your opponent's zombie pieces under one of your pieces. However, you can leave that piece buried if your opponent captures your piece on top of it. When they move off the space, first ask them if they revealed one of your buried pieces. If so, it comes back, and you don't yet have to reveal the piece you have buried there.

In the very unlikely event that you capture a piece and already have a piece buried under each of your pieces, move it directly to the dust bin and say, "I cannot bury this piece."

Game End

As usual, the goal is to checkmate your opponent's king. If moving a piece would put your king in check by revealing a zombie, you may not move that piece. When castling, complete the move before revealing any zombies.

Masquerade Chess

Masquerade Chess is regular chess, but all the pieces above pawns have a secret identity. They use their standard moves, except when capturing. Each player knows the capture moves of their opponent's pieces, but not their own. Who can deduce their way to victory first?

Setup

Players each draw two copies of this table:

cap	K	a	R	В	N	combo
K						
a						
R						
В						
N						

They write their opponent's name above one table and their own name above the other. They then fill in the table for their opponent's pieces without letting their opponent see. Circle one square in each row and column to record which of their opponent's pieces captures using which moves. Each row must have one circle and each column must have one circle. A piece may be given its normal capture or the capture from a different piece.

Players will fill in the other copy as they learn about their own pieces.

The combo column can be helpful to fill in with the move and capture letters together, so players don't have to keep looking at the rows and columns of the rest of the table.

Here's an example set up where Bob has filled in the table for Alice's pieces and left his own blank.

Alice

cap	K	Q	R	В	N	combo
K			0			KR
a	0					<u>ak</u>
R					0	RN
В				0		BB
N		0				NQ

Bob

mv cap	K	Ø	R	B	Z	combo
K						
a						
R						
В						
N						

Play

On each turn, the player may either make a standard move without capturing, or attempt a capture. To attempt a capture, point to the piece you want to move, then to the piece you want to capture, and ask your opponent, "Capture?" If your opponent says the move is legal, perform the capture as normal. If not, you don't move anything, and your turn is over. Either way, record what you learned in your table by writing X's for combinations that you know are impossible and O's for combinations that you know are correct. Remember that pawns always capture with their standard capture moves.

Game End

The game ends when one of the players captures the other's king. Because players don't always know their pieces' abilities, they don't have to call "Check", and a threatened king doesn't have to evade capture. The king may choose to bluff by staying where it is or even move into an attacked square. A king may castle out of check. There is no stalemate between kings: one king can capture another to win the game.

Strategy

A key part of strategy is which capture moves to assign to which pieces. It seems like it would be a big advantage to give your opponent two queens, so perhaps the queen capture should always be assigned to the king or the queen. It seems like giving it to the king makes it harder to use, because a long range capture will likely leave the king exposed. However, a king with a queen capture can defend itself very effectively.

The Queen can quickly get into position to attack, so it's probably wise to give it a less powerful attack like the knight or king. However, even these can be surprisingly effective.

When assigning capture moves to the bishop, knight, and rook, look at which pawns they can defend. If you can make one of the pawns undefended and then try to attack it with a knight, that can be a quick, safe way to learn about some of your pieces.

As an example, KQ, QN, RB, NR, BK seems nicely balanced, and leaves the rook pawns undefended. However, assigning the same moves every game would be too predictable.

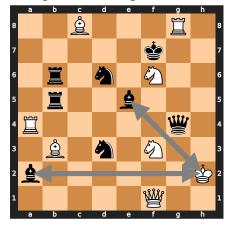
Another part of strategy is the effective use of bluffing. Keep track of what your opponent knows about their own capture moves, and put your pieces in danger if the risk is worth learning something valuable or attacking the king. Try to learn faster than your opponent and strike before they know enough to defend themselves. Move fast and break things!

History

This game was inspired by Robert Abbott's Confusion, which Kerry Handscomb and I originally adapted as Minor Confusion by creating a more balanced set of moves and playing with a chess set. That was playable but uninspiring, so I abandoned it for 15 years. Masquerade Chess returns to the standard Chess moves, and players only learn about their pieces during capture, which slows the pace of the game.

Chess Golf

All the players try to work out the most efficient way to capture the chosen pieces, using all the wrong moves. This game is a series of puzzles, so let's start with an example:







Every puzzle starts with the pieces spread around the board, and some cards choosing types of pieces according to the table in appendix A. The goal is to make one piece type capture the others in as few moves as possible. In this example, you have to make the white king capture one of the black bishops or make one of the black bishops capture the white king.

You might think that the bishop at e5 could directly capture the king, but in this game, the piece's original movement is irrelevant. Pieces can only **borrow** a move from a neighbouring piece in the 8 squares immediately surrounding them, a bit like a golfer takes a golf club from the caddy standing next to them. That means that the bishop at e5 can only move like a knight and the king can't move at all. Also, pieces can only borrow moves from a neighbour that's the **same colour**, so the bishop at a2 can't move at all.

Now that you know how the pieces move, here's one possible solution:







The bishop moves like a knight to g6 and then moves like a king to h5. Then it borrows the queen's move to capture the king at h2. The solution takes 3 moves.

You're not limited to moving the two chosen piece types. Here's a 3-move solution where a chosen piece type only makes the final capture move:







The white bishop uses the rook's move to get out of the way, and then the black rook comes down to b3. The bishop at a2 can now use the rook's move to capture the king.

There are solutions that help the white king capture a black bishop, but they take at least 4 moves. Now that you've seen how to solve one of the puzzles, the rest of the rules explain how to solve a series of these puzzles with a group of players, keeping score like a round of golf.

Equipment

A standard chess set and a standard deck of 52 cards. You'll also need a pencil and paper for keeping score, a timer, and some coins. 4 coins are probably enough, and you can even play without them. A one-minute timer works well, although anything from 30 seconds to two minutes would be fine.

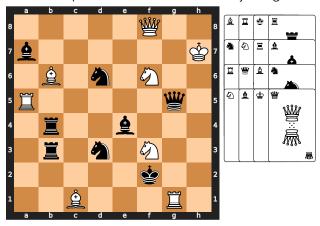
Setup

Place all the chess pieces except the pawns beside the board. Put the pawns away, you won't need them.

From the deck of cards, use one card to represent each piece, as shown in appendix A. You don't need the pawn cards, so you should end up with 16 cards.

Put the rest of the cards away, you won't need them. Then shuffle the cards and place them next to the board. Draw one card at a time, placing the matching piece on the board. Starting at a1 through h1, then a2 through h2, all the way to h8. The table in appendix A shows how big a gap to leave before each piece. That is, how many empty squares to leave before placing each piece.

Here's an example with all the cards laid out in the order they were drawn, from the white bishop to the white queen. Check to make sure you agree with where the pieces were placed.



When all 16 pieces are on the board, randomly choose a dealer to shuffle the cards again.

Also choose a scorekeeper, and get them to write everyone's initials at the top of the paper, leaving enough room for 9 scores and a course total.

Play

On the first turn, the dealer will **draw** two cards and place them face up next to the board where all players can see them. Check appendix A if you need to, and **announce** the two chosen piece types for this turn.

All players try to **solve** the puzzle in as few moves as possible. While solving, no one actually moves the pieces. Just visualize how the pieces will move and count how many moves you need to capture one of the piece types with the other.

When you **find** a solution and count the moves, start the timer, then put your fist on the table to show that you're ready. When all the players have a fist on the table or when the timer runs out, the solving phase ends.

Now, everyone **reveals** their move count at the same time. Bang your fist on the table as you count "one, two, three." As you say "three," everyone puts out a number of fingers to show how many moves they need. The scorekeeper writes down everyone's numbers. If you think it's impossible, keep your hand in a fist as a zero.

The player with the fewest moves must now **demonstrate** the path. If some players are tied for fewest, start with the dealer and go around to the left until you reach one of the tied players. That player must demonstrate. It can be helpful to start by placing coins under all the pieces that you're going to move, so you can reset if you get confused.

Players should not be allowed to hesitate more than a few seconds while demonstrating. Be kind, especially to younger players, but they can't sit and try to solve it at this point.

If the player can't demonstrate their path, then they get the maximum of all the other players' numbers, plus a one-point penalty. Reset the pieces to where they started and get the player with the next lowest number to demonstrate.

If some players say it's impossible, let the player with the lowest nonzero number demonstrate. If they are successful, then all the players with a zero get the maximum number plus a one-point penalty.

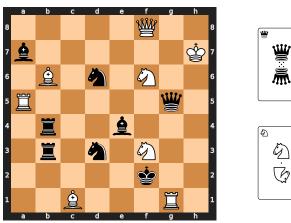
After a successful demonstration, leave the pieces in their final positions, and add any captured pieces back to the board in any empty squares. Remove the coins, if you used them. **Pass** the deck one player to the left to choose a new dealer.

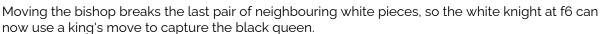
Special Move

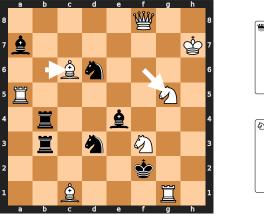
The basic moves are to borrow a move from a neighbouring piece of the same colour. You may only capture one of the chosen piece types with the other one. No other captures are allowed.

In addition, there is one special move to help when you get stuck: if one of the colours has no pairs of pieces next to each other, then any piece of that colour may make a king's move.

For example, in the position below, neither the white knights nor the black queen has any neighbours of the matching colour. One way to move them is bringing in other pieces to borrow moves from. However, there's an easier way.











Difficulty Level

Once all players pick the same number of moves on a turn, the dealer may choose to increase the difficulty level by dealing one more card on later turns. If all players pick the same number of moves on a turn with three cards, the dealer may increase to four cards, and so on.

Game End

Continue dealing new cards each turn until you have played 9 turns. If you don't have enough cards to deal, shuffle the discard pile back in before you deal. Add up the points for all 9 turns, and award the game to the player with the lowest score.

A tie goes to the best dressed player.

Problems

Here are some positions that are more challenging than average. The chosen pieces are circled, and solutions are given at the end of the book. See if your solutions are as short.

Problem 1





Problem 2





Problem 3





Crowded House

Two teams of two play, with each player moving the pieces of their colour on the left or right half of the board. As usual, white moves first, then alternates with black. Each king-side player takes the first move for their team, then alternates with their partner.

In the following example, Walter plays king-side white, Winnie plays queen-side white, Betty plays king-side black, and Bob plays queen-side black. Then the play order would be Walter, Betty, Winnie, Bob, Walter, Betty, and so on.



Rule changes

The key rule is that you may only move a piece that either

- · starts on your side of the board, or
- ends on your side of the board.

In this example, Winnie may move any piece that starts or ends on the queen side of the board, shown by the dashed rectangle. She may move the bishop as shown by the arrow, because it ends up on the queen side of the board. Winnie may not move the bishop to e2, because it would start and end on the king side.



If a player has no pieces on their side and can't move any pieces to their side, they move nothing on that turn.

The rest of the rule changes flow from whether a piece may be captured immediately. A king may move into check or castle out of check, if the next player can't make the capture. En passant capture only works if the pawn is captured immediately after its first move.

Winning

Win by check mate, as usual, but remember that the next player on the attacking team has to be able to make the capture.

Talking

This game shouldn't be taken too seriously, so feel free to chat with your partner, but remember that the other team is listening. Any discussion should be heard by both teams, so no secret codes or second languages! Of course, players should also feel free to ignore their partner's advice.

Cooperative Chess

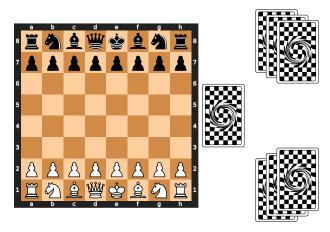
If you don't like battling your friend across the board, you can team up against the game itself. A hand of cards limits what you can capture, and you work together to eliminate as many *types* of pieces as you can.

Equipment

A standard chess set and 32 cards from a standard deck of 52 cards. You will use cards to match the chess pieces, as shown in appendix A.

Setup

- One player **stands** the chess pieces in the standard start position.
- Meanwhile, the other player shuffles the 32 cards,
- deals 3 to each player, and
- places the rest of the cards next to the board as a draw pile.
- When the chess pieces are set up, the first player secretly places a white pawn in one hand and a black pawn in the other. The other player then chooses a hand to decide their colour.



Play

White plays the first turn, and then players alternate. Each turn has four possible steps, in this order:

- 1. You may make a **non-capturing** chess move.
- 2. You must **play a card** from your hand to your discard stack.
- 3. You may make multiple **capturing** chess moves, if the cards allow.
- 4. You must draw a card to bring your hand back to 3.

As the game progresses, you will move the cards between three face-up, spread-out stacks of cards: White's discards, Black's discards, and the captured cards. It's best to spread the cards enough that you can see which cards have already been played.

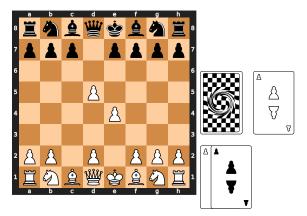
The chess pieces make the same moves as in regular chess, but you can only make a capture if the cards match:

- 1. The **capturing** piece must be the same piece type as the card that the capturing player just played, and
- 2. the **captured** piece must be the same piece type as the top card on the other player's discard stack.

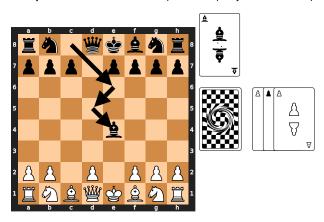
Pieces may match cards of either colour. On each turn, all moves must be made with one piece.

When you capture a piece, remove the piece from the board, and move the captured piece's card from your partner's discard stack to the captured cards stack. If you can make another capture move that matches the next card in your partner's stack, you may continue.

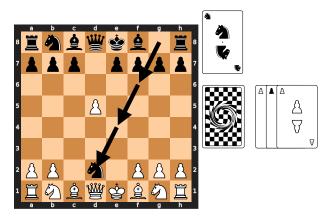
As an example, imagine that black has a knight card, a bishop card, and a king card in hand with the following position:



They can move the bishop to e6, play their bishop card, and then capture both pawns.



The king can't get close enough to attack this turn, but the knight card might be an even better option:



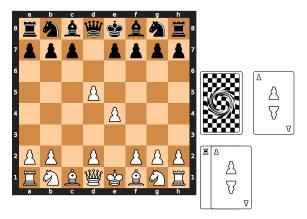
Now the knight can be attacked by anything except a pawn or a rook, and it can attack anything except a queen.

There are two types of **wild** cards that can match any piece type. They may match different piece types when they capture and when they are captured.

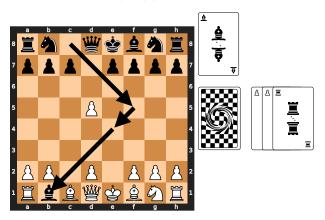
1. If you no longer have any pieces of a certain type, then that type of card is wild on your discard stack. For example, if you have no queen, then a queen card on your stack lets you capture with any piece and lets your partner capture any of your pieces.

2. A double colour match makes the next capture wild. If both the capturing piece and the captured piece match the colour of their cards, then the next captured card becomes wild, as long as you can capture it in the same turn. White pieces match red cards.

In this slight change from the previous example, you might think that black can only capture one pawn.



However, since white's pawn card matches colour, black can make the rook card wild by using a black card to capture a white pawn. Black could do either of the moves shown before, or even capture something bigger than a pawn:



Castling is allowed. En passant capture is allowed. You may promote a pawn on the last rank to any other piece. It can be an effective way to get rid of your last pawn. You may move a king into check or leave it in check.

Winning

The game ends immediately when you capture a king. You then get a point for each piece type that was completely removed from the board, both colours. For example, if you captured both queens, all four bishops, and a king, but still had at least one pawn, one knight, one rook, and the other king still on the board, then you would score 2 points.

If the draw pile is empty, continue playing until you run out of cards in your hands. If you run out of cards without capturing a king, you lose.

Talking

The game works best if players know something about each other's cards, but not everything. They should feel free to ask each other yes or no questions about their hands and to discuss general strategy, but shouldn't just reveal their hands.

Half Alice Chess

Alice Chess is a popular variant invented by Vernon Parton in 1953, usually played with one set on two boards. Since I wanted all the games in this collection to be playable with one chess set, I found a way to play it on one board by placing the mirror pieces on checkers. I'm not the first to suggest this idea, but I think it makes it easier to see the connections between the two sets of pieces.

The main idea is that pieces switch back and forth between the two sides of a mirror, as in Lewis Carroll's "Alice Through the Looking Glass". This causes many surprising positions and interactions, well worth exploring.

Equipment

A standard chess set and a standard checkers set. For full compatibility with the original rules, you'd need 16 checkers of each colour, but I think it's unlikely you'd ever need more than the standard 12.

Setup

Place the chess pieces in their standard opening position, give the light checkers to White and the dark checkers to Black.

Play

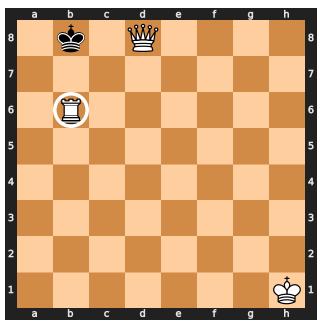
Pieces not on checkers are on one side of the mirror, pieces on checkers are on the other side of the mirror. Rules are as in orthodox chess, with these changes:

- The move must be legal under orthodox chess rules.
- Switch the moved piece to the other side of the mirror after it moves. (Add or remove a checker.)
- Pieces cannot capture pieces on the other side of the mirror, but they can move through squares that are occupied by pieces on the other side of the mirror.
- If you're playing with 12 checkers each, then you must have a free checker in order to move a piece without a checker.

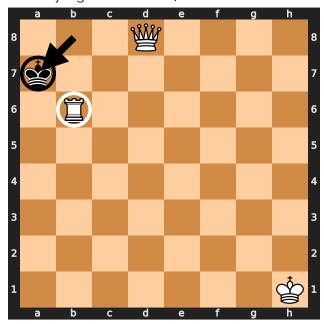
Winning

Place the opponent's king in checkmate. A king may not evade check by switching to the other side of the mirror, because the move must be legal before the switch.

In this example, the king cannot move to a8, because it would still be in check by the queen before switching. It can't move to b7, because it would be in check by the rook after switching.



The only legal move is to a7.



Chess960

This is probably the least silly game in the collection; people organize Chessg60 tournaments! It's still a bit silly, because it takes away the standard "opening book". One of the challenges to learning chess is that strong players have spent a lot of time studying standard openings. That can also make the early game feel like you're following a script. Randomizing the starting position should make the standard openings much less important and make the play feel more creative.

Starting Position

The idea of randomizing the starting position has been around since the 1790s, but Bobby Fischer added some restrictions in the 1990s to avoid positions that strongly advantage one player:

- Pawns start in their regular position.
- The two bishops must be on different colours.
- The king must be between the two rooks.
- · As in the standard starting position, black's pieces are a mirror reflection of white's.

With those restrictions, there are 960 possible starting positions. You can generate a random number and look up the position in a table, or use a website like mark-weeks.com to generate a position. You can also generate a random starting position with a standard deck of playing cards or with the deck of chess cards. If you have a standard deck, create three piles of cards with the following ranks, ignoring suit:

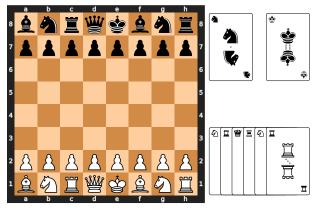
- A, 3, 5, 7
- 2, 4, 6, 8
- 8, 8, 10, 10, 10, Q

If you have chess cards, use black pieces for the first two piles. One with odd numbers of pips and the other with even numbers. You'll need to use the black checkers cards, as well. The third pile is white pieces, minus the king and bishops, plus one black rook.

- Black, odd pips: 1, 3, 5, 7
- Black, even pips: 2, 4, 6, 8
- White pieces: N, N, Q, R, R, plus black R

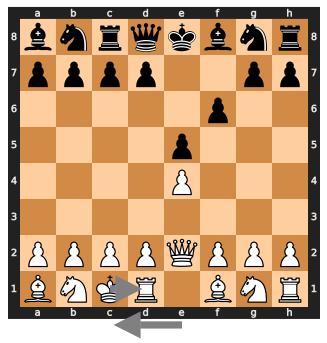
Shuffle each of the piles separately, then turn over one card from each of the first two piles. Using the ace through 8 or the pips to represent the squares at through h1, place the two white bishops on the squares that match the two cards. Confirm that they are on opposite-coloured squares. Now turn over one card at a time from the last pile, and use the identified white pieces to fill in the empty squares from left to right. If you have a standard deck, place a knight for an 8, a queen for a queen, and a rook for a 10. For the three rook cards, place the king in the middle and the rooks on the outside. Finally, place the pawns in their regular positions and place the black pieces to mirror the white pieces.

As an example, imagine you turned over a 1 and a 6 from the first two piles, then N, R, Q, R, N, R from the third pile. The starting position would look like this:



Castling

The other change that Bobby Fischer made was to the castling rules. As usual, the king may castle with the rook to his right or his left. However, the two pieces' end positions after castling are the same as for standard chess. So to castle with the a-side rook, white's king would end on c1 and the rook on d1, no matter where they started. In the example above, white's third move could be to castle.



As in regular chess, there are several restrictions before you can castle:

- The king and the rook must not have moved.
- The king's starting square, ending square, and all the squares he moves through must not be under attack.
- All the squares the two pieces move through must be empty, except for the two pieces themselves.

The rest of the standard chess rules apply unchanged.

Appendix A

Several of the games require a deck of cards to match each chess piece. There are a few options to choose from:

- Use standard playing cards, and memorize which cards match which pieces, as shown in the table below.
- If you don't mind defacing a deck of cards, write the letters for the chess pieces on the cards, as shown in the table below. Press lightly to avoid marking the back of the cards.
- Download the chess deck PDF from https://donkirkby.github.io/chess-kit, print out the cards on card stock, then cut them out.

If you're going to use standard playing cards, these tables show the cards that match each type of piece. Some of the games also use cards to randomly lay out the pieces on the board, and these tables show how big a gap to leave before each type of piece. That is, how many empty squares to leave before placing the piece.

The cards with small numbers match pawns. Kings and queens are obvious, and the other pieces are sorted by strength to match the number cards from 8 to 10.

Black cards match black pieces:

	Cards					
A	24 34 44 54 2+ 3+ 4+ 5+					
	8 4 8 4	1				
<u>\$</u>	9♠ 9♠	2				
I	10+10+	3				
*	QA	5				
*	K4	6				

Red cards match white pieces:

	Cards				
2	20 30 40 50 20 30 40 50				
9	8♡ 8◊	1			
<u>\$</u>	9♡ 9♦	2			
I	10♡10◊	3			
₩	Q♡	5			
*	K	6			

Solutions

Chess Golf Solutions

Here are the solutions to the Chess Golf problems.

- 1. d3b5, a5c6, c6e7, g3g4, g5f6, e7g8
- 2. e3g3, g1b6, c7f4, g4e5, f4e6, e6f8, f8g7, g7e5
- 3. g2f2, e3e7, f7b3, a4d7, d7d6, d6d8, d8b8

Contributing

Know some other lighthearted chess variants? Ideas to share? Get in touch at https://donkirkby.github.io/chess-kit.

Zombie Chess, Masquerade Chess, Chess Golf, Crowded House, and Cooperative Chess are original games designed by Don Kirkby.

