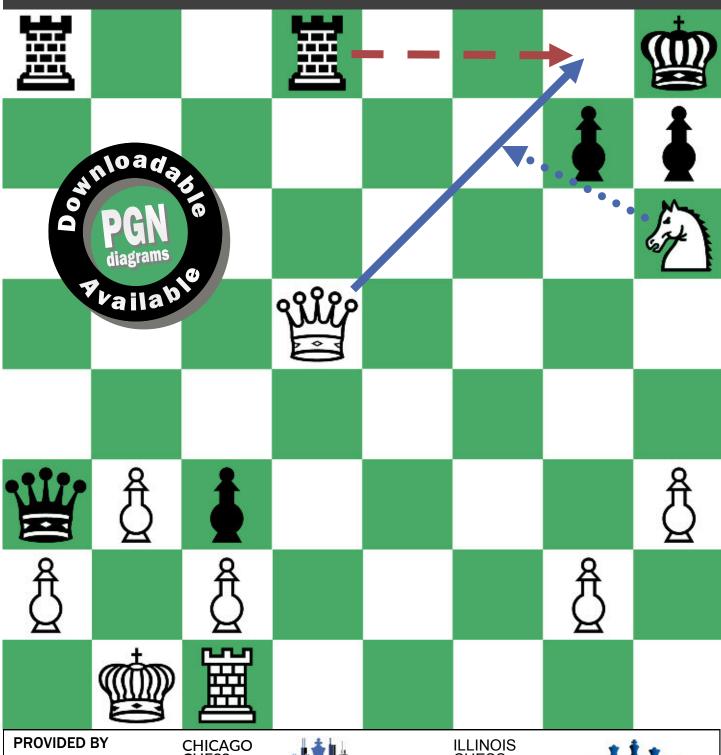
# **BEGINNER & INTERMEDIATE CHESS**

A CURRICULUM FOR YOUTH COACHES DECEMBER 2015







# **Acknowledgements**

Thanks to IM Florin Felecan, Bill Brock, Adam Geisler, David Franklin, Phil Yontez, Bill Feldman, Bill Buklis and Eli Elder for their contributions.

# **About the Cover**

White sees a forced checkmate known as a "smothered mate" in two moves.

21. Qg8+ Rxg8

22. Nf7#

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# Introduction

Who is this curriculum for? This curriculum is the second of two publications designed to help new chess coaches who play a solid game and are willing to teach but aren't sure exactly where to start. In the first, a handbook called "Teaching Chess to Groups," we lay out our philosophy of coaching and offer advice on how to manage a classroom and motivate kids to learn. Here we address the substance of the game with topics arranged in what we believe to be a sensible sequence.

**Section 1** is devoted to the rules of the game and a few common checkmates.

**Section 2** lays out principles of the opening and suggests a method of teaching them.

**Section 3** is devoted to the middlegame and tactics.

**Section 4** treats the endgame and refocuses on checkmate.

**Section 5** treats tournament play and notation.

If you don't already play chess, this curriculum is not for you, because it does not teach chess. It assumes you are familiar with the basics, including common tactics. Think of it as an annotated topic guide, but one with sufficient explanatory text and supporting material that you will not need to look elsewhere for teaching material. (Of course you are free to do so, and many of you will.) We include approximately 150 board diagrams, which comprise about half the length of this curriculum. If you are able to teach with a computer rather than a conventional demonstration board, you will want the digital version of our board diagrams (in playable PGN format, available on our website on the Resources page), which will streamline your teaching considerably. It should work with any user interface/chess engine combination with products such as Fritz, ChessBase, ChessBase Light, Houdini, Stockfish, Rybka, Komodo, or Chessmaster. More information is available at the end of this document (Section 5, How to use the PGN file with this curriculum, page 42).

We make no effort here to innovate, but instead simply offer one conventional approach which has worked for many of us. Another method, or other teaching material, may be easier for you or better suited to your club. In any event, the detailed knowledge and energy important to your students' success will come from you more than any written curriculum.

**Guided game play.** We recommend that you combine these lessons with "guided game play," in which games are played out on a demo board or computer screen and analyzed. There are several ways this can be done, including by replaying a completed game (played by a club member, you, or a figure from chess history) or by having the club play a live game against you or a computerized opponent. What is important is that the game be analyzed move by move. This allows you to help your students learn to weave discrete lessons together and get a sense of the flow of the game.

Should time permit, of course, there is no better way to teach chess than to review a student's individual games, highlighting strengths and weaknesses.

**Scope and length of these lessons.** If the lessons here are combined with guided game play and analysis, this curriculum should contain enough material for approximately fifty 45-minute lessons. Coaches and teaching groups progress at different rates, so your experience may differ. Knowing that you will set your own pace, we have not tried to break this curriculum down into discrete lessons.

By the end of these lessons, your students should know the rules, common tactics, common checkmates, and some general principles of the opening, middlegame, and endgame. Some of us like to think that kids at this point are starting to be real chess players, and it's an exciting moment when a coach sees his or her students weave lessons together and demonstrate a deeper understanding of the game. Sometimes the lights will come on in one or two kids first, but you'll be surprised at how rapidly the broader understanding of the game will spread through your group. If a few kids are getting the big picture, the others will catch up.

**Special considerations for K-1's.** Students in kindergarten and first grade can be excellent chess players, and some of them can learn as quickly as older kids. Some of them, however, may have trouble visualizing the game on a computer screen or demo board, or may be intimidated by being in a group of mostly older kids. We therefore recommend that K-1's be taught in one or more separate small groups of six or fewer, using an actual chess board. We often leave these groups in our main playing room, where they can be overseen by an adult. Parents, high school or middle school students can be excellent teachers. Keep an eye peeled for potential student coaches who are mature and would enjoy the experience. Parents of these young coaches often comment on how rare and valuable it is for their kids to be given real responsibility and to work in an environment where expectations are high that they will be steady and reliable.

If your club is tiered, some K-1's may be able to quickly move up into your larger groups. Others need to learn more slowly or in smaller doses. When teaching a small group, we suggest the coach sit on one side of a table, with one student on each side, and three others directly across. Let the kids handle the pieces and have each of them demonstrate they have learned each segment of what they have been taught.

This being said, and recognizing that K-1's may need gentler handling and a slower pace, we see no reason to recommend a special curriculum for them. The points and sequence of lessons laid out below apply equally well to chess players of all ages.

A note on advanced instruction. Titled players and other experienced coaches teaching advanced students are usually skilled at assessing groups of students and knowing how to help them advance. They are also likely to have their own teaching methodologies and curricula. If you are fortunate enough to have such an instructor, our experience is that it's often best to defer to their judgment in selecting content.

# **Section 1.** The Rules of the Game and a Few Checkmates

Set up demo board or a computerized equivalent. Be sure everyone has a name tag with his/her first name. Adhesive mailing labels work fine.

# Introductory Comments to Your Group

Introduce yourself, then make some opening comments. Here are some possibilities:

- "We'll get you playing quickly, but need to start with the basics for those new to the game."
- "We hope to capture the excitement of the game, considered by many to be the world's best board battle game!"
- "The basic idea: the two armies approach each other, fight for pieces and position (especially in the middle of the board), and ultimately try to attack and surround their opponent's king. When the king is under attack and cannot escape, historically an army would surrender. In chess we call it checkmate."
- "As in real war, there can be battles in several parts of board. Sometimes different kinds of strategies will be involved in each battle."
- "Some people say more people play chess than any other game."
- "Chess is not only for brainiacs. It can be played at any level, from 'just for fun' to world championship level."
- "You'll learn to be a better decision-maker. The game will confront you with lots of choices. There are 16 billion possible board positions after 10 moves."

#### **The Board**

#### **Explain these basics:**

- The board has 64 squares, called "light" and "dark" squares.
- The horizontal rows are called "ranks," and are numbered 1 through 8.
- The vertical columns are called "files," and are given letters a through h.
- Each squares has a name, based on the rank and file to which the square belongs. For example, "e4."
- White sets up on the first and second ranks, black on the seventh and eighth.
- Make sure both sides have a white square in the right-hand corner!
- In diagrams and our demo board, the white pieces are usually on the bottom.
- Explain the importance of the four center squares: d4, e4, d5, and e5. "The downtown of the chessboard."

Have students name ranks, files, and squares.

### **The Pieces**

Go through each piece, naming them and showing how each piece moves.

- The easiest sequence to teach is R, B, Q (like R & B combined), N, K, P.
- Notes on naming: knight (not horse!); rook (not castle!).
- Only the knight can jump.
- Notice that the knight always jumps from a light square to a dark square or vice versa.
- Bishops spend the whole game on the same-color square.
- Initial placement on the board:
  - O Queen on her own color, or queens on the d-file, like "diamonds."
  - o Kings and queens across from each other
  - o Bishops are close advisers to the king and queen
- Explain kingside vs. queenside.

Have them "talk in notation," e.g. "pawn to e4," or "knight to c6."

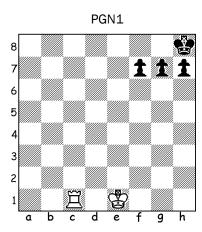
## **Purpose of the Game: Checkmate**

We'll return to this frequently, but briefly:

- Check means an attack on the king.
- When the king is in check, he MUST get out of check!
- The king can NEVER move to a square where he is attacked.
- Checkmate is check PLUS the king is trapped: it can't move, block, or capture the attacking piece.
- If you are in check, your only options are ABC (Avoid [move], Block, or Capture)

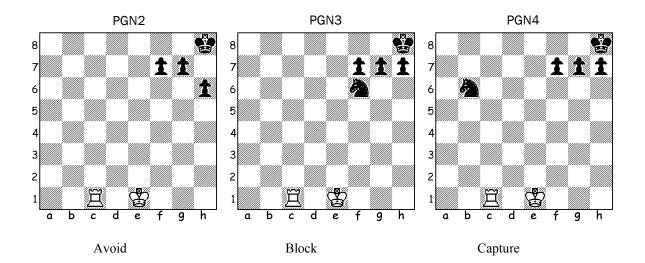
Give a few examples of checkmate, e.g.:

Back rank (or Corridor) mate:

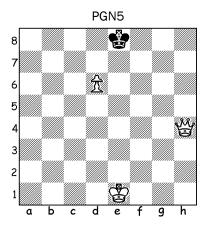


White gives checkmate with 1.Rc8#

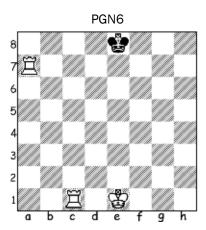
In the following diagrams, 1.Rc8+ is NOT checkmate. Why not?



Queen next to opponent's king (on an edge) in a protected spot:



Ladder mate:



### The Value of the Pieces

The value of the pieces is based on their ATTACKING POWER on an empty board.

Display the following chart if you can. At a minimum, explain the numbers.

| Piece  | # of squares attacked | Value (points) |
|--------|-----------------------|----------------|
| Queen  | 21-27                 | 9              |
| Rook   | 14                    | 5              |
| Bishop | 7-13                  | 3              |
| Knight | 2-8                   | 3              |
| Pawn   | 1-4                   | 1              |

- In other words, the queen covers from 21-27 squares depending on where she is, rooks always 14, bishops 7-13, knights 2-8, pawns a maximum of 4 but most often only 1.
- Mention that the king is PRICELESS because he can never be removed from the board! (In the endgame, the king is often said to have 3 or 4 points in fighting value.)
- Why are bishops and knights roughly equal in value? The bishop can move from one side of the board to the other quickly, but the knight can jump over pieces and visit all 64 squares.
- "Bishops are like dogs, knights are like cats."—GM Dmitry Gurevich.
- Important idea: pieces can become more or less valuable depending on their **position**.

This is a good opportunity to teach the *relative* value of centralization. Show how queens, bishops, and especially knights grow in power in the center of an empty board, then ask students to guess how much more powerful a rook will be on e4 than a8. (Answer: not at all!)

# Moves Generally

- Demonstrate on board from starting game position:
- White moves first, then each side alternates.
- You can only move one piece at a time (exception—castling, covered later).
- To move, just pick up the piece and put it where you want!
- If capturing, start with piece you are moving (not piece to be captured)
- Only one piece on a square.
- THINK BEFORE YOU MOVE!

## **Attacking & Capturing**

- If you are aiming at piece, that means you can take it
- Once a piece is gone, it's gone forever (except for promotion, covered later)
- Only the pawn takes in a different way than it moves.

Do examples with all the pieces. Have them find attacks, including attacks requiring two moves.

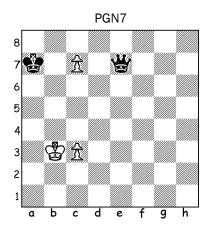
## Special Moves (Castling, Promotion, En Passant)

**Castling:** the only move where two pieces move at the same time.

- The king moves two squares to the side, and the rook occupies the square that the king just jumped over.
- Castling protects the king and brings a rook into play.
- Demonstrate kingside castling vs. queenside castling
- The rules say you cannot castle:
  - o if any pieces are in the way
  - o if the king or the rook has moved; or
  - o from, through, or into check
- Beginners are sometimes reluctant to castle. But you should do it in almost every game!

# Promoting a pawn.

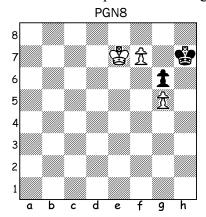
- When the pawn gets to the last rank, it can turn into any other piece except a king.
- You almost always want to promote to a queen, the most powerful piece.
- A fun but rare exception—promoting into a royal knight fork:



1.c8=N+ is a fork of the king & queen, which is better than c8=Q, which nets 8 points.

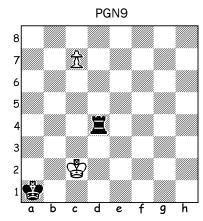
With the knight fork, after 1...Kb7 2.Nxe7, white's net point gain is 11.

• Another rare exception—avoiding stalemate:



Many moves win, but 1.f8=Q?? is stalemate.

1.f8=R! is one way to win.



In this famous position (discovered by Rev. Fernando Saavedra in 1895), 1.c8=Q? allows the brilliant defense 1...Rc4!! If White moves the king, then Black captures White's queen. But if White plays 2.Qxc4, the queen now attacks Black's only flight square, a2, and Black is stalemated!

White has only one way to win: 1.c8=R!! Ra4 (Black has to stop White from checkmating in two moves beginning with 2.Ra8) and now 2.Kb3! threatens both 3.Kxa4 and 3.Rc1#

# En Passant (taking a pawn "in passing").

- When the opponent's pawn moves forward two squares, you may capture it as if it moved only one square, but only on the very next move.
- So, en passant can only be done by a white pawn on the 5th rank (it will end up on the 6th), or by a black pawn on the 4th rank (it will end up on the 3rd).
- (Many coaches find they have to teach this repeatedly. It often "doesn't stick.")
- Demonstrate the move, then give the historical explanation: When the game was developed 1500 years ago, pawns could only move one space, so they could always be assured of a capture of a neighboring pawn. The rules changed 500 years ago to permit a pawn to move 2 spaces on first move to speed up the game. Then it was thought to be unfair to pass an opponent's pawn which under the old rules could have been captured.

#### **Choices When a Piece is Attacked**

PGN10

8

7

6

5

4

3

2

Play out the following example.

The black rook on c7 is under attack.

What can Black do?

- 1. Avoid (move)
- 2. Block with another piece
- 3. Capture

Football analogy

(appeals to some; apologize to others if necessary): If a quarterback is attacked by a rusher:

Avoid/Move: quarterback runs around corner

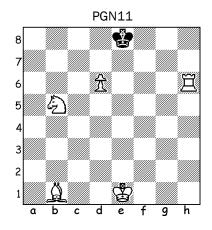
**B**lock: rusher is blocked by a fullback

Capture: rusher is knocked over

It's really a little more complicated. There are two other choices, D and E:

- 4. **D**efend with another piece to set up a trade. But the exchange must be favorable.
- 5. Elsewhere on the board, you might be able to make your own threat, against a piece of equal or greater value, such as the opponent's king.

#### Check



Have them create checks with several pieces in this position:

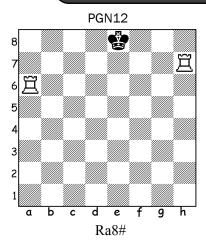
- The main idea: If the king is under attack, it must get out of check IMMEDIATELY.
- King cannot move into check.
- For example, there must always be an empty square between the two kings. (Show examples.)
- Unlike an attacked piece, choices D and E above don't work: when you are in check, you must Avoid, Block, or Capture.

# Checkmate

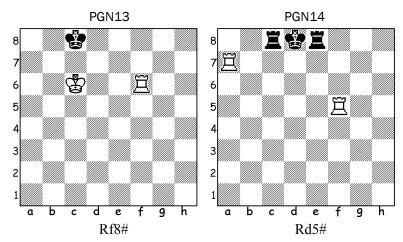
- This is the whole point of the game (not just capturing opponent's pieces).
- You can win even if you are behind in pieces.
- If you are in check, and you can't Avoid, Block, or Capture, you lose.
- The king doesn't actually leave the board.

The purpose of this section is to convey the idea of mate and to give them examples of common mates without trying to build proficiency.

You'll return to mate often.



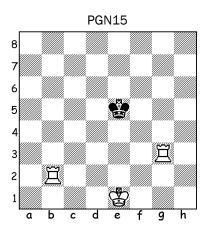
Give a similar example but with the king on the left or right edge (switch 90 degrees). Then let one rook get too close to the king and get captured!



Again, rotate the diagrams 90 or 180 degrees and show them it's essentially the same position.

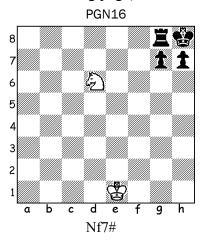
**Ladder Mate**: Two rooks pushing the king toward an edge.

Demonstrate and have them practice The following checkmates.



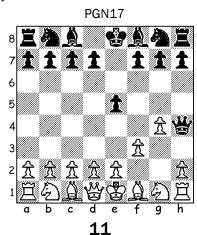
<u>Supported Mate</u>: With king on an edge, queen next to king on a protected square. Give examples with several pieces providing support, including a pawn. General lesson from these two examples: <u>Try to force the king to the edge of the board.</u> Checkmate is much easier to force when the king is on the edge.

**Smothered Mate.** (see the example on following page)



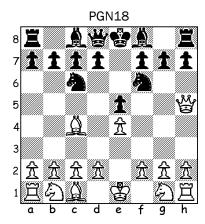
**Fool's Mate**: the fastest mate possible from the starting position, before any pieces are taken. It's called the Fool's Mate because only a fool would fall into it!

- 1. f3 e5
- 2. g4 Qh4#



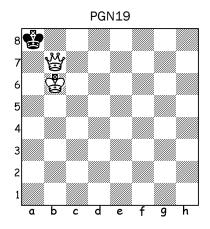
**Scholar's Mate**. (Explain they will be sure to see it, but we'll teach them how to defend against it, and make clear you don't recommend trying for it.)

- 1. e4 e5
- 2. Bc4 Nc6
- 3. Qh5 Nf6
- 4. Qxf7#

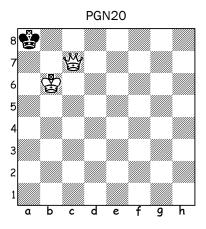


# **Stalemate**

Who wins this game?

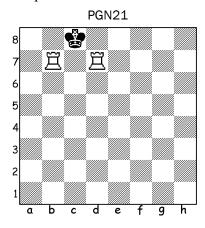


Black is checkmated.



But what if queen is on c7? Black is stalemated.

Stalemate means your opponent is not in check, but has no legal moves by any piece. It is a draw. Another example:



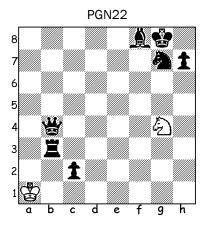
Stalemate is common when you get way ahead in material but don't leave your opponent escape room.

Frustrating, but it happens to everyone!

### Other Draws in Addition to Stalemate

- By agreement
- Three-time repetition of the same position with the same player to move (does not have to occur consecutively, and the positions in between don't have to be identical)
- 50 straight moves by both sides without a pawn move or a capture
- Insufficient material to force checkmate (including king vs king)

Perpetual check (one example of the three-time repetition draw):



If Black to move, Qa4 or Ra3 and it's checkmate. But if it's white to move, Nh6+ and Nf7+ go on forever.

### **Etiquette**

- Be polite, shake hands before the game ("Good luck!") and afterwards ("Good game!").
- Remain quiet, and thank your opponent afterwards even if you lose.

For more information on sportsmanship and etiquette, see the Youth Resources section of the ICA website.

### **Touch Move**

- If you touch a piece, unless by accident, you have to move it, unless that piece has no legal move.
- If you touch a piece of your opponent's, and that piece can legally be captured, you must capture it.

# Section 2. The Opening

The concepts below may be taught sequentially or as they come up in game reviews or game play. Explain that they are not immutable.

- 1. <u>Control the center!</u> Pieces are generally stronger in the center, attacking more squares and better positioned to attack either side. It is therefore common in the opening and middlegame for both players to work hard to occupy and control center squares. It is usually worth the effort. Attacking from the sides (flanks) is usually harder and takes more time.
- 2. Put one or two <u>pawns in the center</u> within your first few moves. The most common and safe first move with White is to move your d- or e-pawn two squares (to d4 or e4). With Black, you should answer 1.e4 with 1...e5, and 1.d4 with 1...d5. If you can safely move pawns to both d4 and e4 with White, you will probably have a big advantage. Moving center pawns also helps your bishops get off of the back rank.
- 3. <u>Develop your pieces quickly</u> and well. This means to bring out your back rank pieces early in the game into positions where they help fight for central control. The player whose pieces are ready for action sooner will be able to control the course of the game.
- 4. **<u>Develop pieces by attacking</u>** whenever possible. This often makes your opponent use up a move (a "tempo") by moving or defending an attacked piece.
- 5. <u>Don't bring out the other pawns early</u>, except for good reason. They help control space but don't have much power. Always remember that pawns cannot move backward! The c- and f-pawns are very useful in fighting for the center. BUT... be careful with your f-pawn. If you move it before you castle, you can end up in early checkmate.

For example:

1. f4 e6

2. g4 Qh4#

Grandmaster (GM) Ben Finegold likes to say,

"F stands for Forget About It! Never move your f-pawn!"

6. **Knights before bishops.** Bring out your knights first, toward the center (to c3, f3, c6, or f6) when possible. These are usually the best squares for your knights. The bishops are long-range pieces, and you may need a few moves to decide what the best squares for your bishops are. Knights are more effective in the center, controlling space and often able to support center Pawns. Keep your knights away from the edges and corners of the board ("knights on the rim are grim!").

Demonstrate this if you haven't yet. A knight in the corner can only attack two squares, vs. eight in the center.

- 7. Then **bring out bishops**, usually to the 3<sup>rd</sup>, 4th or 5<sup>th</sup> rank. They can move across the board more quickly than knights.
- 8. <u>Castle early</u>. This not only protects your king, but also helps to develop one of your rooks. It is the only chance you have to move two pieces at once. Kingside castling is easier (only two pieces need to be moved first) and is considered slightly better because the king ends up further from the center of the board and is less exposed. Consider developing your king's bishop and king's knight before your queen's bishop and queen's knight so you are ready to castle kingside.
- 9. Try to **prevent your opponent from castling**. You can do this sometimes by putting the king in check if your opponent has no blocking moves. Try to create a "check line" (which your opponent cannot cross in castling). You can also do this by trading queens early, forcing your opponent to use his king to re-capture.

For example:

- 1. e4 e5
- 2. d4 d5
- 3. dxe dxe
- 4. Qxd8 Kxd8

Play this out on your board.

- 10. After castling, wait as <u>long as possible before moving the pawns shielding your king</u>. They are his bodyguards and protect him. But if pressure begins to build, you may have to move a pawn to create an escape route for your king. Try not to move your bishop's pawn, as this opens the king to attacks from the center.
- 11. **Do not move your queen out too early!** It is too easy to attack with less valuable pieces. You will generally waste time, and sometimes lose your queen. No queen adventures without good reason! For example:
  - 5. e4 e5
  - 6. Qg4 Nf6
  - 7. Qf5 d5
  - 8. Qf3 Bg4
  - 9. Qb3

White has wasted a ton of time, and has only helped Black to develop.

12. <u>Don't block your own pieces during the opening.</u> For example, try to avoid moving your d- or e-pawn only one square (i.e., to d3, e3, d6, or e6) if this will prevent you from developing the bishop on a square of the same color. (Bishops trapped by their own pawns are called "Bad bishops.") Strong attacks are generally impossible from cramped positions.

- 13. During development, <u>try to move each piece only once</u>. It is normally better to get another piece out than to move a piece to a slightly better spot. Wait to move a piece a second time until other back rank pieces have been developed. Exceptions: Freebies (easy captures of opponent's pieces) or Survival (to avoid being captured).
- 14. The opening is finished when your **rooks are connected**, i.e. after you have castled and developed at least two of your minor pieces (some say all).
- 15.If you can <u>take a center pawn</u> safely, it's usually worth the risk. For example, after 1.e4 e5 2.Nf3 Nc6 3.Bc4 Bc5 4.c3 Nf6 5.c3 exd4 6.cxd4 Bb4+ 7.Nc3, Black can grab a center pawn with 7...Nxe4.

# **Section 3:** The Middlegame and Tactics

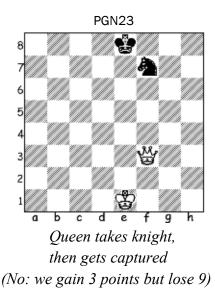
Most players wait until they have finished their opening before they focus on advancing their pieces and planning an attack, the hallmarks of the middlegame. In this section, we offer advice about the middlegame and introduce the most common tactics.

# **The Profitable Exchange**

Every game involves exchanges of pieces which can benefit one side or the other. Beginning players need to know the basic ideas, starting with the simple arithmetic involved in counting points, attackers and defenders.

Why is this important? Because normally (although not always) you get to checkmate by winning more material than your opponent.

Do we always want to capture? Simple examples of counting points:



PGN24

8

7

6

5

4

3

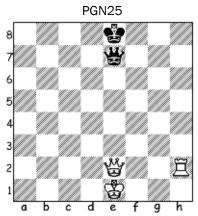
2

1

a b c d e f g h

Rook takes queen,
then gets captured

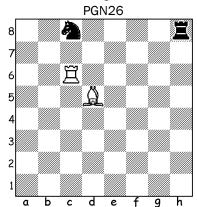
(Yes: we gain 9 points and only lose 5)



Trading queens (Maybe: it's an even exchange, so it depends on other factors. Here, White is winning.)

# **Counting Attackers and Defenders**

Should white take the knight with Rxc8?



Answer: No—we gain 3 points, but lose 5.

Put the bishop on e6. *Now* should White take the knight with either Bxc8 or Rxc8?

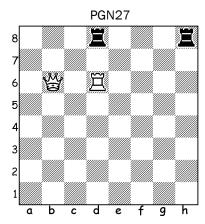
*Answer:* **Yes**—now we gain 3 points for free. This shows the power of the double attack.

General rule: If pieces are of equal value, don't capture unless there are more attackers than defenders. Don't start something you can't finish.

If pieces are of unequal value, COUNT. (Here you can give simple examples such as those in subsection 4 below.) The best players are good counters. Sometimes there are multiple attackers and defenders and there is no substitute for thinking out the potential capture sequences the old-fashioned way: "If I do A, he'll do B, then I'll do C...".

Always capture with cheapest piece first!

In the following example, which piece should White use to take the rook on c8?



Answer: the rook.

If the queen captures first, White gains 10 points (two rooks) but loses 9 (the queen) for a net gain of 1 point.

If the rook captures first, white gains 5 points for free.

# **Trades**

Trades are generally a good idea if you win a more valuable piece in exchange for a less valuable one.

If pieces traded are of even value, TRADE WHEN AHEAD.

Tug of War analogy 11 people pulling against 10 is a close fight, but 2 pulling against 1 is an easy win. Even trades can also be good if there is a good strategic reason (such as opening up a cramped position, or trading a piece in a bad position for a better-positioned opponent's piece).

# Twenty Commandments of the Middlegame

The concepts below may be taught sequentially or as they come up in game reviews or guided game play. Explain that they are not immutable, despite being labeled "Commandments."

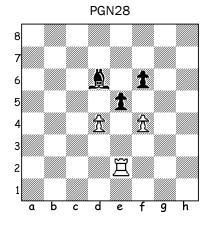
1. <u>Make the best possible move!</u> Look carefully at the square to which you want to move to be sure the square is safe. This is the mistake most commonly made by beginners. Be especially careful to watch out for your opponent's knights!

#### 2. The four questions.

Ask these questions before EVERY MOVE:

- a. Do I have a piece in trouble (that my opponent can capture)?
- b. Does my opponent have a piece in trouble (that I can capture)?
- c. Why did my opponent move there? What is he/she trying to do?
- d. Am I moving to a better square? (safe and better for offense or defense)
- e. (As you improve, add this fifth question): Are there any weaknesses in my opponent's position I can take advantage of? (e.g., an unprotected piece, or two pieces on the same file, rank or diagonal)
- 3. <u>Get in the habit of counting.</u> First, remember what the pieces are worth. Memorize this if you haven't yet. Otherwise you won't know when to trade pieces. Queen=9; rook=5; bishop=3; knight=3; pawn=1.
- 4. <u>More on counting:</u> If the piece you are moving can be captured after your move, can you capture the attacking piece afterwards? And if you do, will still another capture follow? Often pressure builds on a square and captures are followed by several re-captures. Figure out who will be ahead when the capturing is over. Your chess "vision" will improve with time.

For example, can White capture three times in a row on e5 in the following position?

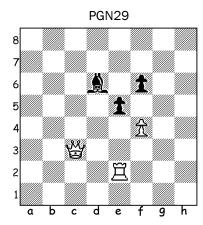


Answer: Yes.

White should capture on e5 with the pawn (not the rook!), because it wins a pawn, or a piece if Black persists in recapturing:

- 1. fxe5 fxe5
- 2. dxe5 Bxe5
- 3. Rxe5

What about in the following position—should White capture three times on e5?

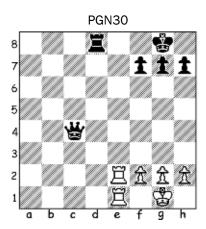


Answer: No.

1. fxe5 fxe5 (So far, so good for White, but now both 2. Rxe5 and 2. Qxe5 lose material)

- 5. So when two of your pieces are able to capture an opponent's piece, <u>take with the piece</u> <u>of least value.</u> (Send in the infantry first, and the cavalry and air power only later!)
- 6. <u>Move your rooks to open files</u>, where no pawn or piece is blocking the way, if you can. Rooks love open files!
- 7. Try to <u>establish a solid position</u>. Put your pieces on "active squares," where they have maximum attacking power. Are your pieces moving forward, in a position to help each other, but still protected? Try to accumulate small advantages. Try to increase the pressure against your opponent's pieces and king.
- 8. **Avoid moving too quickly.** When you see a good move, wait. Look for a better one.
- 9. **Do not put your opponent's king in check unless you have a good reason.** Good reasons include gaining time (tempo), achieving a better position for the attacking piece, or creating a double attack (e.g., attacking another piece while also putting your opponent's king in check).
- 10. Similarly, <u>avoid useless attacks on other pieces.</u> Don't do it unless there is a reason. If they can simply move out of the way (or, worse yet, move to a better square), what have you gained? And don't bother using valuable pieces to attack your opponent's less valuable, protected pieces.
- 11. **Fight for your pawns.** They can often make the difference in a close game. In the end-game, a one-pawn advantage can be decisive.
- 12. <u>Look to develop double attacks.</u> Any time you can attack two pieces at once (including the king), you have a good chance of capturing one of them.

- 13. **Build "batteries,"** in which two pieces are on the same line, with the rear piece supporting the attack of the forward piece. The queen is often involved in a battery, either leading or backing up a bishop or rook.
- 14. Try to <u>"connect" your rooks</u>, which means having them on the same rank or file. This may permit them to attack an opponent's piece without risk of being taken, and positions them for decisive end-game attacks and sacrifices. For example:



Black is winning the "point count" and if it were Black's move, Black could play 1...Qxe2! 2.Rxe2 Rd1+ 3.Re1 Rxe1#.

But White to move uses her doubled rooks on the e-file to win: 1.Re8+ Rxe8 2.Rxe8#

- 15. **Have a plan.** For example, when you have developed well enough that you are prepared to begin an attack, decide whether to attack on the kingside or the queenside. Then position your pieces so that they are attacking the same side. Or, if you are ready to attack your opponent's king, plan to attack with more than one piece. (Attacking with one piece rarely works.)
- 16. Think about pawn structure. For example, "pawn chains" (connected pawns on a diagonal) are much better than doubled or tripled pawns (on the same file). "Isolated" pawns (unable to be defended by other pawns on either side) are easy for your opponent to pick off, so try to avoid getting them. Think of each of your pawns as a potential future queen. If they protect each other, you will have more pawns left for the endgame.
- 17. **Know when to trade pieces.** This was covered above, but it's important enough to be repeated.
  - Trade pieces of even value when you are ahead, not when you are behind.
  - Trading a piece for a better piece generally makes sense.
  - If you are even in material, an even trade may make sense if you have a badly-positioned piece (e.g. a trapped piece, a "bad" bishop, or doubled pawns) and your opponent's piece is putting pressure on you.
  - At the end of the middlegame, if you are trying to win by promoting a pawn, try to trade all pieces *except for your pawns*.
  - The opposite is true for the defender. If you are trying to keep your opponent form winning by promoting a pawn, *trade as many pawns as possible* and keep the other pieces on the board.

- 18. <u>Concentrate and be alert!</u> Don't fiddle with your pieces or let yourself be distracted by other activity in the room. Bobby Fischer said the biggest difference between him and his opponents was that he gave 90% of his attention to the game. He thought most players gave as little as 30%.
- 19. **Don't relax if you are ahead.** With one careless move, you can lose the advantage quickly.
- 20. If you are behind, **don't give up!** Keep making strong moves, and hope your opponent will give you an opportunity to catch up. (This happens often in games between beginners.)

  Where there's life, there's hope. So don't resign, even if you're pretty sure you'll lose.

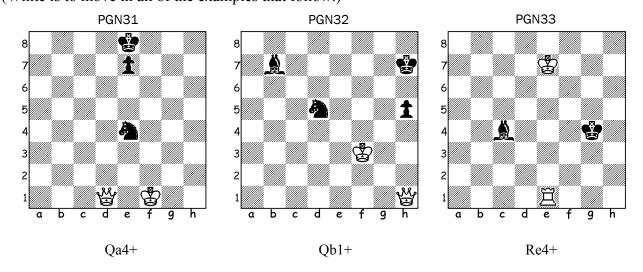
  Look at your situation as an opportunity to practice defense and at least postpone your loss. If you're playing with a clock, maybe you'll win on time!

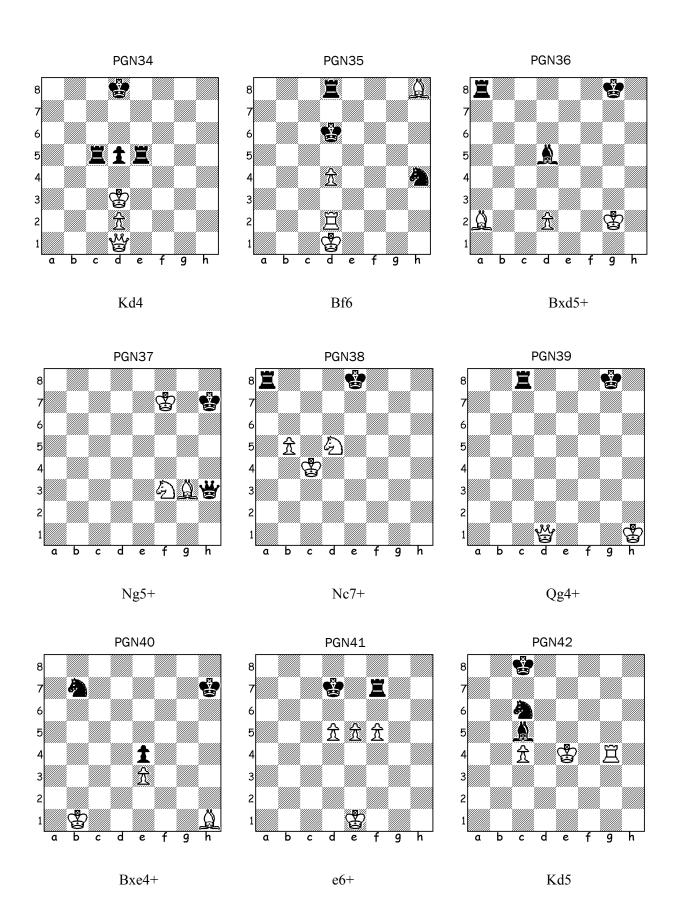
### **Basic Tactics**

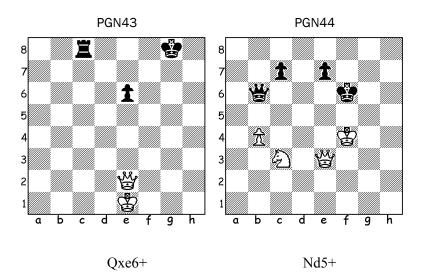
<u>Introduction</u>. Chess coaches uniformly recognize the importance of tactics, and there are many ways to teach them. Coaches who teach with computers often have favorite tactics software or websites. Several that are highly regarded are Think Like a King, CT-ART 5.0, Chesskid.com, and Chesstempo.com.

If you teach with a conventional demo board, the sections which follow should give your students a good start. (We have these diagrams available in electronic form (PGN) on the Chicago Chess Foundation website on the resources page.)

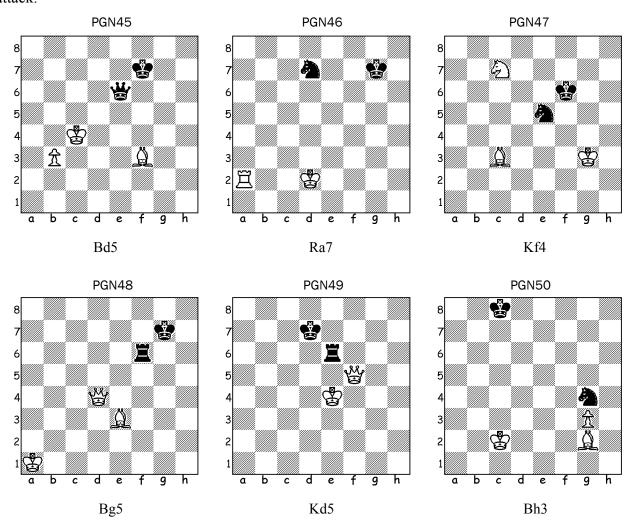
**Forks.** Look for situations where your pieces can attack two of your opponent's pieces at the same time. One type of fork occurs when two of your opponent's pieces are on the same rank or file (where they can both be attacked by a rook or queen) or on the same diagonal (where they can both be attacked by a bishop). Be on the lookout for these patterns. (White is to move in all of the examples that follow.)

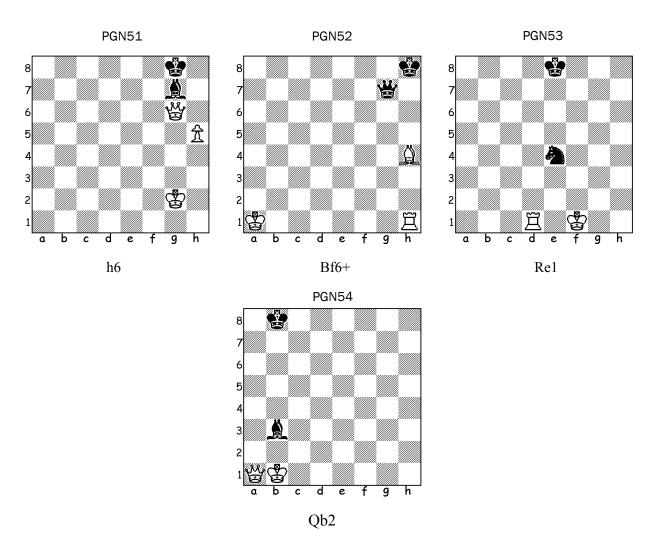




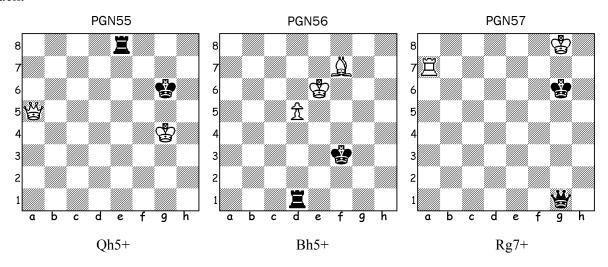


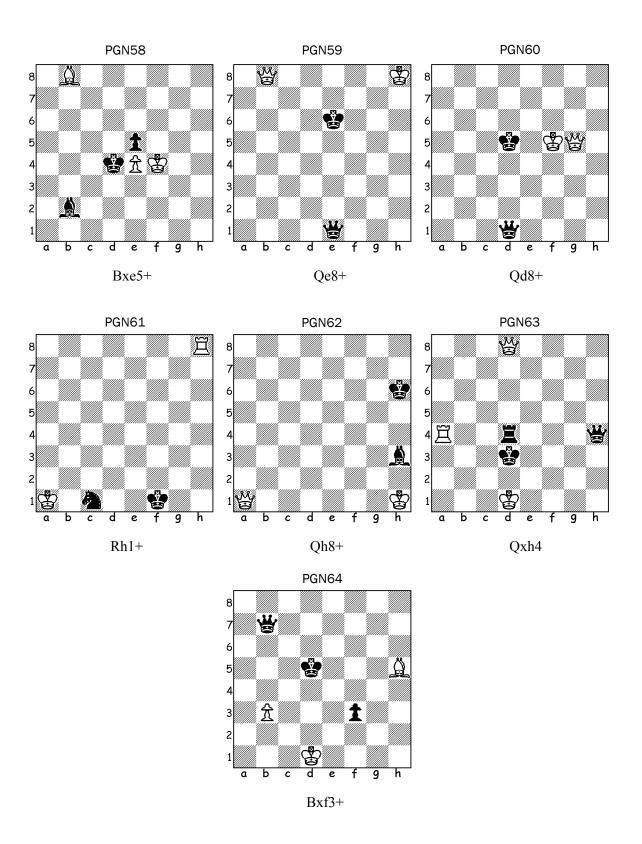
<u>Pins.</u> Look for (or create) situations in which an opponent's piece cannot move because to do so would leave the king in check (an "absolute" pin) or leave another valuable piece open to attack (a "relative" pin). The pinned piece cannot be used by your opponent, and is also open to further attack.



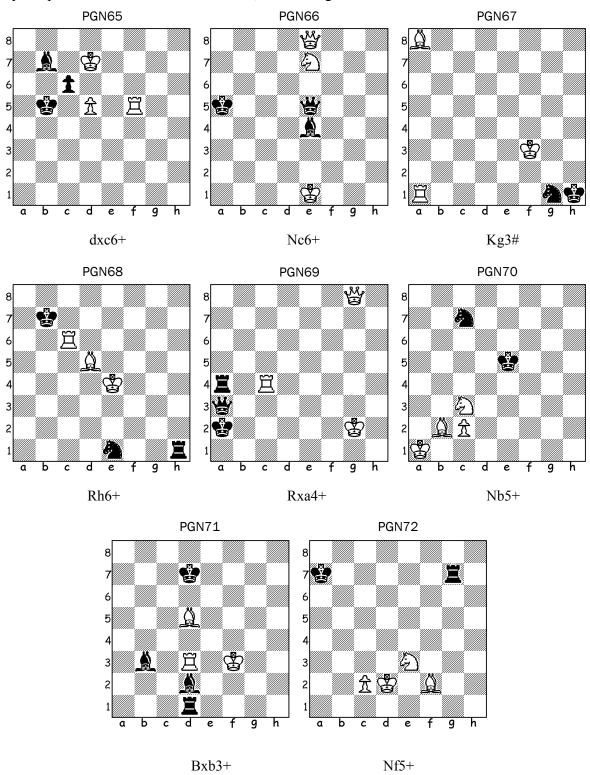


<u>Skewers.</u> Look for situations where you can attack a king or a valuable piece of your opponent's, forcing it to move, and exposing another enemy piece behind it! This is also called an "X-ray attack."

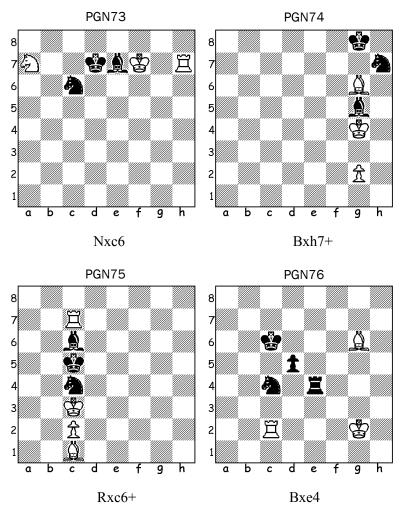




<u>Discovery.</u> (Discovered attacks.) Look for situations where by moving one piece, we unleash an attack by the piece behind it on the same rank, file or diagonal.

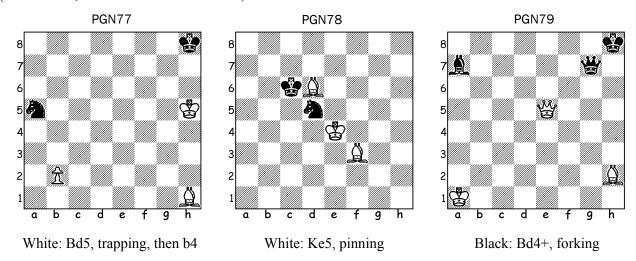


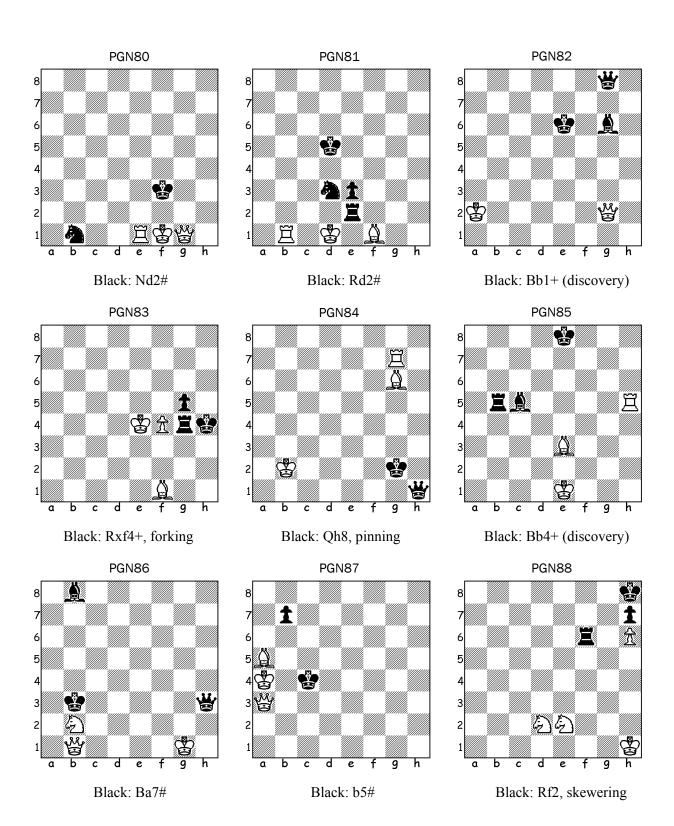
<u>Overload/Attacking the Defender.</u> Look for your opponent's pieces that are defending other pieces, then attack those defenders. If they are defending more than one, they are "overloaded."

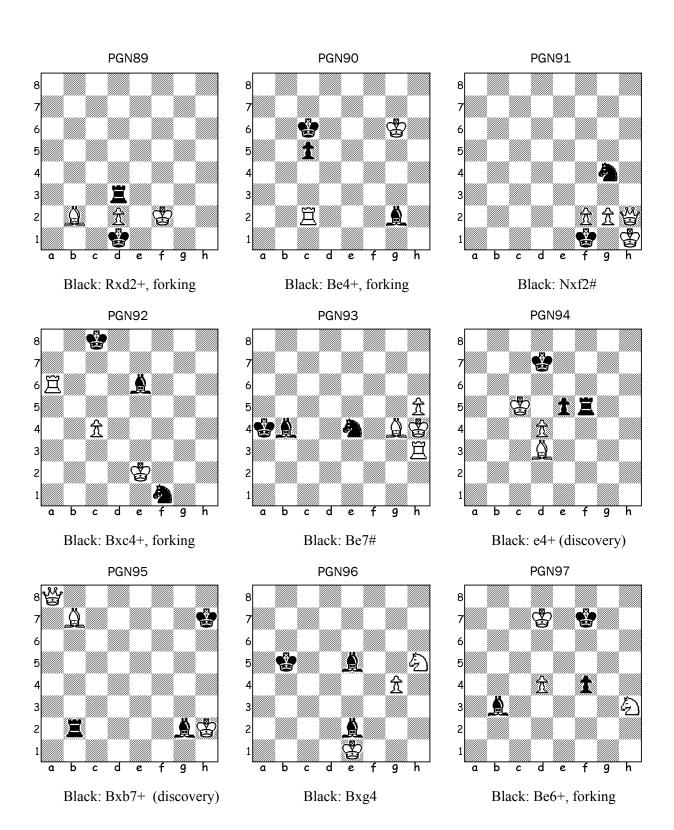


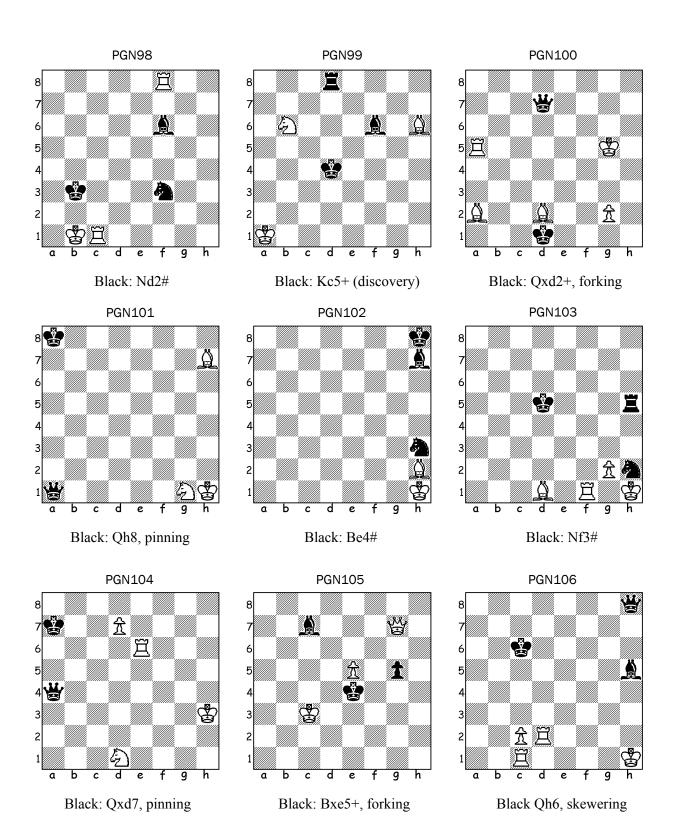
# **Mixed Tactics**

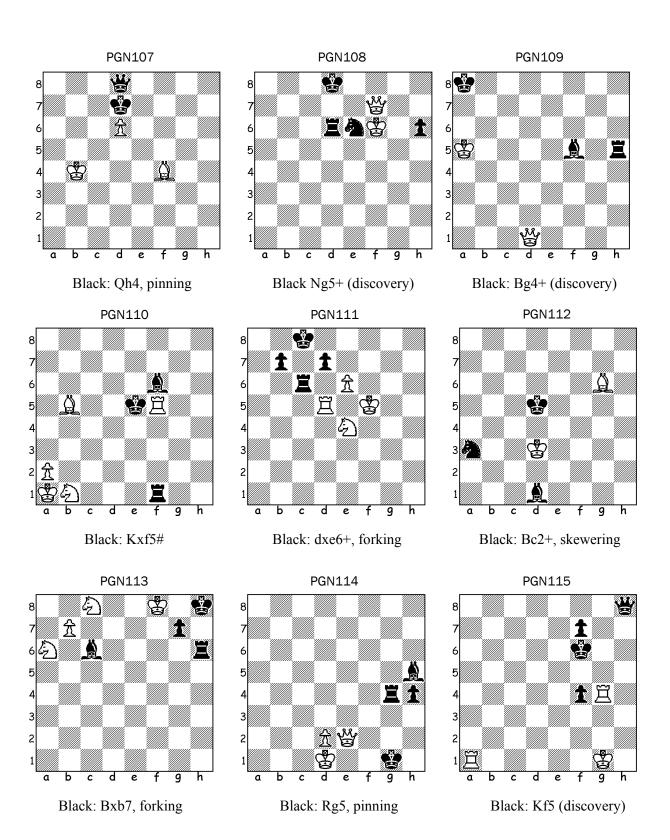
The positions that follow contain moves involving all the common tactics. Find them! (Sometimes, it will be Black to move.)







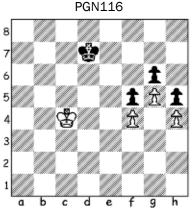




# **Section 4:** The Endgame, and More Checkmates

### **General Ideas**

- 1. Try to <u>force your opponent's king to the edge</u> or to a corner if possible. It is generally more difficult to checkmate the king if he is in the middle. Conversely, if you are losing, try to get your king to the center!
- **Try to promote one of your pawns** to another piece, generally a queen. If you have a "passed" pawn, which cannot be attacked by opposing pawns on either file to the left or right, that is probably the one to try to promote.
- 3. <u>Create an outlet for your king</u> if it is at risk of being trapped, e.g. on the back rank.
- **Activate your king.** The king's role often changes entirely in the endgame. Although it moves only one square at a time, the king is often crucial to winning during the endgame, protecting advanced pawns and other pieces.
- 5. If you are <u>advancing a pawn with your king near it for protection</u>, try to keep your king ahead of or even with the pawn (not behind it).
- **Rooks belong behind passed pawns!** This goes for rooks trying to help passed pawns, and rooks fighting against enemy passed pawns.
- 7. Know how much strength is needed to get your opponent into checkmate. For example, if your opponent has only a king left, you can win easily with a king and a queen or with a king and a rook. You can also gain checkmate with a king and two bishops, or with a king, a bishop, and a knight, but these tasks are more difficult. A king and two knights is not enough to win unless your opponent makes a mistake.
- 8. Try to reduce the <u>number of squares your opponent's king can move to</u>, to make mating easier. For example, try to put your opponent's king in a box, and then make it smaller.
- 9. When kings are facing each other with one square in between, this is called "the opposition." In general, when the kings are in opposition to one another, you want it to be *your opponent's turn to move*. There is an example on the following page.



from Müller & Lamprecht 7.01

If it's White's move in this position, White wins by playing 1.Kd5!

(the kings are facing each other with one square in between, and it's Black's move)

- 1...Ke7 2.Ke5! (opposition!)
- 2...Kf7 3.Kd6! (White uses the opposition to penetrate)
- 3...Kf8 4.Ke6! and the g6 pawn will fall in a few moves—have students play this position out.

If it's Black's move, the easiest way to defend is by taking the opposition with 1...Kc6! 2.Kd4 Kd6!

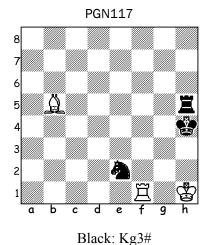
**Avoid stalemate** if you are ahead, and try for stalemate if you are behind. Stalemate is common among beginners where one side has overwhelming strength at the end of the game. It occurs frequently, too, where one side has only a king and the other side has a king and a queen. Practice getting your opponent into checkmate—not stalemate!— with a king and a queen.

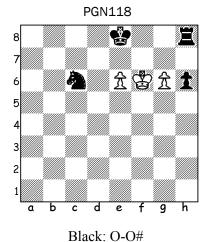
# 11. <u>Learn and practice common</u> mating positions.

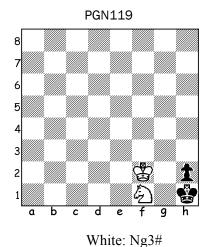
Demonstrate and teach these if you haven't yet.

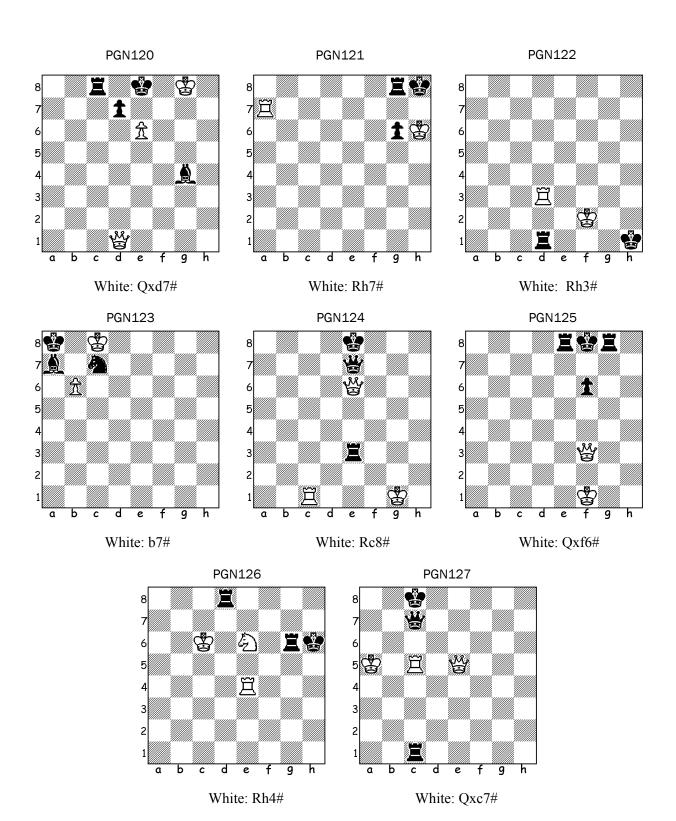
- a. Queen next to the king in a protected spot (Supported Mate)
- b. Trapping the king on the back rank (Corridor Mate)
- c. Two rooks versus king (Ladder Mate rolling the king back)
- d. King & queen versus king
- e. King & rook versus king (careful to keep your pieces together)
- f. King & pawn versus king (tricky)

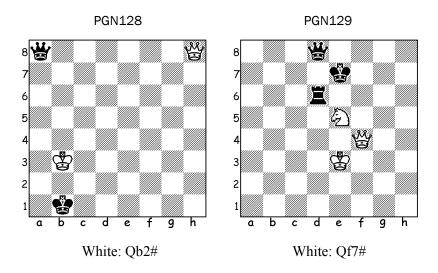
### **Checkmate Puzzles:**











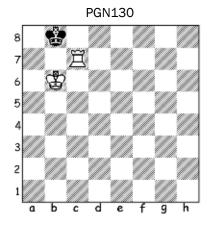
### A Few Endgame Ideas in More Detail

The remainder of Section 4 is more advanced, and not for the faint of heart.

### Pawn Promotion and Zugzwang

Sometimes in life we have to do things we don't want to. This is also true in chess. We have to make a move, even when it costs us the game.

Here's an example of how the inability to 'pass' affects the endgame:



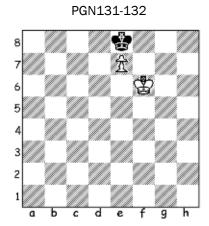
The white king controls a7, b7, and c7.

If it were Black's move, Black would lose immediately.

1...Ka8 is the only move, and White plays 2.Rc8#.

How does White to play win? Wasting a move with 1.Rc1! (or anywhere else along the c-file) forces 1...Ka8, and 2.Rc8# as before.

The Germans have a great word for this, *Zugzwang* (pronounced *TSOOG-svonk*). Loosely translated, it means, "you have to make a move, even though you don't want to." Zugzwang is fundamental to the ending king and pawn vs. king.

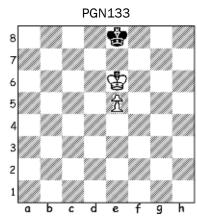


This is a great example of *mutual zugzwang*: neither player wants to be the one who has the move!

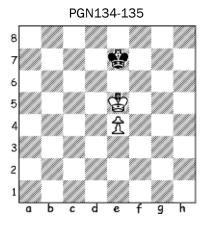
If it's White's move, the king has to protect the pawn. But the only move White has that guards the pawn is 1.Ke6 stalemate!

But if it's Black's move [PGN132], the only legal move is 1...Kd7.
White replies 2.Kf7 and will promote to a queen on the next move.

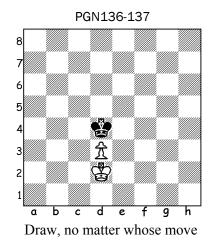
Sometimes, however, zugzwang doesn't matter. When you get your king to the sixth rank in front of your pawn on the fifth rank, you will win. (There is an exception that we'll get to in a minute.) Have your students practice playing the following position. The secret is that Black has no way of preventing White from controlling a square adjacent to the queening square e8, so even "having the opposition" won't save Black.

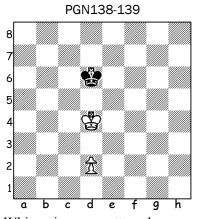


Push the pieces back one rank, and the verdict changes:

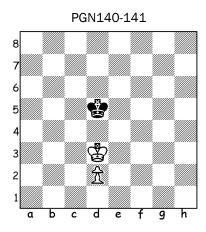


White to play draws, but Black to play [PGN135] loses. When Black has room to make a strategic retreat, having the opposition is enough to save the game. For example: 1. Kd5 Kd7! (opposition) 2. e5 Ke7 3. e6 Ke8! 4. Kd6 Kd8! (opposition) 5. e7+ Ke8 and White has nothing better than 6. Ke6 stalemate.





When trying to promote a pawn the white king belongs in FRONT of the pawn to control the key squares in its path to promotion. On the diagram on the above left with white to move the white king is badly placed and the position is a draw. Black has the opposition and will keep close to the pawn and never can be pushed off the d file. In the diagram on the right white has a win no matter whose move it is.

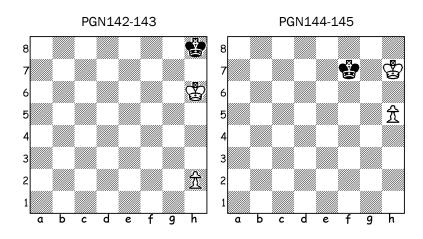


White to move draws as he loses the opposition.

Black to move loses as he loses the opposition.

Have the student try playing each side of the board in these diagrams.

### Rook pawns



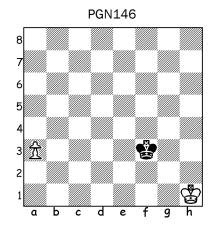
Rook pawns are an exception to the general rules concerning pawn promotion if the opposing king can get near or in the corner of the queening square. In both diagrams the white king is properly in FRONT of his pawn, but both diagrams end in a draw because the white king cannot get control of g7 and out of the way of his pawn to advance. In the diagram on the left, the black king cannot be pushed out of the corner by the white king to allow the pawn to Promote. In the diagram on the right, the black king can prevent the white king from moving to g7 out of the way of his pawn advancing to promote by shuffling back and forth between f7 and f8. If White tries to slide the king out via g6, Black will scurry to h8.

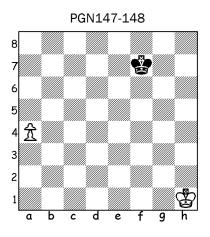
Have the student play each side of the board in the two preceding diagrams.

### The Square of the Pawn

What is the definition of a passed pawn? A passed pawn is a pawn that cannot be attacked by an opposing pawn from the file on either side of it. How do you know whether a passed pawn can get promoted before being captured by the opponent's king? Ask your students if they know the definition of the "square of the pawn."

Can the black king catch the white pawn in the next two diagrams?

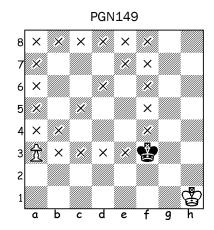


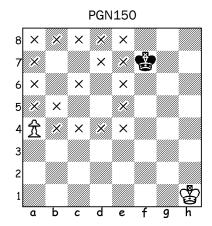


Yes, no matter who moves first.

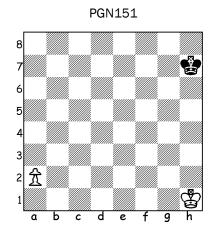
Yes, if it is Black to move.

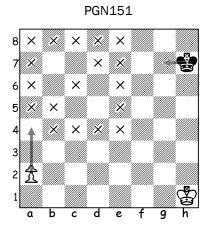
The square of the pawn is made by imagining two lines: One line to the queening square (vertically) and the other to the back rank (diagonally) from the pawn. Then complete the other half of the square by drawing two more lines to connect the corners. If the opposing king is inside the square or on its border, then the pawn can be caught before promotion. On the following page are diagrams showing the square of the pawn for the diagrams above. (NOTE: Switch the pawn and kings to the other sides of the board when you review or test the students later.)





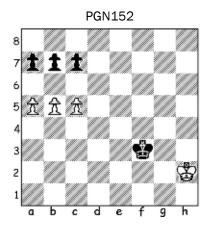
Can the Black king catch the white pawn below?





No, even if black moves first, because the pawn can advance two squares which leads to the Square of the pawn shown in the 2d diagram above. The king is not within the square or on the border.

Now let's take a look at how to create a passed pawn.



White executes the classic breakthrough sacrifice with 1.b6!

Black has two choices: if 1...cxb6, then 2.a6! deflects the b-pawn: 2...bxa6 is forced, and White queens first with 3.c6. If 1...axb6, then 2.c6! bxc6 3.a6! and again White queens first.

Black to move wins by preventing the breakthrough sacrifice: 1...b6! 2.cxb6 cxb6 (but not 2...axb6?? 3.c6) 3.axb6 axb6 and Black will reach a winning king and pawn vs. king ending.

## **Section 5:** Playing in Tournaments

#### **General Advice**

**Before the tournament.** Practice playing with a chess clock to get over the jitters most players get when they do so for the first time. You may wish or need to play with a clock at the tournament. (See below). Most clubs have clocks you can practice with. Consider buying one.

When you arrive at the site. Check in when you arrive, normally at tables set up for this purpose as you walk in. If pre-registrations are posted on wall charts, be sure the information, including your team designation, is correct.

When the pairings are posted. You will be told when the pairings are posted. There are two important things to note on the pairing sheet: what color you are playing and your board number, which corresponds to a numbered location on a table inside the playing room.

When you enter the playing room. Find your board and introduce yourself to your opponent. Wait until you are told you can start. Then shake hands with your opponent, wish him or her a good game, and begin.

If your opponent is late and you are not sure the floor directors know this, raise your hand and tell a director. If you have a clock, and if you are playing white, make your first move and hit your clock. (This will reduce the amount of time your opponent will have to finish his or her moves.) If you are playing black, hit your clock after the round starts so your opponent's time starts to run down.

**Problems during the game.** Problems may arise such as a claim of an illegal move, a touch-move violation, your opponent making noise or otherwise bothering you, a problem with a clock, and so on. **Leave the board exactly as is**, stop your clock if you are using one, and raise your hand for a director. Explain the problem when the director arrives. If you wait until after the game to report a problem, it will be too late. In the rare event in which you disagree with the director's ruling, you are allowed to ask for (or yourself get) your coach, who might be better able to argue your case.

Clocks and time penalties. Any player who owns his or her own clock has a right to use it during the game. Even if you start your game without a clock, if your game runs long, a director may ask you to use a clock toward the end of the round, and will tell each of you how much time you have. If you run out of time, don't "call your own flag" – that's for your opponent to do. Similarly, keep a close eye on the clock when time begins to run short so you will see (and can tell your opponent) when his or her clock runs out. Some tournaments assess time penalties if there is an illegal move. Normally, rather than time being taken away from the offending player, two minutes are added to

the remaining time of the non-offending player. Some tournaments penalize players who are not keeping notation by deducting time from their total allotment, but this is rare, especially for young players.

Advice from your opponent during a game. Some players will try to give their opponents "advice." Don't take it. Make up your own mind. And politely ask your opponent to stop talking during the game.

**Draw offers.** Some experienced tournament players will offer a draw to an opponent who is beating them, hoping to sucker them in and end with a tie rather than a loss. Watch out for this. In this situation, resist the normal temptation to accept someone's handshake when it's offered. If you want to offer a draw, make your move, say "I offer a draw," and then press your clock. *Don't* extend your hand for a handshake when you make your draw offer; save that for when and if your opponent agrees.

At the end of the game, if you and your opponent agree on the result, extend your hand to your opponent whether you've won or lost and say "Good game." (If you don't agree on the result, get a director and leave your board untouched.) Then reset the pieces on your board, remind yourself of your board number, and, together with your opponent, report your score. Normally there are tables set up near the exit door where people will ask for your board number and the result.

### How to Play with a Clock

The player playing black has the choice of which side the clock is placed on. If you are right-handed, put it on the right (and vice versa). You are required to press your clock with the same hand you move your pieces with. At the start of the game, the player playing black starts the clock and then the player playing white makes the first move. Each player then presses the clock after each move, which starts to diminish the other player's time.

The most common time control for scholastic games is Game/30. This is a "sudden death" type of time control where each player has 30 minutes to play all of his or her moves. Once a player's time has expired AND his opponent notices the expiration, the player has lost. The only exception is where the player with time still remaining has insufficient material to mate, in which event the game is a draw.

### How to use the PGN file with this curriculum

Download the PGN file to your computer. http://chicagolandchess.org/wp-content/uploads/2015/12/ccf\_curriculum\_2015.pgn

If you have trouble accessing it from the above link, go to the Chicago Chess Foundation's Resource page: http://chicagolandchess.org/resources/

Save it to a location of your preference. In your chess software, open the file. This is usually done through the Open command in your File menu. (In Fritz, click on "Open" twice to display your directory tree and find the file.) You should be able to move from one diagram to the next by clicking on "Load next file" (at the top right in Fritz and ChessBase).

In Chessmaster 10th Edition, use the "Load" command. To make the diagram playable, close the Load dialog box and/or click on the "Take Back" icon (lower right when the "Shortcuts Bar" window is open). Because diagram numbers do not display in the list of diagrams in Chessmaster, you will need to keep your place and navigate by the diagram names.

#### **Chess Notation**

K = king B = bishop Q = queen N = knight

R = rook P = pawn (when needed)

Use upper case for pieces; lower case for letters of ranks.

### Examples of notation:

Nf6 (knight moves to f6)

Bb5 (bishop moves to b5)

Rxf2 (rook captures a piece or pawn on f2)

a5 (pawn moves to a5—notice that there is no "P")

Nbd7 (a knight moves from the b-file to d7)

R6e1 (a rook moves from the sixth rank to e1)

Qf4+ (queen moves to f4 with check)

Bf6# (bishop moves to f6 with checkmate)

### Special symbols:

O-O (kingside castling)

O-O-O (queenside castling)

x = capture. For example:

Bxe3 (identifying square of captured piece)

cxd5 (for pawn captures -- "P" is not necessary; identify the file instead)

+ = Check. Always goes at end of move. For example: Rxe5+

# = Checkmate. For example: Qxd7#

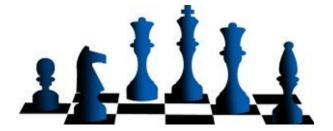


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