11. How to Open a Chess Game

Objectives:

1. Recall the three principles governing opening play
2. Begin demonstrating understanding of opening strategy

The main goal of this lesson is to teach the opening principles and to guide students' application and understanding of these principles. The students should come away with the knowledge of why the opening principles are good guidelines to follow, and begin obeying the opening principles in competition with other students.

From this lesson, the students should learn to pay constant attention to the basic opening strategies of controlling the center, developing pieces toward the center, and keeping the king safe. All mistakes in the opening violate one of these principles, and such violations should be pointed out by the teacher at every available opportunity.

It is important to understand that these general principles are just that: principles. It is sometimes a good idea to violate a principle if something unusual occurs. Again, the position ultimately determines whether an opening move, or any move, is a good move. The principles should be relied upon and generally followed as a guide to opening play, but they are not absolute laws that should be followed without thought.

Outline of lesson:

1. Three stages of a chess game
2. Three general principles
3. What to do and what not to do in the opening
4. Examples of opening play
PART 1: THREE STAGES OF A CHESS GAME

Introduce the three stages of a chess game, in order of importance, as the Endgame, the Middlegame and the Opening. There are principles to guide play in each stage of the game. This lesson concerns the principles that guide play in the opening stage of the game.

PART 2: THREE GENERAL PRINCIPLES

Solicit from the students some ideas of what a player might try to accomplish in the beginning of the game. Students should have enough experience to come up with the main ideas themselves. Give hints to help if necessary. As each principle is described by a student, list the principle in the student's words, then summarize with the ideas listed below:

Control the center

Pieces are stronger toward the center. Center squares are more important. Whoever controls the center usually controls the game.

Develop pieces

The pieces (not pawns) are weak on the back rank. Pieces on the back rank cannot attack at all and are weak defenders. Mobility of the pieces is critical in the opening.

Keep the king safe

Checkmating the king is the ultimate goal, so it must be kept safe from attack. An exposed king is open to attack. This means that players should usually castle the king to help keep it safe.

A student must have a good reason for violating opening principles

Emphasize that these are general principles and not absolute laws. There are times when a player's king is safe right where it is and need not be moved. There are times when immediate attack is better than developing pieces that are not yet developed. Students should be advised to violate an opening principle only if they have a good reason, one they can explain in words, for doing so. Such reasons are few.

PART 3: WHAT TO DO AND WHAT NOT TO DO IN THE OPENING

On the next page is a chart of opening DO'S AND DON'TS that follow naturally from the three opening principles. The students should be able to provide the reasons behind the DO'S AND DON'TS by referring to the three opening principles. Try to get students to explain why these DO'S AND DON'TS make sense.
DO

a. Castle early for king safety. Again, this is just a principle. There are positions in which castling is unnecessary or even a mistake, but in 90% of tournament chess games both players castle within the first ten moves! It is recommended that the teacher insist that students castle early to emphasize the importance of castling. In the rare circumstance in which the student chooses not to castle the student should be able to explain a good reason for not castling.

b. Try to set up a strong pawn center - this helps to control the center. The "d" and "e" pawns are usually moved first to control the center and open up lines for the bishops and the queen.

c. Develop knights before bishops - knights can jump over pawns, bishops can't, so it the takes longer to develop the bishops. Get a knight out first to help control the center immediately.

d. Prepare before attacking. Attacking usually requires that development be complete and the king be safe first.

DON'T

a. Move the same piece twice - This usually is a waste of time. Pieces moved once are usually developed adequately. (NOTE: there are many positions in which moving the same piece twice is a good idea, but in general it is not a good idea.) A player that moves the same pieces again and again allows the opponent to get a lead in development. This generally helps the opponent prepare to attack first.

b. Bring out the queen early. The queen is worth more than the other men. A queen brought out too early can be attacked again and again by weaker men, and forced to waste time retreating from the attack.

c. Play on the edge of the board. Moves like Ph2-h3 or Ph7-h6 are not toward the center and don't contribute to development of the pieces.

d. Attack prematurely - premature attacks almost always break down because all the forces are not prepared, or the attacker's king is left exposed to a counterattack from the opponent.

PART 4: EXAMPLES OF OPENING PLAY

Again, these ideas are all sound in general. However, there are positions in which violating these principles is correct. Emphasize this to make the point that a player should have a reason for violating the principle. If there is no clear reason to violate the principle, then don't violate the principle.
A famous game

Nearly every serious player has memorized the following game. There are many stories surrounding this game, involving Paul Morphy, America’s first chess prodigy. The game was played at the Paris Opera House in 1858 against two men who were consulting each other: Count Isouard and the Duke of Brunswick. Maybe it was played during the intermission of the opera, The Barber of Seville, or maybe it was played during the performance, providing the incentive for the American to finish the game quickly.

Review of the opening principles

It was Morphy who developed the opening principles we believe to be true:

1) Control the center,
2) Develop the minor pieces, and
3) Protect the king, usually by castling.

This game illustrates those principles beautifully.

Examples of good opening moves

1.e4 e5 2.Nf3 d6. With each move, ask the students if the move is good or bad, and why. The correct answer to each of the first four moves is that the moves are good because they control the center, develop (or help develop) pieces and protect the king. How do these moves help protect the king? By getting closer to castling, the players are helping to protect their kings and by controlling the center of the board the king is safer as nearly all good attacks come from or through the center.

3.d4 Bg4

What was the purpose of Black’s third move? (Ans. While moving bishop to g4 does not control a center square, it removes some of White’s control over the center by pinning White’s knight to the queen.)

Optional review:
Relative pins vs. Absolute pins

The teacher may want to review the two types of pins. This is an example of a relative pin as the knight is allowed to move but doing so while the pin exists would allow Black to capture White’s queen.
Converse of the opening principles

For each of the three opening principles there is an equally important converse principle. If a player wants to control the center that player would prefer that his opponent not control the center. It is better for a player’s game if his opponent does not develop pieces or protect his king.

By pinning the knight, Black intends to reduce White’s control of the center. It would seem that the move was a good one. However, the young American playing the White pieces was not concerned about Black’s idea.

4.dxe5. What does Black do now? Planning ahead, what would happen if Black recaptured the pawn with 4...dxe5? The students will correctly figure that the continuation of this variation would be 5.Qxd8 Kxd8 6.Nxc5, leaving the position diagrammed to the right. By trading queens, White broke the pin and now has captured a free pawn in the center of the board and has an additional threat. What is that threat? (Ans. 7. Nxe4 winning the bishop or 7.Nxc7, forking the king and rook. In addition, some students will note that Black has lost the right to castle. That is correct and is important.)

Breaking the pin

Fork

4...Bxf3 5.Qxf3 dxe5 6.Bc4 What is White’s threat? (Ans. 7.Qxf7 would be checkmate unless Black has protected the f7 square with something in addition to the king. This is the basic pattern of the Scholar’s Mate, which will be covered in more depth in a later lesson.)

6...Nf6 The obvious move, developing a piece towards the center and protecting the king. The position is shown to the right.
7.Qb3. What is White threatening now? (Ans. The pawn on f7 is again under attack and now the pawn on b7 also is under attack. This is considered a fork as the queen is involved with both attacks.) Why would it not be a good idea for Black to play 7...Nxe4, capturing a pawn so that when White captures a pawn the material will be equal? (Ans. After 7...Nxe4 8.Bxf7+ and when Black plays either 8...Ke7 or 8...Kd7, the only two choices, 9.Qe6# ends the game. Note that 8.Qxb7 captures a pawn but students who believe that it also would win a rook for free should be shown that Black would play 8...Nd7 and the queen protects the rook.)

A mating threat

Note that every move White makes contains a serious threat. In chess, we call this maintaining the initiative. By being forced to defend against White’s threats, Black never has time to create his own attack, allowing White greater freedom to choose his moves.

7...Qe7 What does Black have in mind with this move? (Ans. The move protects the f-pawn, of course, but it does something more. What would Black play after 8.Qxb7? How does Black avoid losing the rook on a8? By playing 8...Qb4+ forking the king and queen. After 9.Qxb4 Bxb4 Black is behind by a pawn but White no longer has such a powerful initiative. It is for this reason that White does not capture the free pawn.) What does White play to continue the attack while remaining consistent with our three opening principles?

Students may suggest castling, which is a good move but not as aggressive as the young Morphy wanted. 8.Bg5, pinning the knight to the queen does not protect the king, allowing Black to trade off the queens. 8.Bd2 protects the king but has little impact on the center of the board and does not continue the attack.

8.Ne3 controls two center squares, develops another piece and protects the king along the a5-e1 diagonal. Now 9.Qxb7 is a serious threat that would win a rook. 8...e6 How does that protect Black? (The queen now defends b7.) 9.Bg5 b5

(Diagram)

How many minor pieces has White developed? (All four.) How many has Black developed? (Two.) How many pawns has White moved? (Two.) How many pawns has Black moved? (Four.) Is White ready to castle? (Yes, in

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either direction.) Is Black ready to castle? (No.) With White having followed the general opening principles and Black not having done so, the game reaches its climax.

10.\textit{Nx}b5 \textit{cxb}5 11.\textit{Bxb}5+ How should Black get out of check? (Blocking with the queen is not a good idea, as that gives up the powerful queen for a bishop. Blocking with the knight on f6 also gives up the queen as the knight is pinned by the bishop on g5. Moving the king to d8 exposes it to more of an attack along the d-file and magnifies the pin from White's dark-squared bishop.)

11...\textit{Nbd}7 develops a piece (finally) and protects the king. How does White continue the attack? (The obvious target is d7, attacking the king. The knight is pinned. When something is pinned it is a target for capture. How does White bring more force to d7? 12. Rd1 looks good, but what move can White make that accomplishes the same thing but adds another component of the three general opening principles? 12.\textit{0-0-0}.)

How many things does White have attacking the knight on d7? (Two) How many things does Black have defending that knight? (The king may not capture the first thing that captures the knight as that would put itself in check. The queen does not want to be the first to capture, as the queen would be captured. The knight is pinned so if it captures first, the queen would be lost to the bishop. While Black has three pieces seemingly protecting the knight, none of them can be the first to capture.)

12...\textit{Rd}8 What is wrong with 12...0-0-0? (Castling without pawns in front of the king is very dangerous. In this case, can you find the winning combination? 13.\textit{Ba}6+ \textit{Kc}7 14.\textit{Qb}7#.)

13.\textit{Rxd}7 Why not 13.\textit{Bxd}7? (After 13...\textit{Rxd}7 nothing is pinning the rook on d7.) 13...\textit{Rxd}7. What move now is consistent with the previous moves? 14.\textit{Rd}1, putting more pressure on the pinned piece. 14...\textit{Qe}6 breaking the pin, allowing the bishop on f8 to move and offering to trade queens, reducing the pressure on Black’s king.
Now we look for the winning combination. Allow the students some time to work out the attack, which is not at all easy to see from here.

15.Bxd7+ forking the king and queen. 15...Nxd7 (the king is not allowed to capture and taking the bishop with the queen loses to a pretty attack which probably is not worth the time to show: 16.Qb8+ Ke7 (if 16...Qd8 17.Qxd8#) 17.Qxe5+ Qe6 18.Qc7+ Ke8

(if 18...Qd7 19.Qxd7#) 19.Rd8# Sharp students may notice that Black could have moved 17...Kd8 which avoids the checkmate, but after 18.Qb8+ Ke7 19.Rxd7+ Kxd7 20.Qb7+. If a: 20...Ke8 21.Kc8+ Ke7 22.e5 winning a knight and giving White an overwhelming advantage. b: 20...Kd8 21.e5 a6 22.Bxf6 gxf6 23.exf6 and Black cannot move any of its three pieces without losing something important. If 23...Ke8 24.Kc8# If 23...Ra7 24.Qb8+ Kd7 25.Qxf8 If 23...Bd6 24.Qa8+ and after the king moves off of the eighth rank 25.Qxh8. Black could try 23...h5 intending to play 24...Bh6+ to untangle his pieces, but White has the choice of ignoring the threat and capturing two more of Black’s pawns (on a7 and f7) or blocking the threat by moving 24.f4 or 24.Kd1 and staying on light squares. c: 20...Kd6 21.Bf4+ Kc5 22.Qc7+ 23.c3+ Kxe4 24.Qe5+ Kd3 25.Kd1 Kc4 26.b3+ Kd3 27.Kd4# d: 20...Ke6 21.Qc6+ Ke5 (if 21...Ke7 22.e5 produces a game-ending advantage) 22.f4+ Kd4 23.Qf3+ Kxe4 24.Qe5#)

Going back to the game, after 15...Nxd7 the students might be asked where Black’s king may move. (Nowhere.) So if White can find a check it might be checkmate. The game ends with 16.Qb8+ which is not checkmate because of 16...Nxd8. Have the students find 17.Rd8# which is how the Morphy game ended.

Review of principles: How many pawns did White move in the game? (Two.) How many did Black move? (Four.) How many pieces did White move? (All of them.) How many did Black move? (Three never moved, including the king and four seem to be on their starting squares.) Did White castle? (Yes.) Did Black castle? (No.) Who won? (White.)
Second example
1.d4 There are as many good moves as bad ones on the first move. To be good, the first move must:
   1) Control the center
   2) Develop minor pieces, and
   3) Protect the king.
Ten of the 20 possible first moves as white meet those criteria and should be considered good moves. The other ten do not. 1.d4 is a good move because it fulfills the three opening principles.

Restricting the opponent’s options
1...Nf6. Black is discouraging white from moving 2.e4. When white has its pawns on d4 and e4 that gives it a powerful start. But white wants to move its pawn to e4. How should he go about getting it there?
2.Nc3 is a good idea, but it removes the option of later moving the c-pawn. 2.f3 is not a good option, as it removes the natural developing square from the knight and opens the e1-h4 diagonal to the king. 2.Nd2 was played, but it is not a good move as it blocks the dark-squared bishop.

Gambit
2...e5 is a gambit. (A gambit offers material, usually temporarily, to gain a positional advantage.) Black is giving away a pawn in order to get White to make a move that does not develop another piece while at the same time Black is able to develop its dark-squared bishop. 3.dxe5 Ng4 threatening to regain the pawn, now with a knight powerfully placed in the center.

4.Ng3 Be7 White has developed a piece and Black has developed both king-side pieces and is ready to castle. 5.h3 A terrible move, shown below. White obviously was concerned about Black’s knight being close to the king, but White needed to worry more about king safety, control of the center and the development of his pieces. 5.e4 would have been good and several other moves would have been better than the move that was played.

Attacking the queen and king
5...Ne3 Attacking White’s queen that cannot move. To save the queen, White’s only move is to capture the knight. 6.fxe3 Bh4+ leads to mate in two more moves. 7.Nxh4 Qxh4+ 8.g3 Qxg3#
Third example

This next example reviews the same mistake as in the second example.

1.e4 e5 Most games among children begin with these moves. Both moves allow the king-side bishop to develop so as to allow a quick king-side castle. This opening is very common because it uses good moves.

2.d4 This is an aggressive move. Controlling the center immediately it allows for White’s dark-squared bishop to develop and puts pressure on Black. It is common for Black to capture the pawn with 2...dxe4 at which point White has a number of good moves to respond. No serious player can make a good argument as to which of White’s many good moves is the best.

Exposing the king to a diagonal attack

2...f6 This is a mistake. Although Black is controlling a center square (e5) Black will have difficulty developing its king-side minor pieces now, as the f6 square no longer is available for the knight and if the knight moves to e7 it is blocking the bishop. 2...f6 also opens up a line for attack (the h5-e8 diagonal.)

3.dxe5 fxe5 4.Qh5+ and Black has no good way to defend. After 4...g6 (blocking the check) 5.Qxe5 forks the king and rook. After 4...Kc7 5.Qxe5+ Kf7 6.Be4+ (bringing a piece into the attack with a checking move, so Black has no time to develop a corresponding piece to assist with the defense.

6...Kg6 7.Qf5#

Black could have escaped the checkmate by giving up the queen. Instead of 6...Kg6 Black could have played 6...d5 7.Bxd5+ Qxd5 (If 7...Be6 8.Qxe6#) but 8.exd5 and White has an overwhelming advantage.

Developing additional pieces

Conclusion

Students must be taught that it is very dangerous to expose the king to an attack along the diagonal.
Fourth example

**Using the f-file for an attack**

A gambit

1. **f4** This is also a popular opening idea. White controls a center square (e5) and intends to develop a knight to f3, develop the light-squared bishop and castle, using the f-file with the rook behind it to create an attack on Black’s kingside.

2. **fxe4** As a general rule, if a player does not see a good reason not to capture extra material, it is best to capture the material. The worst that happens is that the player learns something about chess. The best that can happen is that the player learns something about chess and wins the game with the extra material.

2... **d6** Black offers another pawn. White does not need to capture it and could reasonably play a move that develops a piece and controls the center. However, there is no good reason not to capture the next pawn in the chain.

3. **exd6 Bxd6** The purpose of a gambit is to develop pieces, and Black now has a piece developed in exchange for its pawn, while White has no pieces developed. Where is Black’s threat? Notice White has an entry along the dark square diagonal of f2 – h4 and notice that the only piece that either side has developed so far is Black’s dark-squared bishop. If White makes a random move like 4.Nc3, what does Black do? (4...Qh4+ 5.g3 Qxg3+ 6.hxg3 Bxg3#)

4. **Nf3** Controlling the h4 square (so as to save the king) in addition to developing a piece and controlling the center.

4... **g5** Black intends to scare White’s knight away by moving the pawn to g5 in order to create the checkmate. If White prevents 5...g5 by playing 5.h3 how would Black respond? (5...Bg3#) **5.g3** is a good move, as it protects the king from the checkmating threats and allows White’s light-squared bishop to develop to g2 and control the center.

In this game, both sides have reasonable chances. Black is behind by a pawn but has slightly superior development. Both sides are in a good position to protect their kings and both sides will be able to establish good control over the center.

White has an extra pawn, which, late in the game, has the potential to be promoted to a queen. When both sides control the center, develop the minor pieces and protect the king, a good game of chess is the likely outcome. If one side forgets any of the three principles, that side is likely to have problems throughout the game.

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