#  The C\&O Chess Journal 

## Part 1 The Basics

Chess, one of the oldest existing board games, had its origins in India around 1500 years ago. It is a game for two players, one using the white chessmen and one using the black. The board represents a battlefield and the chessmen are two armies. Chess is a fight and the objective is to capture (or "checkmate") the opposing King.


The Starting Position

## Board Geography

By tradition, the playing pieces and players are identified as "White" and "Black" (no matter the actual color of the chessmen used). The same is true of the squares on the chessboard, although they are often referred to as "light" and "dark." At the beginning of the game the chessmen are set up as shown in the first diagram. The next section will describe
how the pawns and pieces move and capture.

The following rules will help you to remember the proper board orientation and setup:

1. A white square should always be in each player's right corner (remember "light on right").
2. The opposing Kings and Queens go directly opposite each other, with the "Queen on her own color" (ie: White's Queen on a light square, Black's on a dark square). For children I say "the Queen likes her dress to match her shoes."
3. When the board contains letters, that identify the "files" (rows of squares running across the board, from White's side to Black's side - vertical in a diagram), and numbers, identifying "ranks" (rows running from left to right horizontal in a diagram), the white pieces should be placed on the $1^{\text {st }}$ rank and pawns on the $2^{\text {nd }}$ rank. The black pawns and pieces are placed on the $7^{\text {th }}$ and $8^{\text {th }}$ ranks, as shown.

Each square is named for the intersecting file and rank on which it is located. For example square "al," the dark square on White' left corner, and " $h 1$," the light square on his right.

In addition to the files and ranks, the board contains "diagonals" (rows of squares of the same color connected at the corners). Diagonals are identified by the names of the squares at each end (for example, the "long diagonals" a1-h8 and a8-h1, or a short diagonal such as a2-b1). The printed letters and numbers are a
simple aid in "recording the moves" of the game for later replay, coaching and study (see "Notation"). If no letters and numbers are printed on a board the names of the ranks, files and squares remains the same, determined by board orientation rules and the setup of the chessmen.

The White player always moves first. Then the players alternate turns. A player may not "pass" or skip his turn. Only one man may be moved per turn (except in the case of "castling," a special move which is explained later). By convention, the six types of chessmen are divided into "pieces" and "pawns" and they all move and capture in different ways. The pieces are further divided into "major pieces" (Rooks and Queens) and "minor pieces" (Knights and Bishops).

The Knights are the only pieces which may jump over other chessmen. All other pieces may move only along unblocked lines (ranks, files, and diagonals). No chessman may be moved to a square already occupied by another man of the same color. But a player may capture an enemy man that occupies any square to which one of his men may move. Capturing is done by simply removing the opposing man from the board and replacing it with the capturing one.

The moves of the various pieces and pawns are presented in a specific order. While adults and those of you with some previous knowledge of chess may wish to learn all of them at once and begin playing with a "full board," I recommend that new players learn them in the order presented. As they learn, students should also play the "tactical problems" using
only a few men. "Handicaps" are a good way for more experienced players to play against those with less.

Players who approach mastering the basics in this way will have an advantage as they add the remaining pieces, one by one, to the board. When they have learned the various moves and captures they will already have a grasp of how the pawns and pieces can be coordinated to fight together as a well trained, complete army, should.

## Chess is NOT about memorizing how

 the men move. It is about "ideas" and how to plan and coordinate. It is about how to visualize a strategy and foresee an outcome. Chess cannot be mastered in an hour, or a week, or a year. But it can and should be fun, and a challenge, from the beginning.A word about the "Touch-Move Rule." In most "club" chess, and in all tournaments, a player who touches a piece or pawn "must" move it unless he first states "I adjust" or some clear equivalent (" j 'adoube" in French). That is the "default" (normal) rule and we always use it at the Center. It helps develop the skill of "visualization" and the habit of "thinking before moving." Of course courtesy may allow a "warning" (or two) for a first offense, particularly with new players.

Before going too much further, you should have a, full sized, "club-quality" (or better) chess set (a board with $2 \frac{1}{4} \mathrm{in}$. squares, solid plastic chessmen, and a $31 / 2$ in. tall King), not a cheap "toy store" set. These are available from many internet sources at a reasonable cost.

## The Moves of the Chessmen



The King is the most important piece. When either King is trapped, or "checkmated," the game is over and that player loses (in regular chess the King is never actually "captured"). The King's move is one of the two easiest to learn.


## The King's move

Basically, he may simply move one square in any direction (as represented by the squares with dots in the diagram). He captures opposing pieces or pawns the same way he moves.

There are two exceptions to this simple move. First, the King is never allowed to capture on, or move to, a square on which he is being "checked" (attacked) by an enemy piece. For example, a King may never move next to


Neither King may move next to the other.
the opposing King. In the diagram, above, neither King may move to d 4 or e4, as that would place both Kings in "check." A King which is attacked is said to be "in check" and must get "out of check" immediately (see "Check and Checkmate").

The other exception is the special King move, "castling." Both of these are explained later.


The pawns are the "most difficult" chessmen to learn, and the most underestimated by beginners. This is primarily because they differ from the "pieces" in several very important ways. I also consider them to be the "second most important" men for beginners to learn, primarily due to one "special ability" that no regular piece has. While it is true that, individually, they are the weakest men on the board, they also have a "group dynamic" that makes them unique and, when working together, they may be as powerful as any other single piece. When teaching beginners I always begin with the pawns and Kings, as an understanding of how they may interact is fundamental to chess mastery.

As noted above, the pawns have a number of features which, taken together, make them more difficult for beginners to master. For example, they are the only men who move differently from the way they capture. A pawn may "move" only straight ahead (never sideways or backward) but it "captures" diagonally forward. Its "basic move" is one square at a time, but on its "first move" each
pawn has the option, or choice, of moving forward one or two squares.


## The Pawns' move and capture.

In the diagram, White's pawn (on square c2) has not yet moved. It may move to either of the two squares in front of it (marked with dots), c3 and c4, or it may capture an enemy piece on either of the two squares diagonally forward (marked with stars), b3 and d3. It may not move to the starred squares unless there is an enemy piece or pawn on that square. Black's pawn, on g5, may only move to g4 (it has already moved at least once), or capture on f4 or h4 (if an enemy occupies the square).

The reason I call pawns the "second most important" men is that if a pawn advances all the way to the opposite side of the board it is "promoted" right away, usually to a Queen (but possibly to a Rook, Knight, or Bishop) which immediately replaces it on the square it has reached. Because of the usual choice, promotion is often referred to as "queening" a pawn. It may not remain a pawn or become a King and it is possible for either, or both, sides to have more
than one Queen (two Rooks, etc.) on the board at the same time.

Pawns also have a special type of capture, known as "en passant" which is described later under "Special Moves."

Because pawns are so difficult to learn, and because the King is the only piece who is always on the board, I teach new students the "Pawns Games" (really "King \& Pawns"). These are tactical problems, or exercises, designed to let students play a game right away, and also


A "King \& Pawns Game"
Tactical Problem 1.1
become familiar with the two "most important" chessmen from the start. See the "Pawn and Piece Tutors" section for details on different ways to play "Pawns Game" exercises.


The Rooks are the easiest pieces to learn. Because of their range, they are also the second "most powerful" pieces


The Rook's moves and captures.
(after the Queens). As seen in the diagram, a Rook may move any number of squares along the file (vertical row) or rank (horizontal row) it is on, as long as its path is not blocked. Rooks may also participate in the special King move called "castling" which is described later.
A single Rook, working with his King, may force a checkmate against a lone opposing King in about fifteen moves, or
less, from anywhere on the board. A Rook is a "major piece."

When my new students have learned the "Pawns Game" exercises, I introduce the Rooks by allowing them to "promote" their pawns to Rooks. The Rooks may then be used to capture pawns and to learn how to "checkmate" the opponent's King.

The easiest checkmate for beginners to learn uses two Rooks. In the diagram below, White's Rooks have checkmated Black's King. Notice that the Rook on b7


A two Rook checkmate!
creates an "invisible wall" (along the $7^{\text {th }}$ rank) that Black's King may not cross. At the same time, the Rook on c8 gives a parallel check (along the $8^{\text {th }}$ rank), from which there is no escape. How can White checkmate the black King in the following position?


White mates in one!


The Bishops

A Bishop can move any number of squares in a straight line, diagonally, if its path is not blocked. At the beginning of the game each player has one "light square Bishop" and one "dark square Bishop." Bishops are "minor pieces." A single Bishop and the King are "insufficient" (not strong enough) to checkmate the lone, opposing King. Such a game is "drawn" (tied). However, two Bishops and the King can "force" checkmate against an opponent's lone King without much difficulty (if the
player knows how). For this reason two Bishops are generally stronger than two Knights in an endgame.


The Bishop's moves and captures
Note that this Bishop is on a light square and can reach only other light squares. Two Bishops (one on the light squares, one on the dark) can cover all the squares. If you lose one Bishop you lose its coverage of half of the board and you will be "weak" on those squares.

Many beginners have a hard time visualizing a Bishop's move along the diagonals. Make sure your Bishops move "straight" and remain on the same color, and always watch all your opponent's moves carefully. Many new players (and some experienced ones) make moves with unintended errors (for example moving from b2 to g6 and switching colors).


## The Queen 当

The Queen is the most powerful piece, but relatively easy to learn if you have been following my order. On any turn she may move like a Rook or like a Bishop, that is, in a straight line along the rank, file, or diagonal upon which she stands.


The Queen's moves and captures

In this diagram she may reach any of the squares with a dot. As a major piece, the Queen, together with the King, may "force" checkmate of an opponent's lone King in fifteen moves, or less (usually less than ten). However, it is also easier to wind up in a "stalemate" (one of the
five kinds of draws) if you are not careful when trying to "mate" with the Queen.

Because she is such a powerful part of the chess army, it is important that players be very careful not to "exchange" (trade) her for anything less than the opponent's Queen. All players should learn the average "fighting strengths" and "exchange values" of the pawns and pieces. After all the strongest army usually has a better chance to win (see "Piece Values, Safety and Counting").


A Knight's move is very special and many players have difficulty visualizing it. Unlike all the other, "straight line," pieces, a Knight leaps directly from its old square to its new one, jumping over any friendly, or opposing, pieces that may be between them (as with Black's Knight in the next diagram). However, as with all chessmen except pawns, the Knight does "capture" in the same manner that it "moves."


The Knight's moves and captures

Many students think of the Knight's move as an "L" shape, but I have found that it is often easier for beginners to visualize four "T" or "Y" shapes, radiating from the starting square, with the landing squares at the "tips" of the "T" (or "Y").


The Knight's move as a " $T$ "

A Knight may only capture pieces on the square where it lands. The Knight always lands on a square of the opposite color from where it started its move. Like Bishops, Knights are "minor pieces." A single Knight with the King is unable to make a checkmate of the opponent's lone King.

Unlike Bishops, even two Knights with the King cannot normally force a
checkmate (although there are some specific positions that can lead to mate). However, Knights are the only piece that can be "developed" (activated) without first moving a pawn, and early in the game, when the center of the board is crowded with pawns and pieces, Knights can often exert more influence than Bishops due to their unique ability to jump over the intervening pawns and pieces. They are also the only chessmen, pawns or pieces, that can attack the Queen without themselves being attacked by the Queen.

## Some Tactical Problems



The Pawns Game, T.P 1.0


Pawns \& Knights, T.P. 4.0

## Two Special Moves

## Castling

"Castling" is a special King move. It is the only time a player may move two pieces in the same turn (the King and one of the Rooks). It is also the only time the King may move more than one space. In castling, the player moves his King two squares toward one of his rooks and then the Rook jumps over the King and is placed right next to him, as shown in the diagrams that follow.


Each player may castle only once during a game, and only when these conditions are met:

1. Castling must be the first move for both the King and the Rook involved.
2. There may be no pieces of either color between the King and the Rook involved.
3. The King may not castle out of check, into check, or through check.

Castling is a very important move which has two main purposes. First, it allows you to place your King in a "safe" location behind a "castle wall" of pawns. Secondly, castling allows the development of one Rook and its eventual connection to the other Rook, or placement on an "open file" (a file with no pawns on it). When the
move is legal, each player may castle on either the "kingside" or on the "queenside," or not at all, no matter what the opponent does. I usually recommend castling, particularly in "open" games, and list it as one of the "Seven Things to Do in the First Ten Moves," which are discussed later.

## "En Passant"

This French phrase is used for a special move (an unusual pawn capture) that came about hundreds of years ago, as part of a widespread rule change. Understanding its history helps to make the move easier to remember for both beginners and experienced players.

Originally pawns could only move one space forward, even on the first move. This made the opening proceed very slowly. At some point players in many areas started allowing the pawns to move two spaces on the first move so as to speed up development. This idea quickly caught on and became "official."

However a problem soon became apparent as some pawns could now avoid capture by an enemy pawn (which had advanced to its fifth rank) simply by jumping over the square on which they could be captured (Diagram).


Before 1...f5,
Black to move.


After 1...f5, White to move.

Before the "en passant" rule either pawn (above left) may advance two squares and White is powerless to capture (above right). This problem also led to the formation of more pawn walls and pawn chains that were impenetrable and led to an increased number of draws.

Not wanting to give up the new first move option (two spaces), but also not wanting to weaken the pawns which have advanced to the fifth rank, it was eventually agreed that any pawn which moves two spaces on its first move, in order to avoid capture, may still be captured "as if it had moved only one square." Such a capture must be done immediately (on the next move).


After 1...f5,
White to move.


After 2.gxf6 e.p., White captured.

The French phrase "en passant" means "in passing" and is used because the capturing pawn "passes" the captured one when taking it.

There are three conditions for making an "en passant" pawn capture:

1. The opposing pawn must move two spaces.
2. It must jump over the square where it could normally be captured.
3. The capture must be made on the immediate next turn.

To summarize, in the next diagram, either one of the black pawns may move two squares (to the black dot). Then White may capture either black pawn on his next turn (by moving to the square with the appropriate star) as if the black pawn had moved only one square. If White chooses not capture "en passant" immediately Black's pawn will be safe from such a capture for the rest of the game.

"En Passant" Pawn Captures

## Chess Notation (How \& Why to Read \& Write Chess)

Recording and reading the moves of a game is not difficult, and is the "key" to chess improvement. However, it is not required in informal play, nor is it necessary for the enjoyment of casual play. If you wish, you may skip this section for now and come back to it later. However, knowing how to record and read (play back) the moves allows you to do several useful things and is required in all our scholastic classes.

First, being able to record, and later play over, your games enables you to look for the mistakes that lead to losing. Players who seek to improve look for better moves to use in similar positions in the future. Playing over other peoples' games also allows you to study and learn from the greatest chessplayers of history. Recording of games is required in formal competition and provides written evidence in case of disputes. Recorded games may also be shown to your chess playing friends and family.

There are many different ways to write chess moves. The most popular, and easiest, method is called algebraic notation (although is has absolutely nothing to do with algebra). The main idea is that every square on the board has a name, as described earlier, like this:

|  | a | $b$ | c | d | e | f | g | h |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | a8 | b8 | c8 | d8 | e8 | f8 | g8 | h8 | 8 |
| 7 | a7 | b7 | c7 | d7 | e7 | f7 | g7 | h7 | 7 |
| 6 | a6 | b6 | c6 | d6 | e6 | f6 | g6 | h6 | 6 |
| 5 | a5 | b5 | c5 | d5 | e5 | $f 5$ | g5 | h5 | 5 |
| 4 | a4 | b4 | c4 | d4 | e4 | f4 | g4 | h4 | 4 |
| 3 | a3 | b3 | c3 | d3 | e3 | f3 | g3 | h3 | 3 |
| 2 | a2 | b2 | c2 | d2 | e2 | f2 | g2 | h2 | 2 |
| 1 | a1 | b1 | c1 | d1 | e1 | $f 1$ | g1 | h1 | 1 |
|  | a | b | c | d | e |  | $g$ | h |  |

The Squares Named


It's really easy! Each square on the chessboard has a first name (a lower-case letter) and a last name (a number). These identify the file (vertical column) and rank (horizontal row) on which the square is located. In the diagram the square "e4" has a dot and the square "f6" has a star.

While notation may be written on any kind of paper, it is best to use a real "scoresheet." They provide numbered spaces for the moves, as well as space for other game data that may be of interest.

Three different sized scoresheets may be downloaded and printed at no charge from our website at www.chesscenter.net. At the time of this printing they are on page "Students I." If you prefer, scoresheets and bound "score books" (about the size of our "small" scoresheets) may be purchased on many chess web sites on the internet.

There are several varieties of algebraic notation and I teach them all. The easiest for young children to learn I call "Simple Notation." It is also called "Long Algebraic" notation. Using this, a player simply writes the starting and
ending square for each move. Young children should start using our "Large Scoresheet," which has larger spaces for entering the moves. Remember to record both players' moves; otherwise you will not be able to re-play the game.

Here is a short sample game, known as "Legal's Mate," with diagrams, using simple notation:


After 1.e2-e4 e7-e5
(White's move is first, then Black's)


After 2.g1-f3 d7-d6


After 5.f3-e5 g4-d1


After 7.c3-d5 checkmate

With "simple notation" there are no special symbols for captures, checks or checkmate. Castling is recorded by showing the King's move (ie. e1-g1, etc.) or writing out "castles kingside" (or "queenside"). Students in $3{ }^{\text {rd }}$ grade, or higher, may want to skip simple notation and begin using regular notation right away.

While "simple notation" is easy to teach, learn, and understand, it is actually a bit awkward to use. The next step, "algebraic notation," requires the use of a few additional abbreviations and
symbols, but is actually even simpler and quicker to use and read for play back once you understand it and get in practice.

Now, the pieces are each identified by a single, upper-case, letter, as follows:

$$
\begin{aligned}
& \mathbf{K}=\text { King } \\
& \mathbf{Q}=\text { Queen } \\
& \mathbf{R}=\text { Rook } \\
& \mathbf{B}=\text { Bishop } \\
& \mathbf{N}=\text { Knight }
\end{aligned}
$$

Note that "P" is not used for a pawn. Chessplayers have agreed that a move without a piece-letter (such as 1.e4) is understood to be a pawn move. Here are just a few more symbols for use when recording:

$$
\begin{array}{ll}
\mathrm{x} & =\text { Take or Capture } \\
0-0 & =\text { K-side castle } \\
0-0-0 & =\text { Q-side castle } \\
+ & =\text { check } \\
++ & =\text { double check } \\
\# & =\text { checkmate }
\end{array}
$$

And here are some symbols often found in annotated games.

$$
\begin{array}{ll}
! & \text { good move } \\
? & =\text { questionable/weak move } \\
? ? & =\text { blunder } \\
1-0 & \text { White won } \\
0-1 & =\text { Black won } \\
1 / 2-1 / 2 & =\text { Draw }
\end{array}
$$

In using regular notation the starting square of the moving piece is usually not necessary. Here is the same game as above, (without diagrams) using regular
algebraic notation. Play it over on a board:

De Legal - Saint Brie, Paris, 1750
White Black
1.e4 e5
2.Nf3 d6
3.Bc4 Bg4
4.Nc3 g6
5.Nxe5 Bxd1
6.Bxf7+ Ke7
7.Nd5\#

Many chess books and periodicals do not print game scores in neat columns, as shown here. It requires a great deal of space and is not cost effective when publishing large numbers of games. Instead they use a format similar to paragraphs. Here is the same short game, seen above, in this format. After the move number White's move is always given first:

De Legal - Saint Brie, Paris, 1750
1.e4 e5 2.Nf3 d6 3.Bc4 Bg4 4.Nc3 g6 5.Nxe5 Bxd1 6.Bxf7+ Ke7 7.Nd5\#

If a game score is interrupted by a diagram, annotation, etc., and resumes with Black's move, it is customary to indicate White's missing move with three dots, for example (from the previous game) 5...Bxd1.

Here is another sample game to practice reading notation. It is one of the most famous games ever played. Paul Morphy, from New Orleans, was the first American world champion (unofficial).

He challenged and beat the best players in Europe and America about 150 years ago.
Morphy,Paul - Duke of Brunswick \& Count Isouard [C41 Philidor's Def.]
Paris - Opera House, 1858

| 1. e4 | e5 |
| :--- | :--- |
| 2. Nf3 | d6 |
| 3. d4 | Bg4? [3...exd4] |
| 4. dxe5 | Bxf3 |
| 5. Qxf3 | dxe5 |
| 6. Bc4 | Nf6? |
| 7. Qb3 | Qe7(Forced. Why?) |
| 8. Nc3! |  |


8. ... c6
9. Bg5
b5? [9...Qc7]

10. Nxb5! cxb5
11. Bxb5+ Nbd7

12. $0-0-0$ Rd8
13. Rxd7! Rxd7
14. Rd1 Qe6
15. Bxd7+ Nxd7

16. Qb8+!! Nxb8
17. Rd8\# 1-0 (White Wins)

Set up and play through games like this on your board to become familiar with chess notation. Try to figure out why each player made each move and see if you can identify mistakes. Also try to identify good moves and strategies and use them in your own games

## Check, Checkmate and Draws

The main goal in a game of chess is to trap, or "checkmate," your opponent's King. In practicing with beginners we sometimes allow the King to be captured (ending the game). However, in "real" chess the King is never actually captured. When the King is attacked ("checked") and threatened with capture it must get out of check immediately. If there is no way to get out of check then the position is a checkmate and the side that is checkmated loses.

## The Three Rules of Check

"Check" is the term used to indicate that a King is being directly attacked. The piece which is attacking is said to be "giving check," while the King is said to be "in check." Any piece may give check except the other King. The following are the three rules of check:

1. A player may never make a move which places his King "in check." Any square which is controlled by an enemy piece is like an "invisible wall" or "force field" to a King. A player may not move "into check," either by moving his King onto a square where it is exposed to an enemy attack, or by moving another piece that screens, or blocks, the King from attack. Any move which places your own King into check is illegal and must be retracted (taken back). Another move (with the same piece, if possible) must then be made.
2. A player whose King is "in check" must get it out of check if possible. Notice I did not say "move it out of check." "Moving" the King is only one of three ways to get the King out of check.
3. A player whose King cannot get out of check is "checkmated" and loses. The term "checkmate" comes from the Persian "shah mat" meaning "the king is dead."

## The Three Ways to Get Out of Check

Unlike attacks on the rest of the pieces there are only three possible ways that a player can get out of an attack on the King, or "check." They are:

1. It may be possible to capture the attacking piece.
2. It may be possible to "interpose" one of the player's own pieces, or "block" the attack.
3. It may be possible to move the King out of check.

In any given position the three ways may not all be possible but a player should always look for as many ways as he can find before picking one. "First" is not always "best." It is possible that several ways to get out of check may exist at the same time so try to see them all before you pick one.

The first way, "capturing" the attacker is usually (but not always) the best ...if you can do it. There may also be more than one way to capture an attacker (and don't forget that the King
may make a capture as long as he doesn't move into check).

The second way, "blocking," is never possible when a Knight is giving check, when there is a double check (check by two pieces at once), or when the attacker is right next to the King. However there may be as many as five or six ways to block some checks. Again, remember "first" is not always "best." Look for all the ways before choosing a move.

The third way, "moving" the King, is what most beginners think of first. But it is often the worst way, especially if you haven't castled yet. Always remember "first" is not always "best" so slow down. Look for all the ways to get out of check before choosing your move.

## Five Types of "Draw" (Tie)

"All stalemates are draws, but not all draws are stalemates." A stalemate is only one of five types of draw. They are:

1. Stalemate. If the King is not in check, but the player cannot make any legal move on his turn, the position is called a "stalemate" and the game is scored as a "draw," or tie.
2. Draw by insufficient material. When neither player has enough material (i.e. pieces) to force a checkmate (for example, only King vs. King, King \& Knight vs. King, etc.). A King and a "major piece" (Queen or Rook) may force a checkmate from most positions whereas a King and a "minor piece" (Bishop or Knight) may not.
3. Draw by threefold repetition. When players make moves which cause the
exact same "position" (with the same player "to move") to repeat three times (not necessarily in a row) either player (having the move) may claim a draw. This includes a type of draw popularly known as "perpetual check," where one player can continuously check his opponent but cannot (or doesn't know how to) achieve checkmate.
4. Draw by agreement. If both players believe that there is no chance to force a win (or they're just too tired) they may agree to a draw. A player may "offer" a draw after making his move. The opponent may accept the offer, or make a move (which declines the offer), in reply.
5. The Fifty Move Rule. If fifty moves have been made without a pawn being moved or a man being captured a draw may be claimed. This rule is used almost exclusively in tournaments as it requires an accurate move count. Coaches should use their discretion for limiting the number of moves in cases where a player seems not to know how to achieve a mate.

## Other Chess Rules

There are more rules to learn for tournament play but these are the "basics." Players may purchase a copy of the complete "official" rules of chess from the United States Chess Federation (USCF) www.uschess.org.

Students may also access the free "Practice Site" by a link on our website. It is sponsored by USCF, C\&O Family Chess Center and Chess Magnet School.

## Some Basic Checkmates

The main goal in a game of chess is to trap, or "checkmate," your opponent's King. There are several basic checkmates ("mates" for short) that are indispensible for new players. Understanding them can give a player the first glimmerings of planning and strategy in the journey that is a chess game (or career). Conversely, if you don't know what your destination is (what the mates look like) how will you know which way to go (or what to take with you)?

The three basic mates we will examine all involve the "major pieces," or Rooks, and Queen. In two of the three the King is also required. We will start with the most basic mate, in which the use of the King is optional (not required but your choice). All three may be practiced on the C\&O/USCF/CMS Practice Site.

## Two Rook Checkmate



Black is checkmated.
In this diagram we have the three "elements," or parts, which are combined
to give checkmate. The White King is not shown as he is not necessary to the mate. The three elements are as follows:
a) The opposing King (Black) is on an edge of the board (the a-file).
b) One Rook (on b2) creates the "invisible wall" trapping the opposing King on the edge.
c) The other Rook (a8) gives a check along the a-file ("parallel," or side by side, to the b-file), and far enough away to avoid capture.

These three elements are common in all two-Rook mates. Notice that this position could be rotated to all sides of the chessboard and the pieces could be in many different arrangements if all three elements and conditions are met. For example the Black King could be on a5 or a4 with no change in the Rooks. The "wall" Rook could be on b1, b3, or b4 (but not b8. Why not?*), and the mating Rook could be on a4, a3 or a1 (but not a2. Why not?*). *The answers are at the end of this section (page 23).

Once a player grasps the relationship of the three elements the question becomes "How can one drive (by force) the opposing King to an edge of the board and then mate him?" The key lies in the Rooks' ability to project the "invisible wall" as I have called it in our program. This ability to "block" the opposing King is just as important as the actual act of giving "check." Consider the following diagram, where White's Rook already has an invisible wall on the $4^{\text {th }}$ rank, and ask yourself "How can I force the opposing King to an edge?" Notice that 1.Rc5+
allows ...Kd4, and the opposing King not only stays in the center of the board but attacks the Rook as well.


There are actually two different, and distinct approaches to such a problem. One is known as "Rolling Rooks" or the "steamroller" approach. The other is what we call the "Box Mate." The one most often taught to beginners is rolling Rooks so we will begin with that.

## Rolling Rooks

## 1.Rh5+ Kd6



After 1...Kd6
White has replaced the invisible wall given by the Rook on c4 by a parallel check along the $5^{\text {th }}$ rank. Black's King has
been forced to the $6^{\text {th }}$ rank. He chose d6 to prevent 2.Rc6+.
2.Ra4 Kc6 3.Ra6+ Kb7


After 3...Kb7
4.Rg6


After 4.Rg6
After this move it does not matter what Black does. White is poised for a checkmate in two moves, 5. Rh7 (trapping the black King on the $8^{\text {th }}$ rank) and $6 . \operatorname{Rg} 8 \#$ (giving mate with a parallel check. Diagram next page)

## 4...Kc7 5.Rh7+ Kd8 6.Rg8\#



Black is checkmated

## The "Box" (Two Rook Mate)



## 1.Rd8 (Diagram next column.)

Notice that, even without a "check" Black's King is in the "corner" of a box created by "perpendicular" (the opposite of parallel) invisible walls from the two white Rooks. If you look closely you will see that the d-Rook is "inside" the box, while the c-Rook is "outside the box. This means that the c-Rook cannot be approached or attacked by Black's King, who may only move to three squares (e6, f6, and f5).


After 1.Rd8 A smaller "box."
1...Ke6 2.Rc5 (Next Diagram) [This makes the box smaller (or if $1 \ldots$ Kf6 then 2.Re8 still making the box smaller).]


After 2.Rc5 Black to move.

The black King is in the corner of the box, again.
2...Ke7 [Attacking the d-Rook who is inside the box.] 3.Rd1 [Retreating out of the box.] 3...Ke6 [Away from the edge.] 4.Rd2 [A "waiting move," which forces Black to move away from the corner of the box.]

This move puts Black in a position called "zugzwang," a German chess term which means "the compulsion to move."

You are said to be "in zugzwang" when any move you do makes your position worse. (Diagram)


After 4.Rd2 Black to move.
Now both Rooks are "outside" the box. Black may try to stall but all is in vain if White is careful.

## 4...Kf6 5.Re2 Kg7 6.Rf2 Kg6

 [requiring another "waiting move" from White] (Diagram - Can you "see" the invisible walls and the box?)

After 6...Kg6. White to move.
7.Rd5 [A waiting move that puts Black in "zugzwang" again.] 7...Kg7 8.Rd6 [Making the box smaller] 8...Kg8 9.Rd7 Kh8 [forced] 10. Rf8\# 1-0 (Diagram next column) [NOT 10.Rg2?? Stalemate] (Diagram next column)

It is particularly important for new players to fully understand the last two moves, and the possible errors that could be made, so as to avoid stalemate.


Black is checkmated, 1-0.


Black is stalemated, $1 / 2-1 / 2$.

The Rolling Rooks Mate is perhaps easier to grasp, but both can provide insight into the power of Rooks, especially when working together. As always in chess, you need to take your time to avoid careless mistakes.

## Two Rooks with a King

Two Rooks are sufficient to force a checkmate against a lone opposing King.

However, there are always two Kings on the board. Although he is not required, there are situations where the location of your King can reduce the number of moves required for a mate. This is due entirely to a King's own "invisible wall" (Diagram) and its ability to replace either the edge of the board or one of the Rooks' invisible walls.


The Kings' moves


Neither King may move next to the other.

Here are some positions where you can mate away from the edge of the board due to the position of the King. Try to figure them out in your head. Solutions follow.

a) White mates in one move.

b) Black mates in two moves.

## *Answer to questions on p.19:

Both Rooks could not be on the same rank, in this position, because the "mating" Rook must have moved from another square on that same rank, and cannot have jumped over his own man.

## Solutions to mate problems:

a) 1.Rb4\#
b) $\mathbf{1} .$. Rg5 [or any other "waiting" move] 2.Kd4 2.Rb4\#

## "King and Queen" Checkmate

I present this basic mate next because it is easier to master than the one using only the King and a Rook. People often erroneously refer to these two mates as the "Queen Mate" and the "One-Rook Mate." I always try to include reference to the King in both cases due to the many times I have watched as students vainly chased, and checked, the opposing King into stalemate, threefold repetition, or some other drawn game (often from sheer exhaustion). In both of these mates the role of the King is "essential" to the outcome. Both are easier to understand if you have fully mastered the Two-Rook Mate. Use the free "Practice Site" on our Website for this.

There are many possible checkmates involving the King and Queen. The main one we teach I call the "Kiss of Death" mate, and here are several examples.


Three "Kiss of Death" checkmates.
As with the Two-Rook mates, there are three elements in play here:

1. The opposing King has been driven to an edge of the board.
2. The Queen checks (kisses) the King while also guarding his "flight squares.
3. The Queen is protected from capture by the presence of her King.

However, to get to these positions there are several differences from the Rook mates and new "principles" to be learned.

First, The Queen is the only piece that may force the opposing King to an edge by itself. She does this not by "checks" but by the use of her invisible walls to block the King and "herd" him (like herding sheep) to the desired location.

This is accomplished by first positioning herself a Knight's move from the King as in the following diagram. Note that the black King has only three squares to move to.


Black to move.
No matter which move Black chooses White has only to mimic the move to as to maintain the Knight's move distance. Black will be slowly squeezed (herded or pushed) to an edge. For example, if
1...Ke4 then 2.Qg5; if 1...Kc5 then 2.Qe6; if 1 ...Kc4 then 2.Qe5.

In this way you may always force the opposing King to an edge eventually. There are several "problems" that may be encountered using this method. All demonstrate the need to "think" about your moves, rather than simply trying to memorize a method or series of moves. Those who move without thinking may be led into traps for the unwary and find they have given up a win that should have come easily. The most common errors may lead to stalemate, or as I call it "The curse of the impulsive Queen." Consider this position. Black's King has been slowly forced into corner by the white Queen using the method just described. (Diagram)


Black to move.
Now, if $\mathbf{1 . . . K h 3}$ then 2.Qg5! traps the King on the h-file; but if $\mathbf{1 . . . K g 1}$ then 2.Qf3? allows Black to shuffle between g1 and h2 until White comes up with a different plan; and if $\mathbf{1 . . . K h 1}$ then blindly playing 2.Qg3?? gives Stalemate.

A "thinking" player should always remember that "when the opposing King reaches an edge you should immediately create the invisible wall that traps him" (leaving him at least one space free to move into).

Therefore (from the diagram), if 1...Kg1 2.Qd2! traps him; and likewise if 1...Kh1 2.Qd2! (or 2.Qg4! but NOT 2.Qf2?? still Stalemate).

The first part of the mate is complete when the King is trapped against one edge of the board. It is then a simple matter to march your King to the appropriate square where he may support his Queen. For inexperienced players I have designated four "Golden Squares" (c3, c6, f3, and f6) for your King. (Diagram)


From each of these Golden Squares a King can protect his Queen on five squares next to the edge, allowing her to deliver the "Kiss of Death" to an opposing King on any of the seven squares bordering that quadrant (quarter) of the board.

Notice that these are also the four "Knight Squares" that form the corners of the "Center" of the board. Knights developed to these squares each cover two of the "Four Critical Squares" (d4, d5, e4, and e5).

Now let's look at some positions where the opposing King is already on an edge and you need to figure out the quickest way to mate (but not necessarily the "Kiss of Death"). Try to visualize your answers before setting up a board. Remember the best practice is to sit at a board with a real opponent and set up different positions. Take turns trying to checkmate each other. From the "defensive" position remember "try to stay in the center or lead to a stalemate."


White mates in 1.


Black mates in 3.

## "King and Rook" Checkmate

From the preceding two lessons, and your practice sessions, you should have learned that:

1. Not all "checks" are "good checks."
2. "Invisible walls" often are more important than actual checks.
3. When making a move that doesn't give check, make sure your opponent can make a move (avoid stalemate).
Now we come to what is considered the most difficult of the three "basic" mates. And yet it need not be so. If you have mastered the principles and are familiar with the basic elements involved you will soon master this "King and OneRook" mate as well. You should be able to do these three mates in about fifteen moves, or less (often much less) from any position set up on a board.

Knowing the principles and recognizing the various elements will allow you to begin to find mating positions with more pieces still on the board. You will begin to "foresee," or visualize, that a certain series of moves will put you into positions that you are familiar with, and from which you may force the ending that you want.

Reflect on what you already know about two-Rook mates. Perhaps review the positions with two Rooks and a King. The "three elements" of this mate are the two Kings and one Rook. Ask yourself, "If my King must replace one of the Rooks for the final position which one shall it be? Will my King be making the invisible wall, or delivering the checkmate?" The answer should be
obvious. There are two basic positions involved in this mate. One involves the opposing King in a corner, the other has the opposing King on any other edge square. Let us look at that situation first.

Recall the following diagram:


Neither King may move next to the other.

This shows the two Kings in a position known as "opposition." This concept is very important in chess and often somewhat confusing, even to many good players. Whether the opposition is good or bad depends on what you are trying to do and also on "whose move" it is. When you can check with the Rook in this position, your opponent must retreat. As you get better you will learn more about opposition (direct, distant, diagonal, and rectangular) and why you should care about it. For now it is enough to know that each King has a short (three spaces) invisible wall that is the key to this checkmate.

The following diagram illustrates a basic King and Rook mate. Notice that the condition of opposition is what keeps the checkmated King from escaping. The position could be rotated to any side of
the board and the mating Rook could be on any $8^{\text {th }}$ rank square that was not next to Black's King. But the White King must


Black is checkmated.
be "opposite" the Black King to prevent his escape. Bringing that condition about is the "tricky" part.


White to move and win.

The first part of these basic mates is always "drive the opposing King to an edge." This is done in steps. First get him out of the center. Try playing the following moves on a board.

## 1.Kf2 Ke5 2.Ke3 Kd5 3.Rb5+!

 (Diagram next page) This check forces the Black King out of the heart of the center. He has to choose from only four squares (c4, c6, d6, or e6). Each moves him closer to an edge. He can attack White's Rook or simply flee from theattack, trying to remain close to the center.


After 3.Rb5+ Black to move.
3...Kc6 Attacking the Rook.
4.Re5 Escaping, and making a smaller "box." 4...Kd7 5.Ke4 Kd6 Toward the center but into the corner of the box. 6.Kd4 A waiting move putting Black in "zugzwang" (Diagram). Any move allows White to make the box smaller.


## After 6.Kd4 Black to move.

Now, if 6...Kc6 then 7.Rd5!
if $\mathbf{6 . . . K c 7}$ then 7.Kc5!
if $\mathbf{6 . . . K d 7}$ then 7.Kc5!
In every case the "box" is made
smaller, forcing the black King towards the edge or corner. For our example we will use the third option, 6...Kd7 7.Kc5!


After 7.Kc5 Black to move.
In this diagram we illustrate the principle of "cutting off." That is actually the basic principle of all the "invisible walls" but here is a special case where White's King creates the "pushing" wall (on b6, c6, and d6) while his Rook "cuts off the opposing King's main escape (around the white King's short wall. Notice that White's Rook could be anywhere from e1 to e5 and still "cut off" Black's escape. Black finds himself in zugzwang again! At this time you should be able to "visualize" (imagine in your mind) the White follow ups to all three of Black's possible moves:
a) $7 \ldots \mathrm{Kc} 7 \mathrm{8.R87+!}$
b) $7 . . . \mathrm{Kc8} 8 . \mathrm{Kc} 6!$
c) $7 . . . \mathrm{Kd8} 8 . \mathrm{Kc} 6!$

We'll go with 7...Kc7 8.R87+! Kc8 9.Kc6 Kb8 Looking for an "around the corner" escape. (Diagram)


After 9...Kb8 White to move.

But with White's King on the "Golden Square" there is no escape after 10.Re8+ Ka7 [Around the corner.] 11.Rd8 [A "cut off" and waiting move as Black is again in zugzwang.] ...Ka6 12.Ra8\# (Diagram)


Black is checkmated.

One of the keys here is "flexibility." Your opponent may try to escape back into the middle or attack your Rook at any time. When you are the defender both are good choices. However, if the attacker knows what he, or she (always), is doing there can be no escape. The "opposition," the "cut off," and the "waiting move" are all essential principles to understand for mates with the King and one Rook.

They are some of the "key concepts" which will allow you to find "mating nets" in many positions, with more pieces and pawns present, perhaps even in the opening and middlegame. Visualizing future positions or a specific sequence of moves is a skill which may be practiced and improved. It is one of the many aspects of chess which can be transferred to your other daily activities as well.

## Piece Values，Safety and Counting

When asked＂Who is ahead？＂in any given position many novice（beginner） players will simply count the men who have been captured．For example，if White has captured only three men and Black has captured five，Black must be winning！However，if White has captured a Rook，a Bishop and a Knight while his opponent has captured only four pawns and a Bishop，more experienced players realize that White has a winning＂material advantage＂（all other considerations aside）．

Many new players instinctively understand that some of the chessmen are stronger than others（although often confused about why？and how much？）． Some inexperienced players frequently have no second thoughts about snatching a pawn and losing a Bishop or a Rook（or even the Queen）．Other beginners may freely give away pawns because they don＇t understand their value，or proper use．These are errors we will try to correct with this section by first learning about the relative＂material values＂of the pawns and pieces．

In order for this to be less complicated it is necessary to define several basic terms and ideas．First is the relative ＂value＂（or strength）of the different chessmen．There are several ways of expressing the relative values of pawns and pieces．Most students learn the following average values（also known as the＂Reinfeld＂values，after author，Fred Reinfeld，who popularized them）：

$$
\begin{aligned}
& \text { 욘 Pawn = } 1 \text { Pawn } \\
& \text { Knight }=\text { 碞迸员 } 3 \text { Pawns } \\
& \text { Bishop }=\text { 윤윤只 } 3 \text { Pawns } \\
& \text { Rook = 员员员员员 } 5 \text { Pawns } \\
& \text { Queen = } 9 \text { Pawns }
\end{aligned}
$$

A few years ago GM（Grand Master） Larry Kaufman conducted an extensive statistical study which enabled him to revise these values more accurately．We will not go into the resulting changes （＂Kaufman＂values）in detail as they are not useful for students at this level． However，the addition of a + sign （indicating＂a little bit＂）or＋＋（＂two little bits＂），may be of some benefit．

Here are our slightly modified C\＆O ＂strength values＂：

$$
\begin{aligned}
& \text { 只 Pawn = } 1 \text { Pawn } \\
& \text { 包 Knight = 3+ Pawns } \\
& \text { Bishop }=\text { 3++ Pawns } \\
& \text { Rook = 只只只员只 } 5 \text { Pawns } \\
& \text { Queen = 9+++ Pawns } \\
& \text { King = 3-4 Pawns (the King's } \\
& \text { game-value is "everything") }
\end{aligned}
$$

Keep in mind that the use of either set of values is subjective，as the values are ＂relative＂and subject to modification by the circumstances of a position．For example，an undeveloped Rook，blocked by pawns and undeveloped minor pieces， may be worth much less than a well－ placed Knight，or Bishop，dominating important central squares．In an endgame you may discover that pawns become increasingly more valuable as they come closer to promoting．As your experience grows you will learn more about specific advantages or problems for different
pieces and situations. But for now be content with understanding these as "average" values.

One of the most important ideas in chess, after learning the moves, is "safety." NM (National Master) Dan Heisman names it the "single most important" concept. This term has many differing meanings in chess and players need to become familiar with them all. Directly tied to our discussion of safety is the idea of "piece values" and "counting."

We can define "safety" from both a defensive and an offensive standpoint. NM Heisman states that (defensively) "a position is 'safe' when there is no way that "material"l may be lost for free, or exchanged for something worth less than what was lost."

From an offensive standpoint you want to "win" material from your opponent. The easiest way to do this is to take a pawn or piece off for free. Anything that may be captured this way is said to be "en prise" ( pronounced ONPREEZ, a French term). Finding or leaving "en prise" captures is not the most common way of gaining or losing material. The most common way for beginner and intermediate players to lose material is not even from the tactics they learn (such as pins, forks, skewers, etc.) but simply from errors of "counting," usually based on faulty analysis or poor visualization skills.

What is "counting?" Simply put, counting is the ability to foresee (calculate/visualize) whether or not any possible sequence of exchanges, on a given square, can lose (or gain) material.

In an actual chess game it is very possible that multiple squares may be involved in exchanges. We are going to concentrate, here, on "one-square" counting, that is examining a sequence of exchanges on one square only. This is enough to learn the basic principle.

The most common misconception is that counting is simply "knowing the value of the pawns and pieces." In actuality that is only the start. It is the ability to "visualize" and "analyze" that is most important.

Consider a black pawn on the square d5, as in this diagram:


In these exercises we will be trying to determine whether, or not, the pawn is safe. Remember, "a position is 'safe' when there is no way that "material" may be lost for free, or exchanged for something worth less than what was lost." In this diagram the pawn is "safe" because there is nothing attacking it.

Before we continue I want to explain the difference between the two terms "attack" and "threat." Here is a position from an opening that can lead to "Scholar's Mate (also known as the

## "Four-Move Checkmate")



After 2.Qh5 Black to move.
White's Queen is "attacking" three pawns (it could capture, or "take" the pawns on e5, f 7 , and h 7 on its next move) but is only "threatening" one of them. The pawns on f7 and h7 are both protected. The one on e5 is not. Therefore, the e5-pawn is threatened. If the threat is not dealt with properly the pawn may be lost (for example, if 2...g6?? [attacking the Queen] then 3.Qxe5+ ["forking" Black's King and Rook]). Visualize this in your head. A "threat" happens not just with an attack (sometimes) but any time you can make a "good" move on your next turn and particularly "winning material."

These exercises will all depend on "visualization." When playing a game you are not allowed to move the pieces around on the board while searching for your move. As I often repeat to my students, "Look with your eyes, NOT with your fingers!" Or sometimes "Think with your brain, NOT with your fingers!" We always play with the "touch-move" rule, even in practice, unless specifically stated otherwise.

That's the best way to improve your visualization skill.

This board shows only the pawn on d 5 and no other men because we will only include pawns or pieces directly involved in the example. It should be understood that (in a real game) there are always other men (at the very least the Kings) on the board.


White to move..
Now there is a White Rook on the board. If it should move $1 . R d 1$ it would be attacking, and threatening, the pawn. However, at the moment the pawn is still "safe."


In this diagram the pawn is not safe, as it can simply be captured (1.Rxd5) and taken off the board. These were simple examples. Now let's look at some examples where the pawn is guarded.


Is the pawn on d5 safe? It is attacked by White's pawn... but it is protected by the pawn on c6. It's true, White could take on d5, but Black could simply take back. This would be an "even exchange" of pawns so, by our definition, the pawn on d5 IS safe. Remember, again, " $a$ position is 'safe' when there is no way that "material" may be lost for free, or exchanged for something worth less

## than what was lost."

NM Heisman has had the experience of all coaches who teach beginners:
"Very often, when I teach beginners, they don't like to trade Queens. They like their Queens on the board and when they trade their Queens I ask them if their Queen is safe and they say 'No! It's not safe because he can take it!' But they're wrong because if they can take it right back... if their Queen takes your Queen and you can take their Queen right back it's just what we would call a 'fair trade' [equal exchange]. A fair trade means the piece IS safe. This is a very important thing to note because a lot of beginners think if something can be taken off the board it's not safe. That's only true if there's 'win of material' involved."

However, that doesn't mean that an even exchange (fair trade) can't be good, or bad, for you. Other factors must always be taken into account. As you gain experience these factors (such as position, piece mobility, etc.) will become more familiar to you.


In the above diagram the pawn IS safe
as simple counting shows. 1.Rxd5 [White is ahead by +1 (pawn)] ...RxRd5 [now Black is ahead by +4 (Rook vs. pawn).


White to move.
Is the pawn safe? No, it's not. 1.Rgxd5 [White is ahead by +1 ]. Now it does not matter whether Black recaptures or moves away. If he does recapture, 1...RxRd5, he will be ahead by +4 only until 2.RxRd5 and White will still be ahead by +1 .


Is the pawn safe? If 1.Rgxd5 [White $+1]$...RxRd5 [Black +4]. And now if 2.RxRd5 cxd5 [Black is still +4]. If
1...cxd5 [Black +4] and if 2.Rxd5?? [Black +3] ...RxRd5 [then Black is +8 ]. Yes, the pawn is safe!


Is the pawn safe? White has three attackers and Black only has two defenders. Does this matter? If 1.Rgxd5 [White +1] ...cxd5 [Black +4] 2.Rxd5 [Black +3 ] ...RxRd5 [Black +8 ] 3.QxRd5 [Black still +3]. The pawn IS safe! Were you able to visualize the whole sequence in your head?

This has been only an "introduction" to safety and counting. Remember that the "key" here, as in all chess moves, is "visualization." The more you are able to "see" inside your head, the better you can "count" and determine if a position or move is "safe." Remember to "look with your eyes, NOT with your fingers." The only exceptions we make to the default (normal) "touch-move" rule is when playing "blitz," "bughouse," or some other variant. Then we might specifically state a "house rule" (temporary and "unofficial") such as "clock-move" (a move isn't final until the player pushes the button on his clock).

