
## How to Use This Manual

You can turn the page by clicking on the right-arrow of the scroll bar at the bottom of the window. You can also turn to any page using the Contents" menu at the top of the screen.

While viewing a page, you can scroll up and down on the page by using the vertical scroll bar at the right of this window, in the usual way. If you have a printer, you can print this manual with the "Print..." option in the File Menu. On the second dialog box that appears, you can choose which pages you would like to print, or click Print All" to print the entire manual.

# Loading the Program

## Requirements

Any Macintosh can play CHECKMATE except the original Macintosh 128K or 512K. You need at least 1 megabyte of memory. Additional memory will be used to increase playing strength.

A modem is required for modem play and both computers must run either CHECKMATE or Battle Chess from Interplay or MacPlay.

## Hard disk installation

CHECKMATE may be installed on a hard disk. Before you do anything else, write protect your master CHECKMATE floppy disks.

1. Make a new folder on your hard disk, named “Checkmate.”

2. Copy all files from both CHECKMATE disks into the new folder.

## Running CHECKMATE from a hard disk

Turn on your hard disk and Macintosh. When the System finishes loading, open the folder that contains CHECKMATE, and double-click on the CHECKMATE icon.

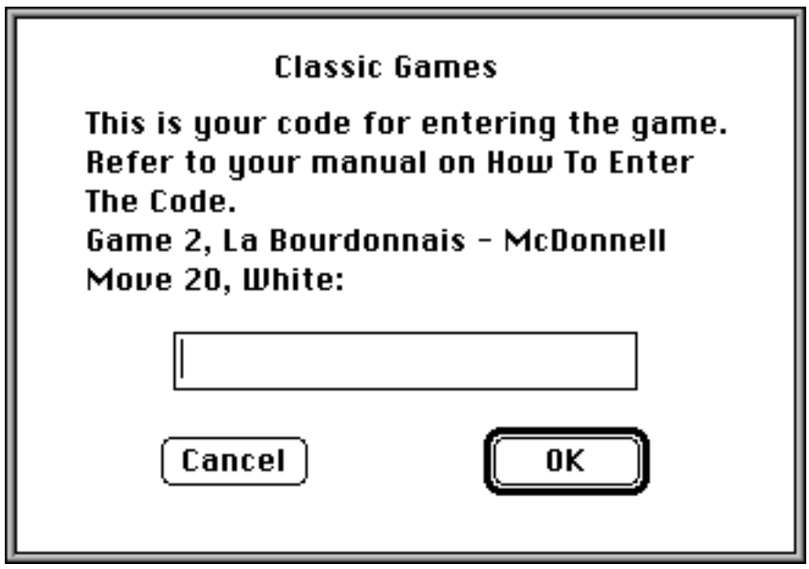
## Running CHECKMATE from floppy disks

Turn on your Macintosh and insert your System disk in a disk drive. When the System finishes loading, eject the System disk and insert CHECKMATE disk #1.

Double-click on the CHECKMATE icon. You will be asked several times to switch disks while loading the game; if you have more then one disk drive, you can insert the requested disks into your second or third drive.

## Entering the Code

When you launch CHECKMATE for the first time, you will be prompted to enter a move of a previously played chess game. Enter the correct move and press Return to begin play. The chess moves can be found on pages 54-57.




The correct code for this dialog box is QxN.

## A note about color

CHECKMATE'S color pieces are red and blue. Remember that if you use a color monitor, the "white" pieces are red in CHECKMATE, and "black" pieces are blue.

## Piece Movement

To move a piece, click once on the piece, let go of the mouse button, then click on the square you want to move to. Do not drag the piece! Pages 4-5 and 8-9 of the manual discuss special movement options you can set.

## Making your own Piece Sets

You can create your own piece set for use with CHECKMATE by using a graphics program that can read and write PICT files. CHECKMATE Disk #2 has two picture files on it that contain the color and black-and-white pieces. The two files are in a self-extracting archive that was created with the "Compact Pro" application (copyright 1991 by Bill Goodman). To uncompress the files, double-click on the "Templates.cpt" icon on CHECKMATE Disk #2. Once you have un-compacted the files onto another disk, you can modify them to your taste.

After running your graphics program, you can open the "Color Pieces" document or the "Mono Pieces" document. You can modify the artwork using the template provided. Be careful not to disturb any of the lines of the template. Once finished, save the modified file as a PICT file, using a different name. The "Pieces..." option from the View menu will let you find the new file and play CHECKMATE with the new pieces.

# A Quick Guide to CHECKMATE™

## Moving Pieces

After you have successfully entered in the code, CHECKMATE will show you the 2-d board. You are now ready to begin playing a game against the computer. You move the white pieces while the computer moves the black pieces at the top of the screen. It is your move.

**Special Moves**

**Castling**

Just move the king. *CHECKMATE* will move the rook for you.

**En Passant**

Just move your pawn to its destination square (one behind the pawn you are capturing "in passing").

**Promotion**

If your pawn reaches the opposite end of the board *CHECKMATE* will query you for promotion to Queen, Rook, Bishop or Knight.

Set Time, Take Back and many other features are available from the menu.

You can move your pieces in one of three ways:

1. You can pick up the piece you want to move by moving the arrow cursor to your selected piece and clicking the mouse button. You can then move the piece to its desired destination and set it down by clicking the mouse button again. If you decide not to move the piece, move it back into its original square and click once. If you try to move a piece illegally, CHECKMATE will stop you.

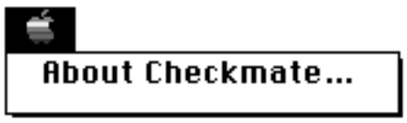
2. You can click on a destination square for a can move to that square, it will move automatically. If more than one piece is eligible to move to that square, then CHECKMATE wil highlight the piece it suggests. If you agree, you can simply click on that space again. If you disagree, you can click on the piece that you want to move or cancel the move by clicking somewhere else entirely. (This is called "Intuitive Move").

3. You can type in the move with algebraic notation using the coordinate system on the sides of the board (e.g. E2-E4 will move your king's pawn ahead two spaces).

CHECKMATE starts you out playing at its difficult Tournament level of play, making a move approximately every twenty seconds (sometimes less, depending on the situation).

Of course, these options can be changed, and many others can be added with the menu options explained later in this manual.

# CHECKMATE Menus




e information about the
r with the size of the
transposition table. A transposition table is used to increase the playing strength of the program and will be enlarged and strengthened if you allocate CHECKMATE more memory before launching it.


### *File Menu*

**New Game**
game. You may wish to Save
as it will be lost when the new
egins.

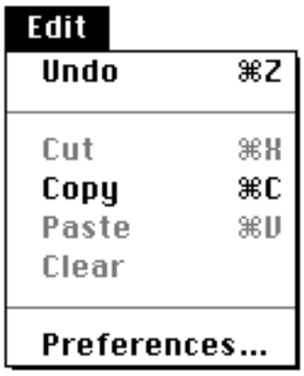
**Open Game**
current game you are playing
me you previously saved.

**Save and Save As**
e current game to disk so you
later. Note that you do not just save the current position, but the entire move history, allowing complete replay of the game. You can save to a separate formatted floppy disk or to your hard disk.

**Page Setup**
Displays a dialog box which lets you set paper size, orientation, and other setting options.

**Print**
Prints your chess game, as a graphic, as a list of moves, or both.

**Quit**
Quits CHECKMATE. Be sure you've saved your game if you wish to resume it later!




### *Edit Menu*

**Undo**
›tion will take back the last move
ake back as many moves as you like
: the game. “Undo” has the same
Back“ in the Control menu.

**Copy**
s board to the Clipboard, or copies a
game so far to the Clipboard. You can then switch to another application, like a word processor or graphics program, and Paste into it.

**Preferences**
This allows you to save certain options so that each time you load CHECKMATE, these options will appear. You can also always load in the original default values. The options that are saved are: 2D/3D display, Orientation, Sliding, Touch & Move, Fast Moves, Intuitive, Book Control (all settings), Coordinates, Learning, Thinking, Who Are You, and Aggressive Play.


### *View Menu*

**Mode**
en the two-dimensional,
al, and “Situation Room” board
.ation Room” screen has the
:eatures:

ocks showing the total time used
ıme.

es, including the time, in seconds,
ıove. Regions of the move list
:ATE has thought for a short time
lay from the opening library,
the program has been guessing your next move or moves where CHECKMATE thinks the position is simple. Alternatively, moves in which CHECKMATE thinks for much longer than average, are ones in which you have played the program into difficult situations.

• Time, in seconds, that CHECKMATE is trying to limit each move.

• Score (measured in pawns) for the current best line-of-play. A positive score indicates that CHECKMATE thinks it is winning.

• Best line-of-play found so far. This line will be from 7 to (typically) 15 moves deep at tournament time levels.

• Current move that the program is thinking about and its iteration number.

## Pieces

This allows you to choose alternative 3D piece sets. When the menu comes up, click on the desired piece set and then OK to select it or CANCEL to exit without changing the pieces.

### Perspective

This option is only available when the 3D board is displayed. Selecting it will allow you to rotate, tilt, and change the size of the board.

### Coordinates

This shows (or hides) the standard algebraic chess coordinates. It is available only when the 2D board is displayed.

### Orientation

This allows you to select which side of the board that you wish White to play from.

### Sliding

Selecting this option allows you to control the way the pieces move. If ON, the pieces move around by sliding. If OFF, the pieces will simply jump from their starting location to their new location.

### Touch & Move

If this option is selected, you must move the first piece that you select to move. You will not be allowed to select pieces that have no legal moves. This option simulates tournament chess, where players must move the first piece they touch.

### Fast Moves

This option, when selected, allows players' moves to be entered very quickly using the mouse, normally only with a single click. When enabled, clicks in the board area act as follows:

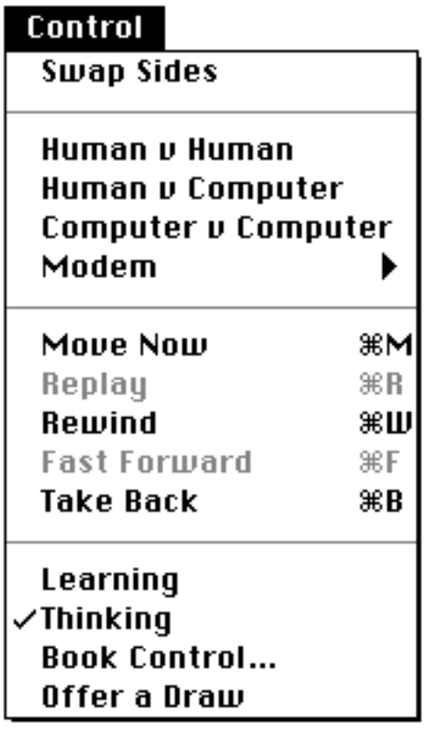
***Click on a piece***
If the piece can only make one legal move, its move will be made automatically. If it can make more than one move, it will be picked up and you should then click on its destination square, just like the normal method of move entry.

***Click on an empty square***
If only one of your pieces can move to that square, it will do so automatically. If more than one piece can move to the square, the destination square will be highlighted and CHECKMATE will wait for you to click on the piece to be moved. If you change your mind, click somewhere that is illegal, or press any key.

***Click on an enemy piece***
If only one of your pieces can capture the enemy piece it will do so automatically. If more than one piece has this opportunity, the destination square will be highlighted and the computer will wait for you to choose the piece to make the capture.

**Intuitive**
This is an extension of Fast Moves, described above, and is not available unless Fast Moves have been selected.
When a square has been highlighted because more than one piece can make the move, as described above, CHECKMATE will intuitively choose the most likely piece that can move to the square, highlighting the most likely origin square. If you agree with CHECKMATE's intuitive choice, just click again on the destination and the move will be executed. If you disagree, click on the desired origin piece which will then move to the destination. If, after the first click you decide to make a different move, just click anywhere on the screen that is not valid, or press a key.

**Sound**
If the "Sound" menu item is checked, CHECKMATE will beep whenever it has finished its move and it's your turn.



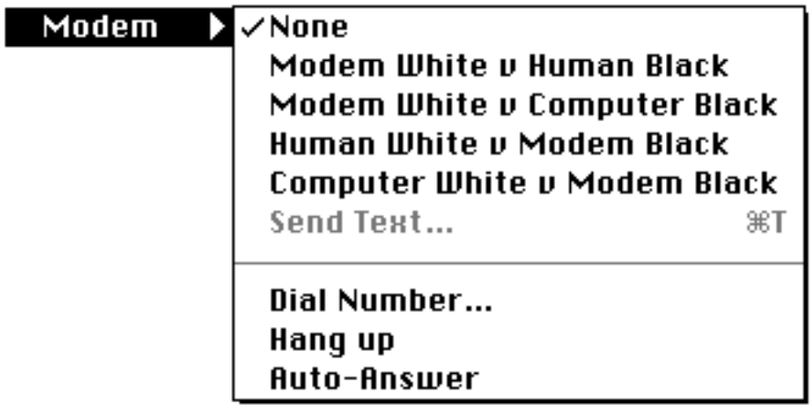

## *Control Menu*

**Swap Sides**
If you select this option, CHECKMATE will play the white pieces and you will play the black ones. Selecting this option a second time will change back to the normal settings. Note that this option will set CHECKMATE to play Human v. Computer.

**Human v Human**
If selected (shown with a check mark) CHECKMATE will allow human versus human play where the computer will supervise play and allow only legal moves.

Human v Computer
If selected (shown with a check mark) CHECKMATE will allow human versus computer play.

**Computer v Computer**
If selected (shown with a check mark) CHECKMATE will play a game against itself, until stopped by selecting another player option.



**Modem**
You can play CHECKMATE against a distant opponent if each of you has a Hayes-compatible modem and both of you are running either CHECKMATE or Battle Chess, also from MacPlay. If your modem is properly connected to your modem port, as shown in your modem manual, there are 3 steps to start playing over the modem.

1. Arrange with your opponent who will play White and who will play Black. Both of you should then run CHECKMATE (or Battle Chess) and use the Control menu options so that your color is set to "Modem".

2. One player must set his modem to auto-answer mode. To do this, choose "Auto-Answer" from the "Modem" submenu.

3. The other player must call the player whose modem is set to auto-answer. To dial a number, choose "Dial Number" from the "Modem" submenu. You can use any phone number, including area codes.

Your modem will pick up the phone and dial the number, and if all goes well, it will then connect with the modem on the receiving end. You can then start your chess game. When you move a piece, that move will happen on your opponent's end as well as yours. Note that after the two players are connected, the menu options New Game, Set Up Board, and Load Game will send an entire new chess board to both sides, discarding the current game.

To hang up the phone, choose the "Hang Up" option from the "Modem" submenu.

You can also use an ImageWriter™ printer cable or a null-modem serial cable to connect two computers directly together. Connect the serial cable between the two computers' modem ports. Then use the Modem menu commands as usual. Once both computers are set to Modem play, you can start right away; you won't have to dial the phone.

**Move Now**
Selecting this interrupts CHECKMATE's thinking and forces it to play its best move found so far.

**Replay**
This option can be selected after a Take Back, a Rewind, or a Load Game has been selected. It will step through the game one move at a time. You can Replay through each move made one at a time until you reach the last move made.

**Rewind**
Selecting this option takes back all moves made to the start of the game. You can then Replay back through them if you wish.

**Fast Forward**
You can select this option only after a Take Back, a Rewind, or a Load Game. It will Replay an entire game without stop until you press the ESC key or it reaches the last move made.

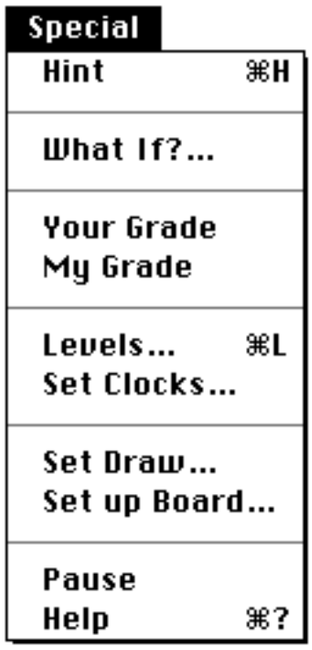
**Take Back**
Selecting this option will take back the last move made. You can take back as many moves as you like until the start of the game.

**Learning**
If selected, CHECKMATE will add moves it considers strong to its opening library. This learning process occurs after the result of the game is known. At that time, CHECKMATE will ask you if you would like the opening added to the library. Upon confirmation, the opening moves will be added to the MOREBOOK.TXT file (further details of this can be found in the Opening Library section later in the manual). If you use this feature, make sure you are playing on your backup disk.

**Thinking**
If selected, CHECKMATE will try to predict your next move and use your time to consider its response. In our tests, CHECKMATE predicted correctly about 30% of the time and thus gained substantial free thinking time. If you don't want CHECKMATE to have this advantage, turn it off.

**Book Control**
This allows great control over how the opening library works. For further information, see the CHECKMATE Opening Library section later in this manual.

**Offer a Draw**
This offers a draw to the computer. Depending on the game situation, the computer with either accept or decline.




## *Special Menu*

**Hint**
CHECKMATE will suggest a move for your next possible move.

**? (Keyboard Only)**
Typing a ? character from the keyboard will give you a suggested move which can be edited and / or accepted for immediate play. This feature is only available when it is your turn to move.

**What If?**
Basically, What If ? allows you to investigate lines of play within the game tree of moves. You can discover whether the search algorithm finds a line you may be interested in and why (or why not) it ejects it. For example, you may think the program has just missed a checkmate chance. You would take back that last move and use What If ? to enter the line-of-play you consider interesting.

The dialog box will prompt you to enter the line-of-play (up to ten moves deep) and its "iteration number". [CHECKMATE's algorithm searches again and again with a progressively greater search depth until reaching a time control. This progressive searching is known as "iterative deepening"].

If CHECKMATE's search comes across the selected line-of-play it will display it in an alert box. After clicking on OK, another alert box should then open as the same line-of-play is analyzed nearer the start of the line-of-play.

Suppose you entered: E2E4 E7E5 G1F3

The alert displays: E2E4 E7E5-G1F3 finds the line

Next alert is: E2E4-B8C6 D2D4 (B8C6 is preferred)

This tells you that the program found your line-of-play but preferred a different one. As for the minus sign appearing between two of the moves, this denotes the depth at which a decision about the line-of-play is being made. Normally you will see windows with lines-of-play showing the minus sign falling back to the start of the line-of-play. If one of these alerts is missing it is because the program thinks the selected line-of-play is so inferior it won't look at it further!

If no alert is displayed at all, this will be because your line-of-play was not found. It may have been illegal, too deep for the search or rejected as uninteresting lower down the line-of-play. In these last two cases, try again, but with fewer moves in the line-of-play (or larger iteration number) until the search finds it. You may want to temporarily select Infinite Time to fully observe the results.

When you've finished with this feature, call up the What If dialog box and cancel it.

**Your Grade**

This unique feature abandons the current game and presents you with a series of twenty four chess positions, for each of which you will need to suggest up to four candidate moves.

On the basis of your replies CHECKMATE will estimate your current grade. You should allow yourself about two minutes per position.

During Your Grade, the Intuitive Move option is disabled, though Fast Move is still available.

At the end of the test your estimated grade is displayed based on the internationally recognized ELO scale, along with a summary of the moves chosen, together with the correct moves for the unsolved positions.

We've tested this grading function on a number of chess players of known strength and it appears to give quite accurate results to around ±50 ELO points. Macplay would welcome further reports from players of known grade as to the accuracy of the test to enable us to refine it in future releases.

The following two menu options are available only when using Your Grade or My Grade:

***Go to Next***
This is available only when Your grade or My grade are selected. It skips the current position.

***Terminate***
This is available only when Your grade or My grade are selected. It abandons the grading assessment and starts a new game.

**My Grade**
CHECKMATE will attempt to solve the above test positions, according to its currently set time allowance. CHECKMATE, itself, scores well in excess of 2000 ELO at two minutes per move, placing it in the candidate master class, an exceptionally impressive achievement for a personal computer chess program.

Computer chess theory suggests that a doubling of speed (or time allowance) gives a further 100 points on the ELO scale. In practice this increase tends to fall off at higher grades, indicating that chess programs need to do more than just look-ahead deeper to beat the chess Grandmasters! You could test the rate of change of grade yourself for CHECKMATE by grading it at different time allowances.

***Levels***
This allows you to set CHECKMATE's level of play; you can select a weak or strong opponent.

***Weak Opponent***
You can select ten separate levels from Orangutan to Gorilla (with apologies to any simian players). These levels are most suitable for complete beginners.

Orangutans play legal chess moves selected virtually at random, rather like playing coffee-house chess. If you can't win against this....


Gorillas select the best available move found without using any search look ahead. The intermediate levels have a greater or lesser chance of playing weak moves.

**Strong Opponent**
CHECKMATE selects its move according to its powerful search algorithm. You should enter the average time (in minutes and seconds) you would like the program to play each move. There are four play modes to choose from:

**Tournament**
This is the strongest level, and CHECKMATE averages out its time for each move according to its time spent so far in the game. For example, if CHECKMATE has been quickly playing moves from its long opening library and / or correctly guessing your next move, it can then afford to spend more time on its moves during the later stages of the game. Alternatively, if you play CHECKMATE into a difficult position, it will spend more time trying to get out of trouble and subsequently speed up on its following moves.

**Matching**
CHECKMATE will spend roughly as long thinking about its moves as you spend thinking about yours.

**Average**
CHECKMATE will try to stick to the selected move time for every move.

**Infinite**
CHECKMATE will think indefinitely, until you interrupt its thought by selecting Move Now.

**Aggressive play**
CHECKMATE adopts a more aggressive strategy in its play.

**Set Clocks**
This allows you to adjust the tournament clocks. To avoid causing massive confusion to the program's sophisticated time controller, the dialog box allowing you to do this will only appear at the start of the next move. One interesting and unique feature allows the program to automatically query the player every few moves, checking to see if the computer time is accurate. We use this feature in computer chess tournaments where games are played against the clock.

**Set Draw**
By default, CHECKMATE treats drawn positions as equal. This unique feature allows you to use a strategy often favored in tournament play. You may want the program to avoid draws at all costs (select Draw=Lose), or you may want to set the program to play for a draw (select Draw=Win). CHECKMATE also allows for various permutations of these extreme positions.

**Set Up Board**
This allows you to modify the position for setting up of a problem or to handicap a game by removing the Queen, for example.

Pieces may be added by selecting the colour and type from the menu (when the cursor colour will reflect the piece chosen) then clicking on the required board square.

Pieces may be deleted by selecting Delete Piece (when the arrow cursor will change to a cross-hair) then clicking on the piece to be deleted.

Once you have set the board up as required, select Finished to return to the main Chess program. CHECKMATE will test for impossible positions (more than eight white pawns, no king, king of side to move in check etc.) and prevent you from playing on from such a position.

You may start playing from one of the ELO test positions by selecting Alter, then Load Test Position. After the position is set you will automatically be returned to the main Chess program.

**Pause**
This allows you to pause the game and temporarily halt the timers, so you can, for example, answer the telephone without incurring a time penalty.

**Help**
This allows your to quickly review what the menu options do. When selected, the cursor changes to “help.” Select which menu option you want to review and a text window will come up explaining what it does. You are then given the choice of getting help for another option or returning to your game.

# CHECKMATE'S Special Features

**Check and Checkmate**
When a move is made that puts a king in check, a "+" will appear beside the move list on that move.

If checkmate is achieved, a message will appear informing you of the mate. You can then either start a new game or Take Back moves or Rewind the game.

**Pawn Promotion**
When a pawn reaches the eighth rank, a window will appear in the center of the screen. This window contains four pieces, Queen, Rook, Bishop, and Knight, and you can promote your pawn to any of them by clicking on the desired piece and clicking on OK with the mouse button.

**En Passant**
CHECKMATE supports and allows en passant movement. Simply move your pawn to its destination square and the passed pawn will disappear.
If you witness a pawn capture with the pawn moving behind an opponent's pawn, you have witnessed an en passant. See page 32 if you are unfamiliar with this.

**Castling**
If it's legal to castle (as discussed on page 34), you may move your king two spaces to his destination square. The rook will know what to do on its own.

# CHECKMATE'S Opening Library

An opening library is a database of opening lines (a line is a sequence of moves). The inclusion of an opening library allows the computer to play moves early on in the game very quickly, giving it a time advantage later on in the game, and also allows CHECKMATE to set and avoid various opening traps. (An opening library is also known as an opening book—this is important to know since, for its own use, CHECKMATE refers to "lines" and different opening "books". For that reason, those terms are used here where appropriate).

The opening library in CHECKMATE contains over 300,000 bytes of opening data.

CHECKMATE allows great control over the decision-making processes of the opening library via the Book Control dialog box, accessed from the Control menu.

**Choose Next Move By**
When the computer needs to choose between two or more moves within the opening library, it can do so in one of three user-selectable ways. They are as follows:

**Random**
In this mode each of the lines of play are equally likely to be chosen. This is similar to the way most other chess programs work.

**Strength**
The opening library contains strength information and this is used in this mode. Selecting this option will cause a slider to appear, allowing selection between Always Best and Random modes. With Always Best the strongest move is chosen; with Random then the strength is hardly taken into account at all. The slider allows anywhere between these two extremes to be set. You should note that 100% Best eliminates practically all traces of randomness!

**Popularity**
Selecting this option will cause a slider to appear, allowing selection between Common and Rare modes. With Common, the most popular lines will be chosen; Rare will give the less popular lines a proportionally greater chance of being chosen. The slider allows anywhere between these two extremes to be set.
The default setting is Random.

**Manual Selection**
When the computer has to make a decision between two or more possible moves in the opening library it will use the criteria as defined above. For even greater control, and for the sake of curiosity, if Manual Selection is On, a dialog box will appear showing all the moves the computer is contemplating. Its intended move is highlighted, but you can cause it to choose any of the others by clicking on the other move, then the OK button. Alternatively, you can click on Exit Book to force the computer to stop using the opening library and to start thinking for itself. With this option On, you will be informed when the opening library in no longer being used via an alert box.
Manual Selection defaults to Off.

**Name Openings**
CHECKMATE has a database of named opening lines, such as Queen's Gambit and Sicilian Defense, and these names will be displayed when an opening line is recognized if this option is On. The dialog displaying the named opening will disappear after five seconds, or after a mouse click or key-press. Please note that the database of named openings is very much smaller than the full opening library, we have just chosen some of the more popular and romantic sounding names for inclusion in the name database. You can play a particular named opening using the Named Line option, described below.

Name Openings defaults to On.

**User Book Priority**
The User Book Priority option allows control of when the user book (and learned openings) is investigated - before or after the main book file, or not at all.

If the Learning option is selected then a supplementary database file will be created. This will contain any opening moves the computer thinks are good that it has learned from its own thought processes and from its human opponent.

User Book Priority defaults to Last, i.e. after main book.

**Force Opening Line to be**
The computer will normally choose an opening line from one of the book files, as described above. However you can force it to play a particular opening line by using one of these two options. Note that you can only select these options at the very start of a game, before either side has moved.

**My Line**
This allows you to enter a move sequence of up to twelve half-moves (in algebraic notation) that will be used as the opening line.

**Named Line**
This displays a scrollable list of named opening lines that you may choose by clicking on with the mouse. This list is only shows the named openings - the number of un-named openings in the main opening library is many times larger!

Once you have selected a forced opening line, the computer will play it as long as it makes sense; if you selected e2e4 g7g6 then started out with d2d4, the computer obviously can't use the forced opening line so it will instead use one of its book files, which it will also do when your forced opening runs out.

A forced opening will remain until cleared, by selecting My Line and clearing the first move, then clicking on OK.

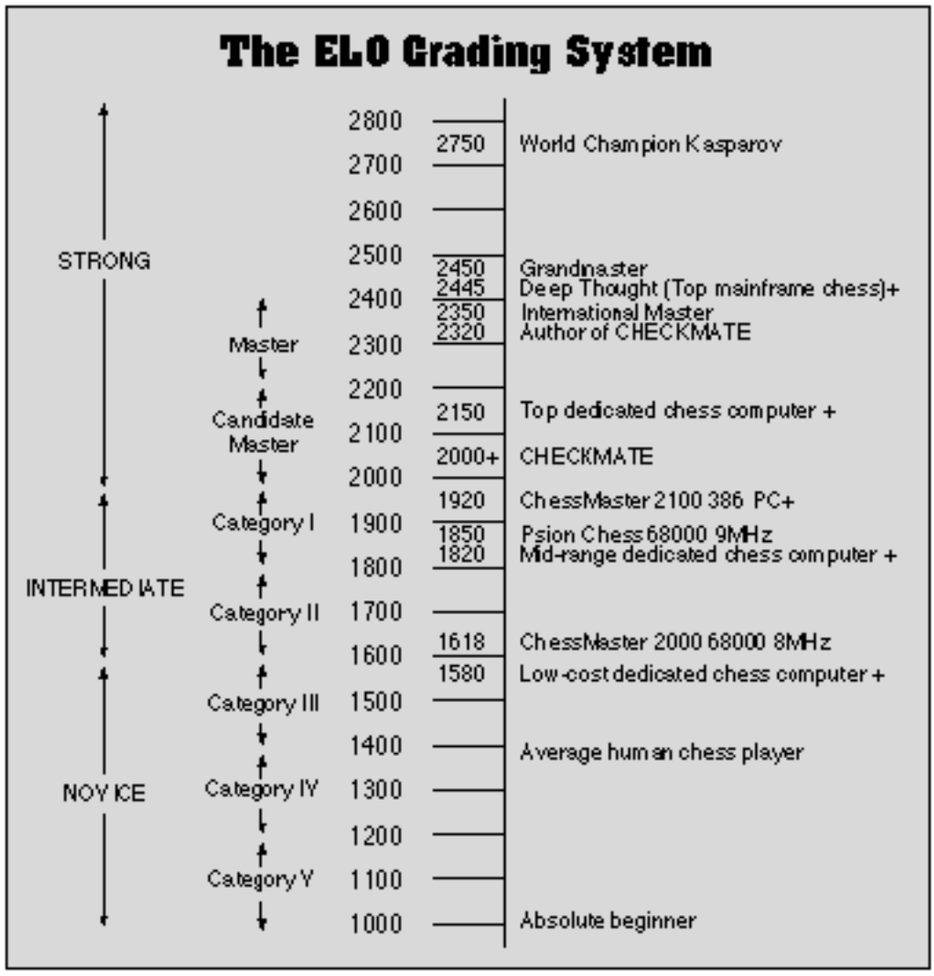
If you wish to play a forced opening but have forgotten which move you are supposed to make to continue the opening, press the ? key or select Hint from the menu.

# Playing Strength of *CHECKMATE*

We estimate the rating of CHECKMATE running on a Macintosh Classic to be well over 2000 on the ELO scale.* This places it in the Candidate master or Strong Club Player class and is the only Personal Computer Chess program able to claim such a high rating. With additional memory the ELO rises still further, and, with a faster processor, even higher grades result.

To convert from BCF (British Chess Federation) to ELO, use the formula:

**ELO = BCF x 8 + 600**



To convert from ELO to USCF(United States Chess Federation) you should add around 100 points to the ELO rating.

*The ELO Grading System: Gradings are taken from International Computer Chess Association listings or estimated by MacPlay using test positions, results of test game series and intuition. Estimated grades (denoted with a +) will have a margin of error, but should give a good guide to the relative strengths of the programs.

At the end of 1989 the Swedish rating list downgraded all computer chess programs by around 70 grading points on the grounds that human chess players are much more used to playing against computers than before. The ELO ratings given above reflect this downgrading.

# CHECKMATE vs Other Chess Programs

CHECKMATE is the latest development in the Chess Player series of programs. During the development of this series, a number of games were played against other 16-bit chess programs in the following manner:

Ten consecutive games were played against each program at a rate of 30 to 45 seconds per move with an equal number of whites and blacks for each program. All programs were set to play at their strongest (opening book on, thinking in opponent's time, best play mode etc.).

Games were considered won (one point) as a result of mate or material advantage where a clear win could be seen. Games were considered drawn (half a point) if neither side could demonstrate a win with material level.

Of course these results cannot be guaranteed precisely in every set of games, but they do give a very good guide to the relative strength of the programs.

CHECKMATE beat the following programs:

**ChessMaster 2000**
Software Toolworks
ST / Amiga
9-1

**ChessMaster 2100**
Software Toolworks
PC
6\F(1,2)-3\F(1,2)

**Colossus Chess X**
CDS
ST / Amiga
9\F(1,2)-\F(1,2)

**Psion Chess**
Psion
ST
7-3

# Basics of Chess

The goal of playing a game of chess is identical to that of many other games: specifically, defeating your opponent. In chess, this is done by placing your opponent's King in checkmate. Every move you make should be for this goal and to prevent your opponent from doing the same to you!

**The Basic Basics**

Here are the rules of chess in a nutshell:

•Two opponents play against each other. One player is usually White and the other Black. In CHECKMATE, the White pieces are colored red, and the Black pieces are colored blue.

•Each player has one King, one Queen, two Rooks, two Bishops, two Knights, and eight Pawns.

•The object of chess is to checkmate your opponent's King.

•The White player always moves first and then the two players alternate moves. You must move when it is your turn.

•You may only move one piece per turn (with the exception of castling; see Castling) A move is when a piece moves from one square to another square. Each kind of piece moves in its own individual way, described in The Individual Pieces section.

•No piece (except the Knight) may jump over or pass through any other piece on the board when it moves. Only one piece can be on the same square at a time.

•Any piece may capture any of the opponent's pieces by landing on the same square with it. The captured piece is removed from the board and is out of the game. You may only capture one piece per turn.

•When an opponent's piece threatens the other player's King, meaning that piece could capture the King on the next move, the King is said to be in "check."

•If your King is in check, you have three options: One, you must move your King out of check; two, block the attack with another piece; or three, capture the piece putting your King in check. If you cannot escape check in any one of these ways, the King is in "checkmate," you lose, and the game is over.

# The Pieces

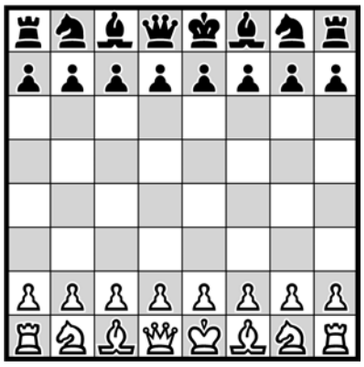
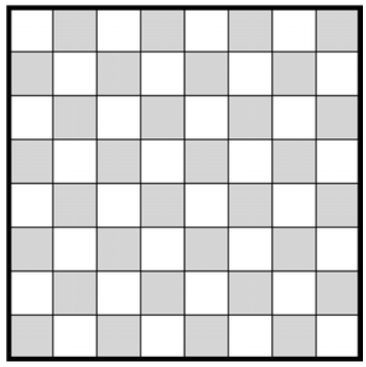


Figure 26: Initial positions.

In CHECKMATE, your pieces will appear as in Figure 26. Read The Individual Pieces for their characteristics.

# The Board



As you can see by looking at your screen, the chessboard consists of 64 alternating dark and light squares, 32 white and 32 black. For the purpose of this manual, the light squares and pieces will be referred to as white and the dark as black to match traditional chess notation. The squares are arranged in 8 rows and columns. When you start up CHECKMATE, all the pieces are in their starting positions. All chess games start from this initial position.

# Movement

In Chess, White always moves first. This means that the player controlling the White pieces moves one White piece for their first turn. The Black player moves next, also limited to one move for one piece. The actual game itself consists of the players making a series of alternating moves, one piece at a time. White first, then Black, then White, then Black, and so on until the end of the game. The only time that a player may move more than one piece per turn is during castling (see Castling), and this may occur only once per player per game.

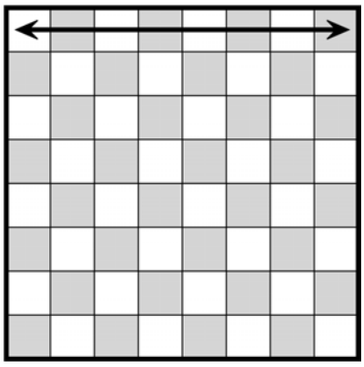


Figure 27a: Moving on the rank.

**Movement Restrictions**

With the exception of the Knight, all chess pieces must move in straight lines. Some chess pieces may move on the rank, that is, in any straight line across the board (see Figure 27a).

Other pieces may move on the file, that is, in any straight line up and down the board (see Figure 27b). And there are other pieces which move on the diagonal, or in any straight line of squares that meet only at one corner (see Figure 27c). Some pieces may move using a combination of these: on the rank, on the file and / or on the diagonal.

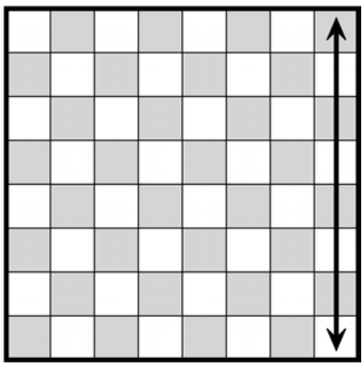


Figure 27b: Moving on the file.

The only restriction on this movement is that you cannot move your pieces through or into a square already occupied by another one of your pieces. The exception to this restriction is the Knight, which can move through or over pieces, but cannot land in a square already occupied by a piece of his own color or the opposite color unless he intends to capture it. You can move a piece into a square already occupied by one of your opponent's pieces provided you have an open line of attack. This is your primary method for capturing an opponent's pieces. Specific methods of attack will be covered under each individual piece description.

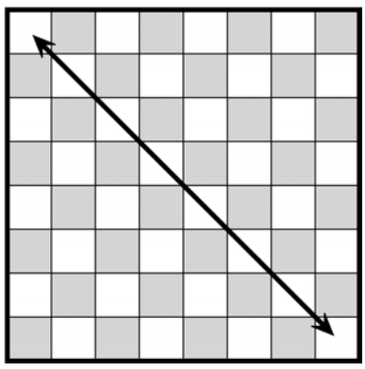


Figure 27c: Moving on the diagonal.

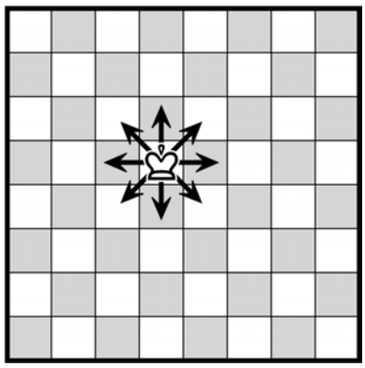


Figure 28: The King's range.

# The Individual Pieces

**The King**

The King is your most important piece. As noted above, once he is checkmated, the game is over. The two primary goals of your game, then, will be to protect your King from being checkmated and to put your opponent's King in checkmate instead. You will do this by using a combination of defenses and attacks by your various pieces. Without them, your King is practically helpless.

With the exception of castling, your King can only move one square at a time in any one direction (see Figure 28). **Under no circumstance may your King move into check, meaning your King may never move directly into an open line of attack from an opposing player's piece.** If you did then you'd lose the game. This does not mean, however, that your King is completely defenseless. If there is an enemy piece directly adjacent to your King, you can use him to take that piece, provided that you're not moving him into check. This is the only way you can use your King to directly attack another piece. The King is not a piece intended to be used heavily in offense. In fact, it's fairly safe to say that if you're reduced to relying heavily on the King's offensive capability early in a game, things are getting pretty grim. Toward the end of a game, however, both sides have usually been reduced to a handful of pieces, and at this time the King's attacking power can be very useful. Generally speaking, you should strive toward successfully defending the King while carrying on your offense with the other pieces, and with this balance of power you'll have a much better chance at victory.

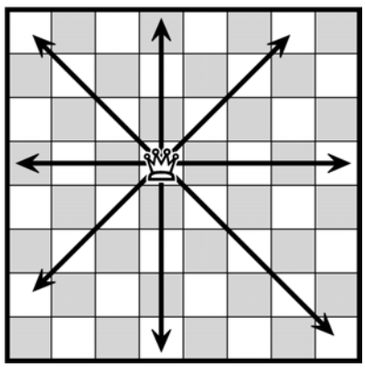


Figure 29a: The Queen's range.

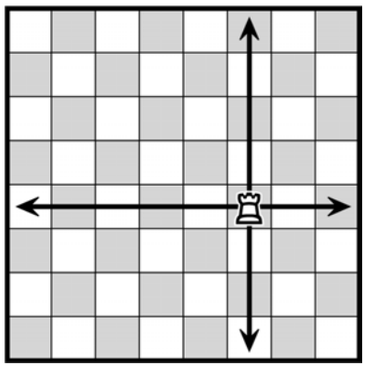


Figure 29b: The Rook's range.

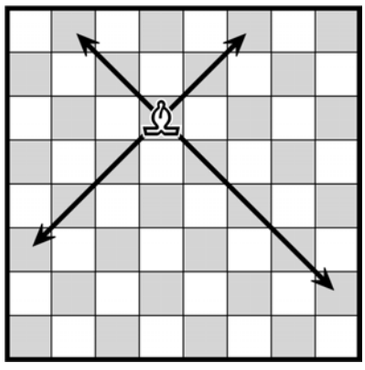


Figure 29c The Bishop's range.

**The Queen**

Like your King, your Queen can move or attack in any straight line in any direction. Unlike your King, however, your Queen can move as many squares as she wants, provided there is an open path (see Movement Restrictions and Figure 29a). No other piece has such a wide range of movement, which makes the Queen your most powerful piece. Even so, don't be tempted to overuse or rely too heavily upon her. As you will see, a good game of chess is won using a combination of pieces, and over-reliance on any one piece is an almost guaranteed path to defeat.

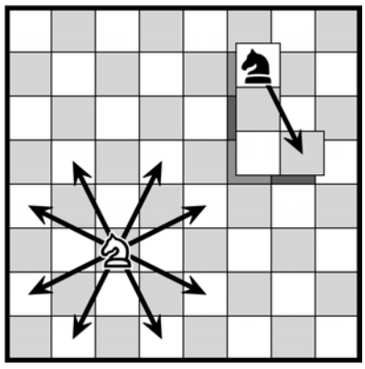


Figure 30a: The Knight's range and L-shaped pattern.

**The Rook**

Your Rooks (each side has two) are restricted to rank and file movements only (movement

across the board or movement up and down the board). Like the Queen, either Rook can move from one side of the board to the other during a turn, again provided the rank and / or file is clear of obstructing pieces. Because of this movement capability, your Rooks are considered second only to your Queen in terms of power (see Figure 29b).

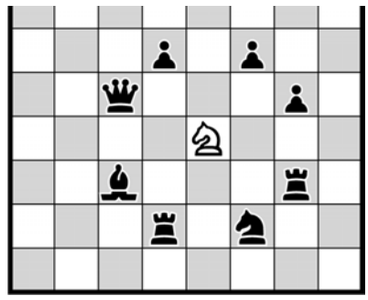


Figure 30b: The white Knight may capture any black piece.

**The Bishop**

Your two Bishops are restricted to diagonal movement only. For instance, provided that you have an open path, you can move a Bishop from the lower left corner of the board to the upper right corner. Keep in mind both Bishops start on a color, one on black, one on white, and each Bishop must remain on that same color for the entire game. If you play as White, the Bishop on the left hand side of the board starts on a black square, and will always move on black squares (see Figure 29c).

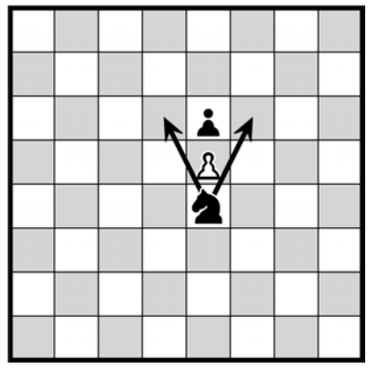


Figure 30c: The Knight ignores pieces of both colors in its path.

**The Knight**

The Knight is your most unusual piece. Rather than moving in a straight line like all the other pieces, he moves in an L-shaped pattern. Also unlike all the other pieces, he can skip over any pieces in his way. Unlike checkers, however, this does not mean that he captures any of those pieces. If there is an opponent's piece on the square where the Knight lands, only that piece is captured. Although it should be fairly obvious, keep in mind that your Knights cannot land on a square already occupied by one of your own pieces (see Figures 30a-c).

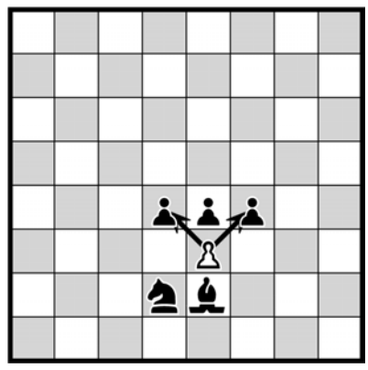


Figure 31: The white Pawn may only capture either one of these side Pawns.

**The Pawn**

The Pawn is your weakest piece, and as a result, the most expendable. This might be why you get eight of them. Pawns act as the footsoldiers or pikemen of your army, advancing slowly across the board, performing your initial attacks. They are usually the first to defend your side against your opponent's attack. Unlike any of your other pieces, the Pawns do not have the option of retreat. Pawns can only move forward, one square at a time.

The exception to one square at a time is on each Pawn's first move. It may, but is not required to, move forward two squares at that time. See Figure 32a for an illustration of Pawn movement. Each of your eight Pawns may do this once on each of their first moves.

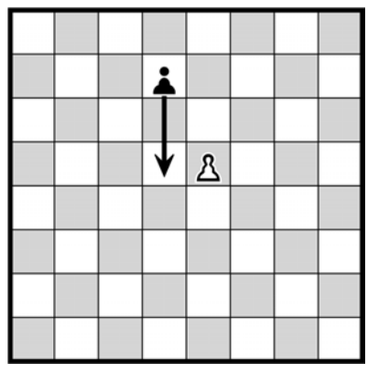
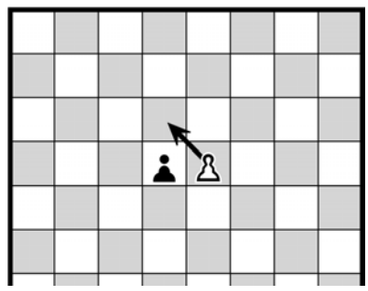


Figure 32a: Black Pawn makes its initial two-space move.

Unlike the other pieces, the Pawn's attack pattern does not match its movement pattern. Rather, the Pawn may only attack one space at either diagonal ahead of it (see Figure 31).

The Pawn may not attack ahead of itself. So the Pawn may never move into a square directly ahead if it's occupied by any other piece. Often



two Pawns meet and are deadlocked until another piece captures one of the Pawns, or until one of the Pawns can capture a piece diagonally ahead.

Figure 32b: White Pawn performs en passant, capturing black.

**En Passant**

There is another method of attack that occurs in only one situation: when an enemy Pawn moves two squares forward, bypassing one of your attacking Pawns (this can only happen on the enemy Pawn's initial two-space move). On your following turn your bypassed Pawn has the option of capturing the opposing Pawn even though it is not at a diagonal from yours. Your Pawn merely advances diagonally by one square, moving into the square directly behind the enemy Pawn (as though the enemy Pawn only moved one square), and your opponent's Pawn is captured. This move is called en passant (a French term meaning "in passing").

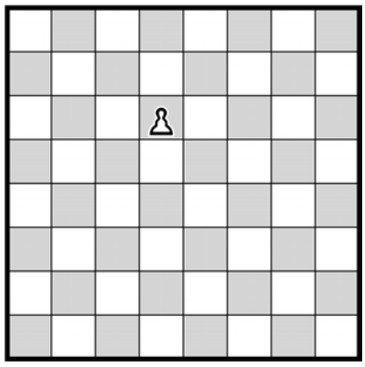


Figure 32c: Final position.

It is not a required move. There may be times when you will not want to take your opponent's Pawn in this situation. If you do not take your opponent's Pawn at that time, you may not repeat en passant with that same enemy Pawn. En passant only occurs when an enemy Pawn advances two squares, an event which only occurs once per Pawn in any game. Three turns later, for example, you cannot follow through an en passant (see Figures 32a-c).

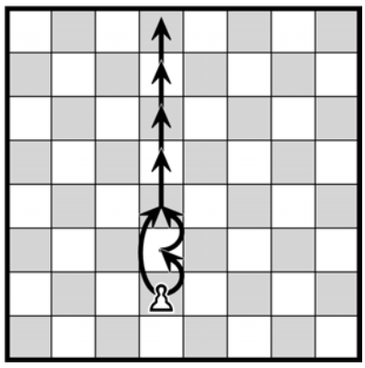


Figure 33a: The Pawn's opportunity for advancement.

**Promotion**

Finally, if one of your Pawns manages to cross the entire board, upon reaching the opposite side of the board, your Pawn gets promoted to another piece. Your Pawn changes into a Queen, a Rook, a Bishop or a Knight (it's your choice as to which piece it becomes, but it must change into something.) Your Pawn may not remain a Pawn, nor may it become a King. If you somehow manage to move all eight Pawns to the other side of the board you could have nine Queens on the board: your original Queen, plus eight promoted Pawns (see Figures 33a-b).

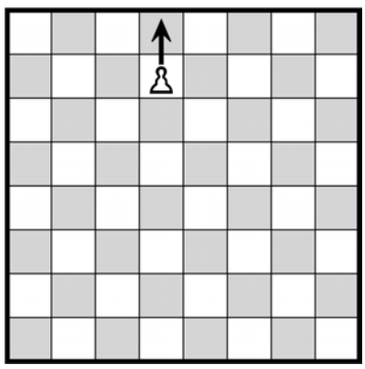


Figure 33b: A Pawn's promoting move.

# The Individual Importance of Each piece

By now, you should be getting a sense of the power of each piece. The Queen is your most powerful piece. The Rook is considered next in power, and the Bishop and Knight are both in third place. Although the Knight is limited in how many squares he can move in one turn, he can still use all 64 squares of the board. A Bishop, on the other hand, can use only 32 squares maximum (remember, a Bishop always stays on his starting color), and this trade-off between mobility and the potential number of squares that can be attacked ties these two pieces at third in power. However in the end game, two Bishops are favored against two Knights or one Bishop and one Knight. Last, of course, is the Pawn with its very limited mobility. But don't forget the Pawn is able to change into the most powerful piece if it can be moved completely across the board. As for the King, he is admittedly limited in power through most of the game, but as both sides lose more pieces the King's limited power becomes more useful.

A way of remembering all of this is to think in terms of points: a Queen is worth about 9 points, a Rook about 5, a Bishop or Knight about 3, and a Pawn about 1. Keeping this in mind, you can

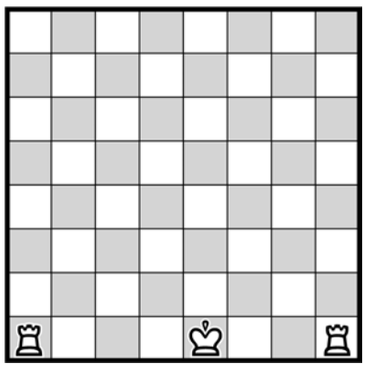


Figure 34a: White before castling.

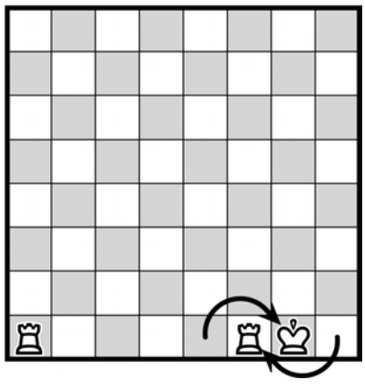


Figure 34b: Castling King-side.

see that you would come out well ahead in power if you were able to trade a Knight for a Queen. On the other hand, the exchange of a Knight for a Bishop is ordinarily a fair trade. Keep in mind again, that there will be times when you may want to trade a high value piece for one of much lower power. For instance, if by trading a Queen for a Pawn you can set up for checkmate in the next move, then it wouldn't really matter how many points you lose in the piece transaction.

All that ultimately matters in the game of chess is whether or not you win the game. Everything else, including points, is second.

**Castling**

Castling can occur only once per player per game. It is the only time a player may move two pieces during one turn, and the only time that a King may move more than one square during one turn. It is a powerful defensive move, and as a matter of good strategy, it is recommended that you castle fairly early in the game.

Castling can only occur when there is a clear path between your King and either of your Rooks. Provided you meet that and a couple of other restrictions, you may move your King two squares to the right or left, depending on which Rook you are using. That Rook is moved to the opposite side of the King. When you are finished castling, the Rook ends up closer to the center of the board which makes it more versatile, and your King is placed in an easier defended space (see Figures 34a-c).

**Castling Restrictions**

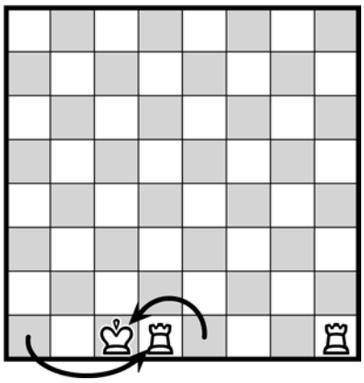


Figure 34c: Castling Queen-side.

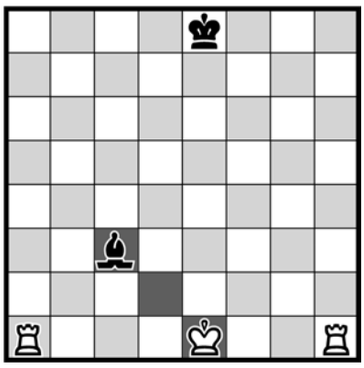


Figure 35a: You cannot castle while in check, either side.

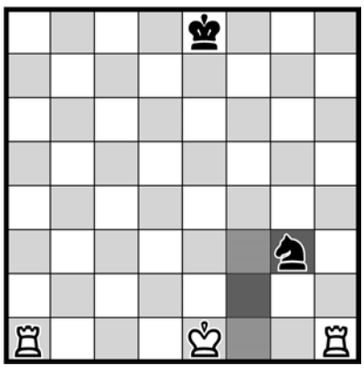


Figure 35b: You cannot castle through check (king-side) but you may castle queen-side.

Not surprisingly, there are restrictions on the use of castling. You already know one of them: There must be an open path between the King and the Rook which will be used to castle. Second, the Rook and King must not have been moved at any time during the game preceding the castling. Third, the King must not be in check, cannot move into check, and cannot move through check. If there is an open line of attack by an opposing piece on any square in between the King and the Rook, the King may not castle in that direction, even if the path is clear of other pieces. Figures 35a-c show situations in which White may not castle.

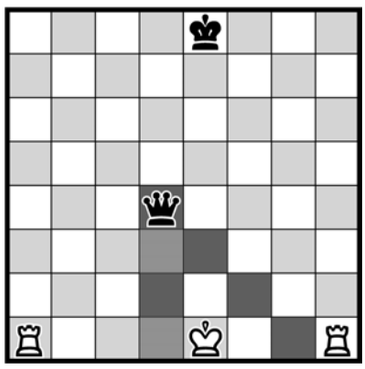


Figure 35c: You cannot castle through check (queen-side) or into check (king-side.)

# Check and Checkmate

The terms check and checkmate have been used several times in this manual. Here, we will go into more detail.

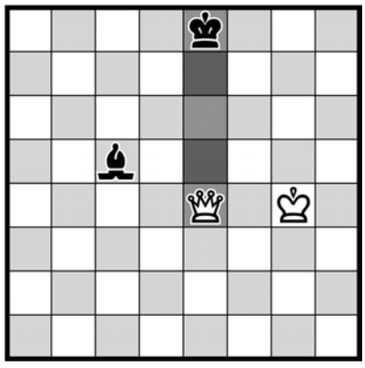


Figure 36a

Check and checkmate always involve the King because the King is the only piece which can be placed in a condition of check or checkmate. The King is the only piece which cannot put another King into check or checkmate, although sometimes he assists.

Check occurs when a King is under direct attack by an enemy piece. In the case of the Queen, Rook, Bishop and Pawn, this attack will come in a straight, unblocked line (rank, file, or diagonal) to your King. In the case of the Knight, the direct attack will be in an L-shaped pattern, possibly directly over some of your defending pieces. Keep in mind that a Queen, Rook or Bishop can place your King in check from the opposite side of the board, provided that there is an open path between the attacking piece and your King. As for the Pawn, it can place your King in check only if it is at an adjacent diagonal from your King. The only exception to this is when a Pawn actually reaches the other side of the board. At that time, as the Pawn is promoted, a King in that same rank, file or diagonal may suddenly fall into check as the Pawn is replaced with, for example, a Rook or Queen. Again, the King can only be in check at that moment if there is an open path between the King and the attacking piece. The only exception to this is the Knight, which never requires an open path between it and any piece it is attacking.

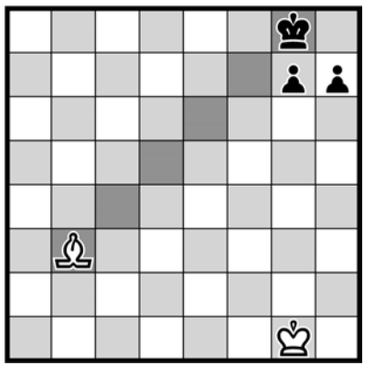


Figure 36b

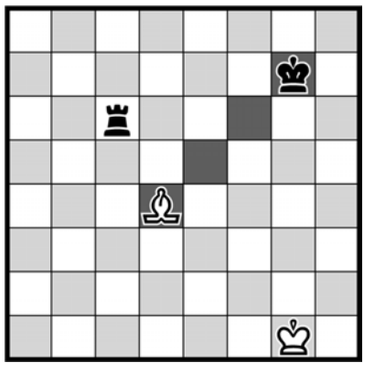


Figure 36c

There are three ways to escape check:

- The King may move out of the line of attack.
- Another piece may move and block the line of attack.
- The attacking piece may be captured.

You must escape check in one of these ways as soon as the King is in check. If you can't escape check the King is in checkmate and the game is over. A simple definition of checkmate: "An attack on the King which allows no possible escape."

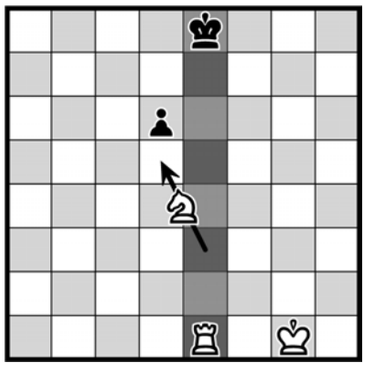


Figure 37a

You may never move the King into check, nor move another of your pieces so that an opened line of attack places your King in check. A piece preventing your King from being in check like this is called a pinned piece. These rules may be factors in blocking the King's escape from check

so watch out for them. As stated earlier, one of your prime objectives is to avoid being placed in checkmate, while trying to place your opponent's King in checkmate.

See Figures 36a-c and 37a-c for several examples of check and checkmate:

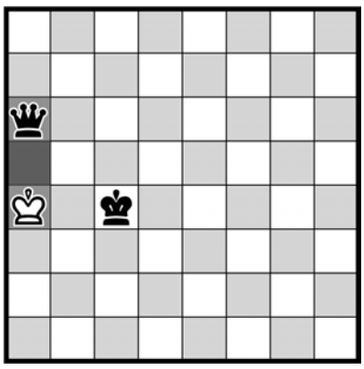


Figure 37b

*36aThe White Queen is checking the Black King. The Black King can move one square to he left or right to escape check, or move its Bishop between the King and Queen to block the attack.*

*36bThe White Bishop is checking the Black King. The King can escape check by moving one square to the left or right.*

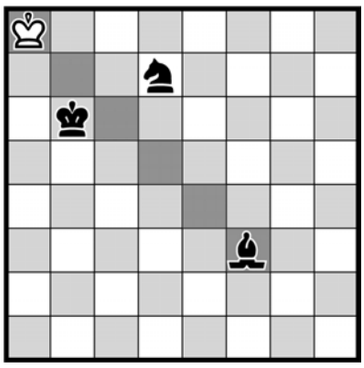


Figure 37c

*36cThe White Bishop is checking the Black King. The Black King can escape by moving to quite a few different squares, or the Black Rook can move to block the attack.*

*37aA "discovered check." When the White Knight moves, the Black King discovers that the has been checked by the White Rook. (The Black King can escape by moving to either side.)*

*37bA checkmate of the White King by the Black Queen. The Black Queen has just moved across to QR6 (QR6 is chess notation which will be discussed next), checking the White King. Since there is no place the White King can move where he won't be in check, it's checkmate.*

*37cA checkmate of the White King by the Black Bishop. Again, the White King cannot escape from check, so he is in checkmate.*

If you wish to review the specifics on each piece before we continue, refer to the previous sections. The next part of this manual deals with chess strategy.

# Chess Notation

To show you some basic opening moves, and to show you how to study and understand other books on chess strategy, you should at least know basic chess notation.

The two most popular ways to note the moves in a game of chess are called “algebraic” chess notation, and classical chess notation. CHECKMATE uses algebraic chess notation when giving hints and listing moves.

**Algebraic Chess Notation**

This form of chess notation simply notes the starting and ending squares of each move. As shown in figure 38a, each square is marked with one letter and one number. Together the letter and number are used to denote the square. The first file on the left (from the perspective of the White player) is file A, the second is file B, all the way to the eighth file, file H. The bottom rank (from the perspective of the White player) is rank 1, the second is rank 2, up to the top rank, rank 8.

The lower left square, then, is square A1. The Black King is sitting on square E8 at the beginning of the game.

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 8 | A8 | B8 | C8 | D8 | E8 | F8 | G8 | H8 |
| 7 | A7 | B7 | C7 | D7 | E7 | F7 | G7 | H7 |
| 6 | A6 | B6 | C6 | D6 | E6 | F6 | G6 | H6 |
| 5 | A5 | B5 | C5 | D5 | E5 | F5 | G5 | H5 |
| 4 | A4 | B4 | C4 | D4 | E4 | F4 | G4 | H4 |
| 3 | A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 |
| 2 | A2 | B2 | C2 | D2 | E2 | F2 | G2 | H2 |
| 1 | A1 | A1 | C1 | D1 | E1 | F1 | G1 | H1 |

Figure 38a

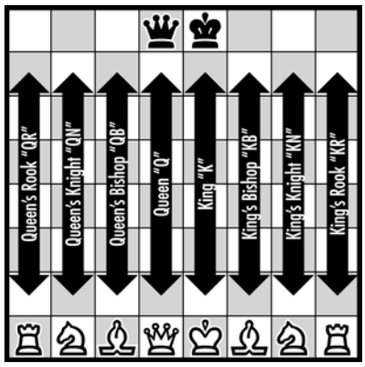



Figure 38b: King’s & Queen’s sides and standard abbreviations.

The chess game described on page 41 would be denoted as follows using algebraic notation:

| WHITE | BLACK |
|---|---|
| 1.E2-E4 | E7-E5 |
| 2.F1-C4 | F8-C5 |
| 3.D1-H5 | B8-C6?? |
| 4.H5-F7 | mate |

In some chess books or newspaper columns you'll see algebraic notation that leaves out the starting square in cases where only one piece could possibly move to the destination square. For instance, move 1 could be described as follows:

| | WHITE | BLACK |
|---|---|---|
| 1. | e4 | e5 |

It's OK to just say "e4" rather than "e2-e4" for the first move, because at the beginning of the game, the only White piece that can move to square e4 is the pawn at e2.

**Classical Chess Notation**

If you divide the chess board vertically right down the middle, you will notice that both Queens are to one side of the line, while the Kings are on the other. This is important for chess notation, since every piece on the King's side of the board is referred to as "King's piece" (i.e., King's Rook, King's Bishop, etc.) while every piece on the Queens' side is referred to as "Queen's piece" (see Figure 38b).

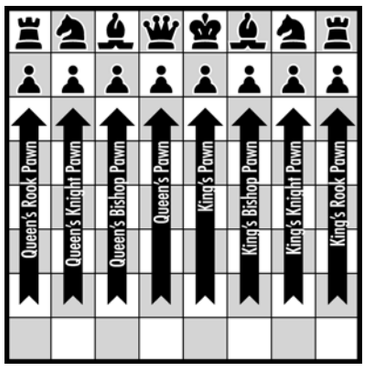



Figure 38c: Pawns in chess notation.

**Common Chess Abbreviations**

| | |
|---|---|
| — | moves to |
| x | captures |
| o-o | castles King-side |
| o-o-o | castles Queen-side |
| ep | en passant |
| ch/+ | check |
| ! | good move |
| ? | bad move |
| !! | very good move |
| ?? | very bad move |
| 1-0 | checkmate, White wins |
| 0-1 | checkmate, Black wins |

This also applies to Pawns (see Figure 38c). However it is not necessary to continually refer to Pawns using their full names. King's Rook Pawn can just be referred to as a Pawn during a move unless it is unclear precisely which Pawn you are using.

As for the files (the columns of squares on the board), keep in mind that they are named just like the pieces. The King's file is the file the King is located on, while the Queen's Knight file is the file that the Queen's Knight is located on at the start of the game. The ranks (the rows of squares across the board) each have two names, depending on whether you are looking at them from the Black or White side.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| QR1<br>QR8 | QN1<br>QN8 | QB1<br>QB8 | Q1<br>Q8 | K1<br>K8 | KB1<br>KB8 | KN1<br>KN8 | KR1<br>KR8 |
| QR2<br>QR7 | QN2<br>QN7 | QB2<br>QB7 | Q2<br>Q7 | K2<br>K7 | KB2<br>KB7 | KN2<br>KN7 | KR2<br>KR7 |
| QR3<br>QR6 | QN3<br>QN6 | QB3<br>QB6 | Q3<br>Q6 | K3<br>K6 | KB3<br>KB6 | KN3<br>KN6 | KR3<br>KR6 |
| QR4<br>QR5 | QN4<br>QN5 | QB4<br>QB5 | Q4<br>Q5 | K4<br>K5 | KB4<br>KB5 | KN4<br>KN5 | KR4<br>KR5 |
| QR5<br>QR4 | QN5<br>QN4 | QB5<br>QB4 | Q5<br>Q4 | K5<br>K4 | KB5<br>KB4 | KN5<br>KN4 | KR5<br>KR4 |
| QR6<br>QR3 | QN6<br>QN3 | QB6<br>QB3 | Q6<br>Q3 | K6<br>K3 | KB6<br>KB3 | KN6<br>KN3 | KR6<br>KR3 |
| QR7<br>QR2 | QN7<br>QN2 | QB7<br>QB2 | Q7<br>Q2 | K7<br>K2 | KB7<br>KB2 | KN7<br>KN2 | KR7<br>KR2 |
| QR8<br>QR1 | QN8<br>QN1 | QB8<br>QB1 | Q8<br>Q1 | K8<br>K1 | KB8<br>KB1 | KN8<br>KN1 | KR8<br>KR1 |

Figure 39: Names of each square.

You should be able to see that every location on the board can be identified by a combination of rank and file. Since there are two names for each rank location, there are consequently two names for every square. Using abbreviations, each square on the board is identified as shown in Figure 39. The top name in each square is the Black player's name for that square; the lower name is the White player's name for the same square.

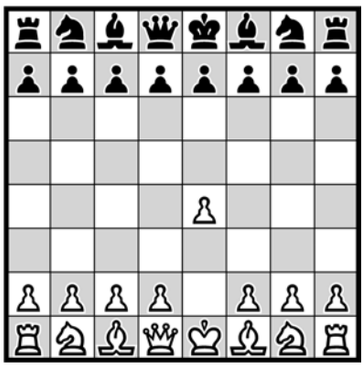


Figure 40a

Keep in mind that when the White player moves, you must use the White player's names for the squares he or she is playing. Likewise, when the Black player moves, use the Black player's names for the squares he or she is playing.

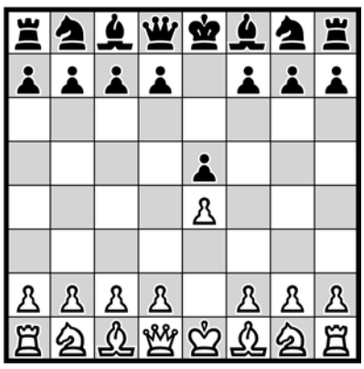


Figure 40b

Now that you know the names of each piece and each square, the only other thing to understand is the shorthand to record each move. P-K4 is

the most common first move in most chess games. It means that the King's Pawn moves out two ranks to rank four. The Pawn's starting position of K2 (King's Two) is given as obvious (on a first move, where else would it be?), as is the fact that the Pawn being used is the King's Pawn. No other pawn could reach K4 on the first turn.

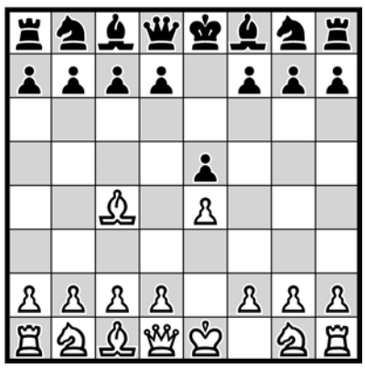


Figure 40c

**Sample Chess Game Walk-Through**
To put it all together, let's play a quick sample game over the next few pages, with notation and illustrations. This particular game is called Scholar's Mate.

The chess notation for this entire game is as follows:

| WHITE | BLACK |
|---|---|
| 1.P-K4 | P-K4 |
| 2.B-B4 | B-B4 |
| 3.Q-R5 | N-QB3?? |
| 4.QxBP | mate |

What does this mean? Let's see:

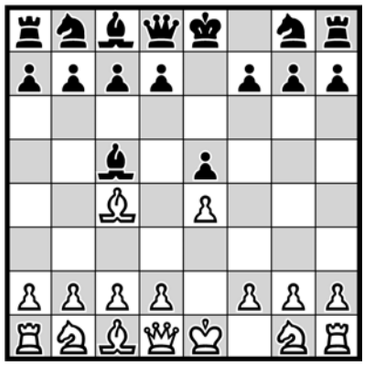


Figure 41a

For White's first move, P-K4, the board looks like Figure 40a. Black responds by doing exactly the same thing (P-K4) in Figure 40b.

In Figure 40c, White moves its King's Bishop to the 4th rank of the Queen's Bishop file (B-B4). Black's response to this is to move its King's Bishop to the 4th rank of its Queen's Bishop file (B-B4) in Figure 41a.

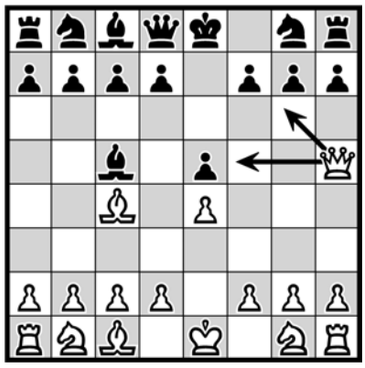


Figure 41b

The next thing that White does is to move its Queen to the 5th rank of the King's Rook file. This is an important move because the Queen is now threatening two of Black's pieces. By

attacking at a diagonal, the Queen can take Black's Bishop's Pawn on the next move or the Queen can take Black's King's Pawn (see Figure 41b). One of these attacks, the attack against the Black Bishop's Pawn, will lead to checkmate and the end of the game if Black fails to respond properly. The other attack will lead only to check because, after the Queen captures the King's Pawn, the Queen's line of attack against the King could be blocked by several Black pieces: the Queen, the King's Bishop, or the King's Knight.

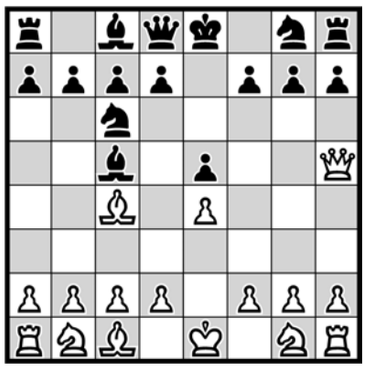


Figure 41c

Black responds to these two potential attacks by guarding the King's Pawn. As you can see by the notation, the "??" denotes a very bad move. The reason? Although the Knight is now guarding the King's Pawn, guaranteeing that the White Queen would be captured if it were to capture the Pawn, Black has failed to guard against the more deadly attack: the White Queen's attack against the Bishop's Pawn. The board now looks like Figure 41c.

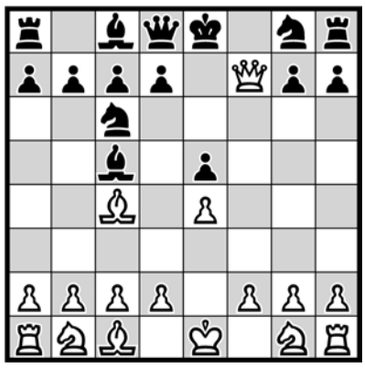


Figure 42a

White finishes the game by moving the Queen to the 7th rank in the King's Bishop file and taking the Bishop's Pawn (see Figure 42a). This places the King in checkmate. Remember our definition of checkmate: the King is in check, cannot take the Queen without entering into check (notice that the Queen is guarded by its Bishop at B4), and cannot escape to any other unoccupied square that is not already under attack by the Queen. Also, the attacking Queen cannot be eliminated by any other piece, nor have its line of attack blocked.

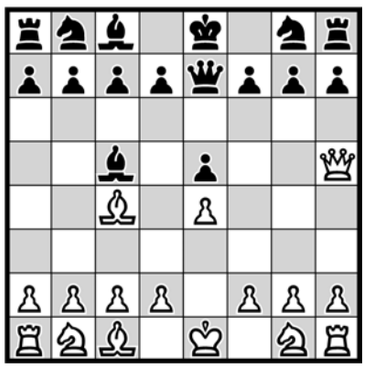


Figure 42b

There are several simple ways in which Black could have avoided checkmate. One is as simple

as moving the Black Queen to King's Two (written as Q-K2) which would have simultaneously guarded both Pawns under attack and which would have ended the threat of check or checkmate by the White Queen (the reason, of course, is because the White Queen could then be taken by the Black Queen). Figure 42b shows this simple defense.

The other defenses against this attack should also be obvious. Try a few variations on this game, and you should see the alternatives.You now should have a basic understanding of the game of chess as well as a basic understanding of chess notation.

Now for some more detail…

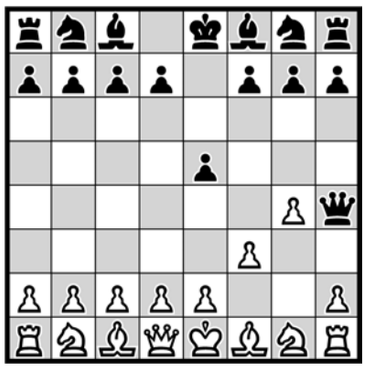


Figure 42c: Fool's Mate

# The Three Phases of a Chess Game

Chess is said to have three phases: an opening game, a middle game, and an end game. We'll talk about each of them.

**The Opening Game**
The opening game can be defined as the portion of the game that occurs generally between the first move and the eighth to the fifteenth move. The point of the opening game is to organize and coordinate your pieces as quickly as possible in order to take maximum advantage of their power. If you're a beginner, this is where you are going to make most of your mistakes. The mistake made in the sample game Scholar's Mate, for instance, is fairly common. An even simpler variation of that game, which can be just as easily lost by a bad move, is appropriately called the Fool's Mate. This game is pictured in Figure 42c.

As you can see, the attack again relies heavily on early development of the Queen and on White's poor responses to that development. Keep in mind that the Fool's Mate and the Scholar's Mate are regarded as very amateur games—ordinarily, even a poor player will spot your attempt to play one of these games and will respond with an appropriate defense.

The Fool's Mate and Scholar's Mate are two games to avoid. There are plenty of better ways to start your chess game. In fact, there are 169.5 octillion (169,518,829,100,544,000, 000,000,000,000) possible combinations of the first 10 moves. To avoid making the wrong opening moves, keep the following things in mind:

•Your first move should be a center Pawn (the Queen's Pawn or King's Pawn). Otherwise, do not move too many of the other Pawns and never forget that a Pawn cannot retreat once it goes forward.

•Avoid moving the same piece twice during the opening game. Remember, if the point of the opening game is to organize and coordinate your pieces as quickly as possible in order to take maximum advantage of their power, then wasting several moves on one piece isn't likely to assist this.

On the other hand, if by moving the same piece twice you have a chance to make a useful capture, or if you can take advantage of an opportunity created by a blunder on your opponent's part, then do it. The key thing to always remember is that winning is all that matters in chess. If, by breaking some of these general guidelines, you can still win, then by all means, ignore these suggestions. However these guidelines will generally help you win.

•Move out your Knights and Bishops before you move out the Rooks and Queen. For best control of the board, try to move them toward the center of the board. From the center each piece will have greater control of the board around it. From the edge of the board, the area controlled by each piece is diminished.

•Initially, you should stay on your side of the board. This strategy was violated by the White Queen in the Fool's Mate and by the Black Queen in the Scholar's Mate. If you try these games against an experienced player, you will learn the hard way why it's not a good idea to violate this particular rule.

•Castle early in the game. This will give you a stronger defense, move one of your Rooks to a better attack position, and allow your other pieces to concentrate on the offensive. It is also a good idea to castle on the King's side so you have less area to defend.

•Do not move your Queen out too early. It is unlikely you will be able to accomplish a Fool's Mate or Scholar's Mate, and it is far more likely that your opponent will concentrate all attacks on your Queen.

•Move your Rooks to K1 or Q1. If you have castled early, and if you opened with a center Pawn move, this will allow your Rooks a greater range of power than leaving them in either corner.

•Do not prematurely move your most powerful pieces into the center of the board. To do so invites attack against them by other pieces—for instance, to move your Queen out too early invites attack by weaker pieces, even Pawns. Likewise, if you move one of your Rooks out into the center of the board prematurely, you risk losing it to a Knight, Bishop or Pawn.
If you keep these things in mind during your opening game, you will have a better chance at winning.

**The Middle Game**
This is the part of the game that follows your opening development (your opening attempts to maximize your power over the board) and that precedes the final battle to finish off your opponent. This is the phase of the game where the attack is critical. You want to be on the offensive here. As in the opening game, however, there are some general things to keep in mind during this phase:

•Try to get ahead in power or position. This is the portion of the game where you will concentrate on capturing pieces, particularly powerful pieces. Concentrate on attacking, gaining territory and points, decimating your enemy, and thereby advancing toward checkmate. Attack, but be certain you are not leaving holes in your defenses (remember, you should have already castled). Keep in mind that whoever is on the attack at this time is less likely to make an error than whoever is on the defensive. Attack!

•Be especially careful where you put your pieces. This may sound like ridiculously simple advice, but keep in mind that, during the opening game, the important center of the board is fairly open, still subject to control by either player. During the middle game, the center is generally cluttered with many of the squares guarded by one or more pieces, making each move more dangerous than in the opening game.

•Watch your opponent's moves. During the middle game, your enemy's moves will be used to decrease your numbers and increase their power just like you're trying to do. Always remember that your opponent is setting up for checkmate.
All of this will set you up for the end game.

**The End Game**
This is the portion of the game where, all things being equal, both sides will have relatively few pieces left on the board, the King may actually be part of an offensive strategy, and where a Pawn or two may even have crossed the board to become a Queen or another piece. Because you will have fewer pieces on the board, the pieces that remain will increase in importance. Now more than ever, use every piece to its full potential.
At the end of the game, your least powerful pieces are going to assume a new importance. Just the difference of a Pawn or two may decide the outcome of a game. Remember that once a Pawn crosses the board, it can be promoted to a Queen. The use of Pawns during the end game is a major end game strategy.

Some Important Pawn-Related, End Game Rules:

•If you are two Pawns ahead of your opponent, winning the game is considered easy, assuming you make no major mistakes. This can even be said of the player who is only one Pawn ahead, but of course, the opposing player will target that Pawn once it tries to run for a promotion.

•Two of your Pawns in a row (one directly in front of the other) is a weak position. Likewise, a Pawn by itself is weak or, for that matter, so is a Pawn that is blocked from forward movement.

•If one or several of your Pawns are able to pass through your opponent's lines of defense, advance them as fast as you can toward the other side of the board (with the intent of promoting them to Queens).

•If you are one or two Pawns ahead of your opponent, and if you must make a choice between specific types of pieces to trade, then trade your power pieces first (your Queen, Rooks, Knights, and Bishops), but not your Pawns.

•If you are one or two Pawns behind your opponent, and if you must make a choice between specific types of pieces to trade, then trade your Pawns, not your power pieces.

•If you are down to one Bishop, avoid putting your Pawns on squares that are the same color as your Bishop (that is, if you have a Bishop that moves
only on white squares, don't block the white squares with your Pawns).

•If you and your opponent trade away all your power pieces, don't worry. When Pawns are the only pieces left you still have the potential of trading each Pawn for a Queen. In some ways, therefore, this is actually the easiest kind of game to win.

**A Few Other End Rules with Other Pieces**
By the end of the game your King will become a more powerful piece. Take advantage of his power; if you are going to use your King offensively, now is the time.

If you have two Bishops, and your opponent has only a Bishop and Knight, then you have the advantage. Following that line of thought, Bishops are generally better than Knights during the end game. So if you must trade power pieces, trade the Knights first.

**Drawn Games: The Other Ending**
As said earlier, the entire point of chess is winning. There is another possibility. If neither side wins, there is a tie game, called a draw.
There are several types of drawn games. These include:

•Draw by Mutual Agreement: This is when both players agree that a game is drawn.

•Draw by Perpetual Check: This occurs when one player continually puts the other player's King in check (not checkmate) and the checked player has no alternative but to endlessly repeat the same moves to avoid check.

•Draw by Stalemate: For the purpose of explaining this, let's look at it strictly from your point of view. Stalemate occurs when 1) it is your turn to move, 2) your King is not in check, and 3) your only remaining move is to move the King onto a square which would place him in check (which, of course, is illegal). Under these three conditions the game is a stalemate and drawn. No victory, no defeat either.

•Draw by Insufficient Checkmating Material: Simply, neither side has enough pieces left on the board to achieve checkmate. For example, White has a King, and Black has a only King and a Bishop.

•Fifty Move Draw: If fifty moves have been made on each side without a single capture or a single Pawn move, then the game should be considered drawn (for obvious reasons, this rarely happens).

•Repeat Move Draw: If a player repeats the exact same move for three continuous turns, then the game can be considered drawn.

# Closing Comments

*Chess skill does not make a man better, but it does make a mind better.*

*- An Old Soviet Saying*

This manual covers only the basic moves and strategies of chess as well as basic chess notation. With these skills, you can now go to your local library or book store and find books that will go into much more detail than this manual; almost all of them will include records of the games of past and present chess masters. Since you now know how to read chess notation, you can study and learn from these books and from the games inside them. All of this is nothing without playing the game, so here in front of you is the battlefield: your chessboard. Your warriors stand ready, your training is finished, and there, the storm draws near. Battle Chess awaits you. Let the battle, and the legend, begin…

Your move.

# Common Problems Experienced By Users

**1. The program cheats, sometimes when I move a pawn, the program moves its pawn and my pawn disappears.**
This is not a form of cheating, but a type of move which chess beginners have often not heard of, called en passant. It means capturing a pawn "in passing" and was introduced to chess in the eighteenth century in order to prevent blocked positions arising too easily.

**2. The program won't let me make my move.**
If your king is in check, or a move would result in your king being in check, then only moves which get the king out of check are permitted.

**3. I can't move pieces around very easily.**
Remember you must click once on a piece to pick it up, and click again to drop it down. Don't try to drag the piece! Pages 8-9 reveiw several menu options that affect how you move your pieces.

**Technical Details**
For the technically minded, or the curious, or anyone that has read the manual this far, we thought it may be useful to give an indication of the work involved in a program of this complexity by describing it with a little technical detail.

Although it is difficult to appreciate, the majority of computer games consist mainly of graphics and sound data; very little of the machines' memory is used for the actual program. CHECKMATE is very different. The actual chess-playing program code (or engine, as it is known) is around 100K, making it one of the biggest (and most complex) games, in terms of code size, available. (It takes rather more code to calculate a good chess move than it does to move a spaceship across the screen, for example!). The remaining 300K or so is made up of data tables (for the chess engine to use), user interface code and graphics data.

For the computer-chess afficionados amongst you, CHECKMATE uses a type-B search method (i.e. brains instead of brute force).

CHECKMATE consists of around 30,000 lines of 68000 assembly-language and has been developed over a period of four years. Its author, Chris Whittington, ex-Master Level, is constantly updating and improving it to maintain and strengthen its position as the best Chess program available on a microcomputer today.

"Hence if the knowledge of the chess-master were built into a computer program we should see not master chess but something very much stronger . . . . To capture in a formal descriptive scheme the game's delicate structure - it is here that future progress lies."

- Professor Donald Michie

"Programmers' Gambit"
New Scientist, 1972

# Solutions to Test Positions

**Key**

No.
Side to move
Best move
Comments

1
B
d6d1
+queen sacrifice leading to mate

2
W
d4d5
after c6d5, e4e5 white has complete control

3
B
f6f5
pawn lever, black gains space

4
W
e5e6
if c5d4, e2b5+ wins

5
W
c3d5 (or a2a4)
after exchanges on d5, white forks king and rook

6
W
g5g6
white recovers the pawn and keeps rook on 7th

7
W
h5f6
if g7f6, e5f6 and f6f7 forking the rooks

8
W
f4f5
gives the white knight access to f4

9
W
f4f5
idea is f1d3 and c3e2 followed by e2f4

10
B
c6e5
with the idea e5g4 and winning tactics

11
W
f2f4
pawn lever, white gains space

12
B
d7f5
simple move, defends against both white threats

13
W
b2b4
pawn lever, mobilizes white's centre pawns

14

19
B
e8e4
after e1e4, idea is d6d5 with gain in activity

20
W
g3g4
and whites pieces penetrate black's king side

21

W

d1d2 (or d1e1)

nasty pin, wins the black bishop

15

W

g4g7+

wins a pawn

16

W

d2e4

idea is e4d6+, if d5e4 then b3f7+ wins the queen

17

B

h7h5

white's king side pawns come under attack

18

B

c5b3

after c2b3, d8b6+ with advantage of bishop pair

W

f5h6

tactics - white wins the exchange

22

B

b7e4

after d3e4, c7c4 wins back the piece

23

B

f7f6

pawn lever before white plays f5 (if c8f5 g2g4!)

24

W

f2f4

pawn lever, white stands better

# Classic Games

## Game 1

| White | Black |
|---|---|
| **Capt. Smith** | **Philidor** |
| 1. P-K4 | P-K4 |
| 2. B-B4 | N-KB3 |
| 3. P-Q3 | P-B3 |
| 4. B-KN5 | P-KR3 |
| 5. BxN | QxB |
| 6. N-QB3 | P-QN4 |
| 7. B-N3 | P-QR4 |
| 8. P-QR3 | B-B4 |
| 9. N-B3 | P-Q3 |
| 10. Q-Q2 | B-K3 |
| 11. BxB | PxB |
| 12. O-O | P-N4 |
| 13. P-R3 | N-Q2 |
| 14. N-KR2 | P-R4 |
| 15. P-KN3 | K-K2 |
| 16. K-N2 | P-Q4 |
| 17. P-B3 | N-B1 |
| 18. N-K2 | N-N3 |
| 19. P-B3 | QR-KN1 |
| 20. P-Q4 | B-N3 |
| 21. QPxP | QxP |
| 22. N-Q4 | K-Q2 |
| 23. QR-K1 | P-KR5 |
| 24. Q-KB2 | B-B2 |
| 25. N-K2 | RPxP |
| 26. QxP | QxQch |
| 27. NxQ | N-B5ch |
| 28. K-R1 | RxP |
| 29. R-KN1 | RxNch |
| 30. KxR | R-R1ch |
| 31. N-R5 | RxNch |
| 32. K-N3 | N-R6ch |
| 33. K-N4 | R-R5 mate |

## Game 2

| White | Black |
|---|---|
| **La Bourdonnais** | **McDonnell** |
| 1 . P-Q4 | P-Q4 |
| 2. P-QB4 | PxP |
| 3. P-K3 | P-K4 |
| 4. BxP | PxP |
| 5. PxP | N-KB3 |
| 6. N-QB3 | B-K2 |
| 7. N-B3 | O-O |
| 8. B-K3 | P-B3 |
| 9. P-KR3 | QN-Q2 |
| 10. B-N3 | N-N3 |
| 11. O-O | KN-Q4 |
| 12. P-QR4 | P-QR4 |
| 13. N-K5 | B-K3 |
| 14. B-B2 | P-KB4 |
| 15. Q-K2 | P-B5 |
| 16. B-Q2 | Q-K1 |
| 17. QR-K1 | B-B2 |
| 18. Q-K4 | P-N3 |
| 19. BxP | NxB |
| 20. QxN | B-B5 |
| 21. Q-R6 | BxR |
| 22. BxP | PxB |
| 23. NxNP | N-B1 |
| 24. Q-R8ch | K-B2 |
| 25. Q-R7ch | K-B3 |
| 26. N-B4 | B-Q6 |
| 27. R-K6ch | K-N4 |
| 28. Q-R6ch | K-B4 |
| 29. P-N4 mate | |

## Game 3

| White | Black |
|---|---|
| **Burn** | **Blackburne** |
| 1. P-K4 | P-K4 |
| 2. N-KB3 | N-QB3 |
| 3. B-N5 | B-B3 |
| 4. O-O | P-Q3 |
| 5. P-Q4 | PxP |
| 6. NxP | B-Q2 |
| 7. N-QB3 | B-K2 |
| 8. B-K3 | O-O |
| 9. B-K2 | R-K1 |
| 10. B-B3 | B-KB1 |
| 11. B-N5 | P-KR3 |
| 12. B-B1 | P-KN4 |
| 13. P-KN3 | NxN |
| 14. QxN | B-N2 |
| 15. Q-Q1 | B-B3 |
| 16. R-K1 | Q-Q2 |
| 17. B-N2 | R-K2 |
| 18. Q-Q3 | QR-K1 |
| 19. B-Q2 | N-N5 |
| 20. P-B3 | N-K4 |
| 21. Q-B1 | P-Q4 |
| 22. QR-Q1 | PxP |
| 23. BxP | PxP |
| 24. B-R1 | N-Q6 |
| 25. RxR | B-Q5ch |
| 26. B-K3 | RxR |
| 27. QxN | RxB |
| 28. QxB | R-K8ch |
| 29. K-B2 | QxQch |
| 30. RxQ | RxB |
| 31. R-KR4 | R-B8 |
| 32. N-K4 | RxPch |
| 33. KxP | P-B4 |
| 34. resigns | |

## Game 4

| White | Black |
|---|---|
| **Morphy** | **Duke and Count** |
| 1. P-K4 | P-K4 |
| 2. N-KB3 | P-Q3 |
| 3. P-Q4 | B-N5 |
| 4. PxP | BxN |
| 5. QxB | PxP |
| 6. B-QB4 | N-KB3 |
| 7. Q-QN3 | Q-K2 |
| 8. N-B3 | P-B3 |
| 9. B-KN4 | P-QN4 |
| 10. NxP | PxN |
| 11. BxPch | QN-Q2 |
| 12. O-O-O | R-Q1 |
| 13. RxN | RxR |
| 14. R-Q1 | Q-K3 |
| 15. BxRch | NxB |
| 16. Q-N8ch | NxQ |
| 17. R-Q8mate | |

## Game 5

| White | Black |
|---|---|
| **Zukertort** | **Blackburne** |
| 1. P-QB4 | P-K3 |
| 2. P-K3 | N-KB3 |
| 3. N-KB3 | P-QN3 |
| 10. N-QN5 | N-K5 |
| 11. NxB | PxN |
| 12. N-Q2 | QN-B3 |
| 13. P-B3 | NxN |
| 14. QxN | PxP |
| 15. BxP | P-Q4 |
| 22. PxP e.p. | NxP |
| 23. P-B5 | N-K5 |
| 24. BxN | PxB |
| 25. PxNP | R-B7 |
| 26. PxPch | K-R1 |
| 27. P-Q5ch | P-K4 |

| | | | | | |
|---|---|---|---|---|---|
| 5. O-O | P-Q4 | 17. QR-K1 | R-B2 | 29. R-B8ch | KxP |
| 6. P-Q4 | B-Q3 | 18. P-K4 | QR-QB1 | 30. QxPch | K-N2 |
| 7. N-B3 | O-O | 19. P-K5 | N-K1 | 31. BxPch | KxR |
| 8. P-QN3 | QN-Q2 | 20. P-B4 | P-N3 | 32. B-N7ch | K-N1 |
| 9. B-N2 | Q-K2 | 21 . R-K3 | P-B4 | 33. QxQ resigns | |

## Game 6

| **White** | **Black** | 9. P-K3 | B-Q2 | 20. PxR | Q-N3ch |
|---|---|---|---|---|---|
| **Pillsbury** | **Lasker** | 10. K-N1 | P-KR3 | 21. B-N5 | QxBch |
| | | 11. PxP | PxP | 22. K-R1 | R-B2 |
| 1. P-Q4 | P-Q4 | 12. N-Q4 | O-O | 23. R-Q2 | R-B5 |
| 2. P-QB4 | P-K3 | 13. BxN | BxB | 24. R(1)-Q1 | R-B6 |
| 3. N-QB3 | N-KB3 | 14. Q-R5 | NxN | 25. Q-B5 | Q-B5 |
| 4. N-B3 | P-B4 | 15. PxN | B-K3 | 26. K-N2 | RxP |
| 5. B-N5 | BPxP | 16. P-B4 | QR-B1 | 27. Q-K6ch | K-R2 |
| 6. QxP | N-B3 | 17. P-B5 | RxN | 28. KxR | Q-B6ch |
| 7. Q-R4 | B-K2 | 18. PxB | R-QR6 | 29. resigns | |
| 8. O-O-O | Q-R4 | 19. PxPch | RxBP | | |

## Game 7

| **White** | **Black** | 9. Q-R4 | B-N2 | 20. R-B2 | BxN |
|---|---|---|---|---|---|
| **Bernstein** | **Capablanca** | 10. B-QR6 | BxB | 21. RxB | N-Q4 |
| | | 11. QxB | P-B4 | 22. R-B2 | P-B6 |
| 1. P-Q4 | P-Q4 | 12. BxN | NxB | 23. KR-QB1 | R-B4 |
| 2. P-QB4 | P-K3 | 13. PxP | PxP | 24. N-N3 | R-B3 |
| 3. N-QB3 | N-KB3 | 14. O-O | Q-N3 | 25. N-Q4 | R-B2 |
| 4. N-B3 | B-K2 | 15. Q-K2 | P-B5 | 26. N-N5 | R-B4 |
| 5. B-N5 | O-O | 16. KR-Q1 | KR-Q1 | 27. NxBP | NxN |
| 6. P-K3 | QN-Q2 | 17. N-Q4 | B-N5 | 28. RxN | RxR |
| 7. R-B1 | P-QN3 | 18. P-QN3 | QR-B1 | 29. RxR | Q-N7 |
| 8. PxP | PxP | 19. PxP | PxP | 30. resigns | |

## Game 8

| **White** | **Black** | 9. P-Q3 | B-K2 | 20. N-Q5 | NxN |
|---|---|---|---|---|---|
| **Reti** | **R. Gruber** | 10. Q-Q2 | N-B2 | 21. PxN | B-N4 |
| | | 11. N-Q1 | O-O | 22. PxN | QxP |
| 1. N-KB3 | N-KB3 | 12. N-K3 | B-R2 | 23. Q-B3 | B-B3 |
| 2. P-B4 | P-Q3 | 13. O-O | N-Q2 | 24. Q-Q2 | K-R1 |
| 3. P-KN3 | B-B4 | 14. N-R2 | N-K3 | 25. R-N2 | R-B2 |
| 4. B-N2 | P-B3 | 15. P-B4 | PxP | 26. QR-KN1 | B-K4 |
| 5. P-N3 | Q-B1 | 16. PxP | P-KB4 | 27. P-Q4 | B-B3 |
| 6. P-KR3 | P-K4 | 17. K-R1 | N-B3 | 28. P-Q5 resigns | |
| 7. B-N2 | N-R3 | 18. R-KN1 | N-R4 | | |
| 8. N-B3 | P-R3 | 19. B-KB3 | N(4)xP | | |

## Game 9

| **White** | **Black** | 9. B-Q3 | N-B3 | 20. RxP | P-B6 |
|---|---|---|---|---|---|
| **Keres** | **Smyslov** | 10. O-O | B-N2 | 21. Q-B1 | QxP |
| | | 11. R-B1 | R-B1 | 22. Q-R6 | KR-Q1 |
| 1. P-QB4 | N-KB3 | 12. R-K1 | N-QN5 | 23. B-B1 | B-N2 |
| 2. N-QB3 | P-K3 | 13. B-B1 | N-K5 | 24. Q-N5 | Q-B3 |
| 3. N-B3 | P-B4 | 14. P-QR3 | NxN | 25. Q-N4 | P-B7 |
| 4. P-K3 | B-K2 | 15. RxN | N-B3 | 26. B-K2 | R-Q5 |
| 5. P-QN3 | O-O | 16. N-K5 | NxN | 27. P-B4 | R-Q8ch |
| 6. B-N2 | P-QN3 | 17. RxN | B-B3 | 28. BxR | Q-Q5ch |
| 7. P-Q4 | PxP | 18. R-R5 | P-N3 | 29. resigns | |
| 8. PxP | P-Q4 | I 9. R(3)-R3 | PxP | | |

## Game 10

| **White** | **Black** | 13. PxN | NxP | 28. R-K1 | RxR |
|---|---|---|---|---|---|
| **D. Byrne** | **Fischer** | 14. BxP | Q-N3 | 29. Q-Q8ch | B-B1 |

| | | | | | |
|---|---|---|---|---|---|
| | | 15. B-B4 | NxQBP | 30. NxR | B-Q4 |
| 1. N-KB3 | N-KB3 | 16. B-B5 | KR-K1ch | 31. N-B3 | N-K5 |
| 2. P-B4 | P-KN3 | 17. K-B1 | B-K3 | 32. Q-N8 | P-QN4 |
| 3. N-B3 | B-N2 | 18. BxQ | BxBch | 33. P-R4 | P-R4 |
| 4. P-Q4 | O-O | 19. K-N1 | N-K7ch | 34. N-K5 | K-N2 |
| 5. B-B4 | P-Q4 | 20. K-B1 | NxPch | 35. K-N1 | B-B4ch |
| 6. Q-N3 | PxP | 21. K-N1 | N-K7ch | 36. K-B1 | N-N6ch |
| 7. QxBP | P-B3 | 22. K-B1 | N-B6ch | 37. K-K1 | B-N5ch |
| 8. P-K4 | QN-Q2 | 23. K-N1 | PxB | 38. K-Q1 | B-N5ch |
| 9. R-Q1 | N-N3 | 24. Q-N4 | R-R5 | 39. K-B1 | N-K7ch |
| 10. Q-B5 | B-N5 | 25. QxP | NxR | 40. K-N1 | N-B6ch |
| 11. B-KN5 | N-R5 | 26. P-KR3 | RxP | 41. K-B1 | R-B7mate |
| 12. Q-R3 | NxN | 27. K-R2 | NxP | | |

# Credits

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