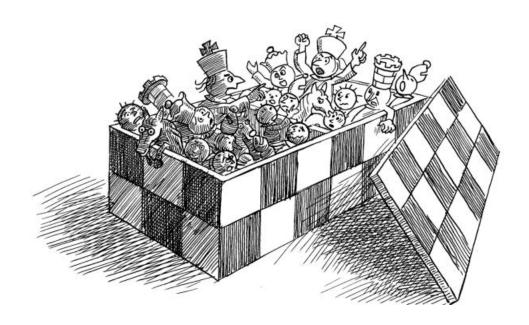
# Step 4 plus

#### Reminders



The 2<sup>nd</sup> edition of workbook Step 4 plus is published for the first time as an international version. We have decided to remove the reminders and make them available as a PDF file for downloading. This means more exercises on the pages that have become available.

As a teacher you can now hand out the reminders one by one at the appropriate time. Please note that a reminder can never replace the lesson in the manual! (Manual for chess trainers Step 4).

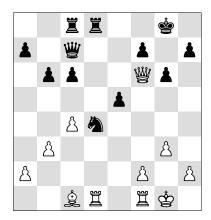
The page number at the bottom left refers to pages in the workbook with the corresponding theme of the reminder.

The solutions of all workbooks can be found on the website at: http://www.stappenmethode.nl/en/solutions.php

Information and an order form can be found on our website at: http://www.stappenmethode.nl/en/

# Attacking the king

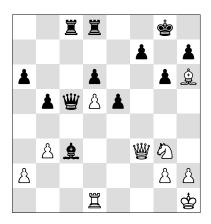
You already know the basic rules for attacking the king: bring up your pieces, bring in defenders, eliminate defending pieces, get access to the king and win. It is also worth studying typical attacks. Let us take a look at cooperation between the queen and the bishop (aimed at g7), and open lines.

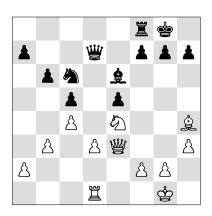


On the left 1. Bh6 does not win on account of 1. ... Ne6. After the capture with 1. Rxd4 exd4 2. Bh6 there is no defence against mate.

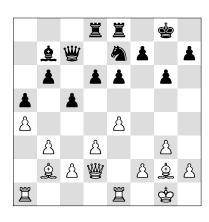
On the right the immediate 1. Qf6 is not enough in view of 1. ... e4.

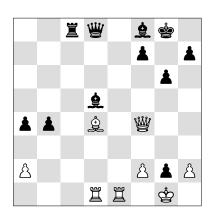
White can blockade the e-pawn with 1. Ne4, after which 2. Qf6 decides the game. In both cases one sees good cooperation between queen and bishop.



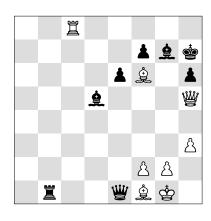


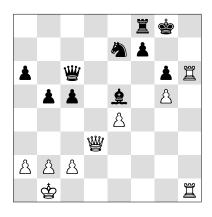
On the left White must first weaken the opposing king position with 1. Nf6+. After 1.... gxf6 2. Bxf6 the threat of 3. Qg5+ (or 3. Qh6) can no longer be prevented. On the right Black can still play on after 1. Qh6 with 1.... e5. In positions like this without a black dark-squared bishop, White often has all the time in the world: 1. Bf6! and 2. Qh6+.





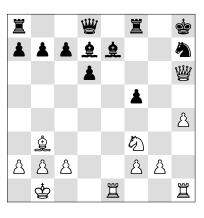
On the left Black has a good defensive bishop on f8. Yet he is helpless. White can become active on the long diagonal with his queen and bishop. That is deadly. 1. Bal Rc5 is not directly decisive but eliminating the queen wins. 1. Re8 Qxe8 2. Qf6 and then mate. On the right there is a combination to remember: 1. Rh8+ Kxh8 2. Qxh6+.





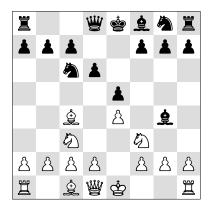
A bishop is always a rapid attacking piece. A rook has to get in front of pawns or have a file without pawns (an open file).

On the left White wins: 1. Rh8+ (not 1. Qh3 f5 2. Rh8+ Kf7) 1. ... Bxh8 2. Qh3 Be5 3. Qh7#. On the right there is no open file. One can be opened by 1. Ng5 Bxg5 2. hxg5.

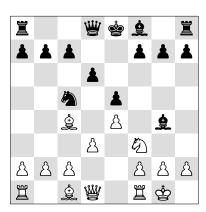


## The opening: Legal's mate

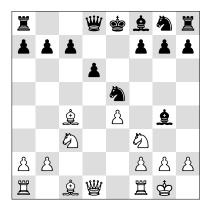
Openings and opening variations owe their names to countries (French Defence), cities (Berlin Defence), chess players (Alekhine Defence) or simply have a name which in some way suits them (Four Knights Game). Some mating patterns also have a name. Let's take a look at **Legal's mate**.



This position arises after the moves 1. e4 e5 2. Nf3 d6 3. Bc4 Nc6 4. Nc3 Bg4. This is the game Legal - St. Brie, played in 1750 in the Café de la Régence in Paris. The game is still famous for the move 1. Nxe5??!: Black actually wins a piece with 1. ... Nxe5, but St. Brie fell into the trap: 1. ... Bxd1? 2. Bxf7+ Ke7 3. Nd5#.

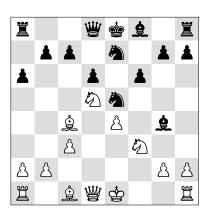


Pinning the knight on f3 with a bishop on g4 is sometimes premature. Here too (without a knight on c3) White can win a pawn with 1. Nxe5. Black has to content himself with 1. ... dxe5 2. Qxg4. Once more he may not take the white queen: 1. ... Bxd1 2. Bxf7+ Ke7 3. Bg5#.



The idea of sacrificing one's queen is of course very attractive and amusing enough to have appeared in the operetta 'The sea cadet' as a version of Legal's mate. This time a correct one:

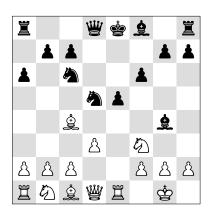
1. Nxe5 Bxd1 (after 1. ... dxe5 2. Qxg4 Black is left a piece down) 2. Bxf7+ Ke7 3. Nd5#. Therefore we have the name: The sea cadet's mate.



In this diagram the pinning of the knight by the bishop is equally unsuccessful. A pin on a piece which moves along a line such as the queen allows a discovered attack. Once again White can exploit the battery Qd1/Nf3. White wins with 1. Nxe5 Bxd1 2. Nxf6+ gxf6 3. Bf7#.



Let us return again to Legal's game from the first diagram. We continue the game with h3 and Bh5. Maintaining the tension would be wrong for Black this time. Let's take a look at this position. White can win a pawn with 1. Nxe5: 1.... Nxe5 (1.... Bxd1 2. Bxf7+ is Legal's mate) 2. Qxh5 Nxc4 3. Qb5+.



The pins on this page which are so harmless that the opponent can get out of them are also called pseudo pins. The final example illustrates another such pseudo pin: 1.

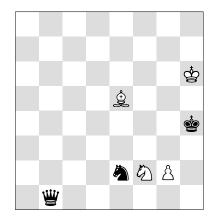
Nxe5 Bxd1 (1.... Nxe5 2.

Qxg4 is better) 2. Nxc6+

Be7 3. Nxd8, and White wins a lot of material.

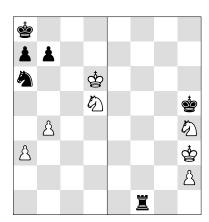
# **Blocking and interfering**

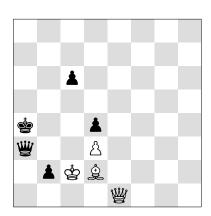
Eliminating a defender is a practical weapon. There is more to be said about blocking and interfering than what has been dealt with in the fourth step.



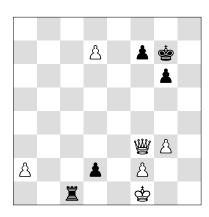
On the left after 1. Bf6+ the black king escapes to g3. White deprives the black king of this square by blocking it: 1. g3+ Nxg3 2. Bf6#. Black has no choice.

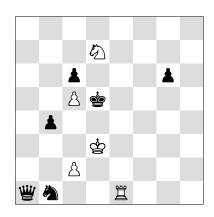
On the right Black has no choice after **1. b5**. White has to chase away the knight to block the king's flight: **1. ... Nb8 2. Nc7**#. In the other position Black wins with **1. ... Rf4 2. Ng2 Rf3**#.





When blocking we can also use luring. On the left Black plays 1. ... Qa2! (the threat is 2. ... b1Q+). White must play 2. Qb1, followed however by 2. ... Qb3#. On the right White uses blocking to gain time: 1. Qd1 Rxd1 2. Ke2, and Black has to contest a lost pawn ending: 2. ... Ra1 3. d8Q d1Q+ 4. Qxd1 Rxd1 5. Kxd1.

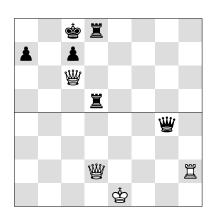


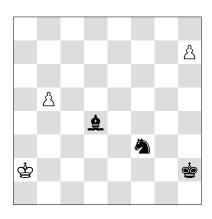


On the left White can win by interfering. The black queen is defending e5. After 1. c4+ bxc3
2. Re5# the pawn on c3 interferes the queen's diagonal.

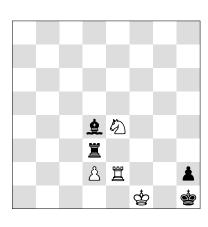
On the right White chases a piece to win material. At the top the king has to abandon its protection of the Rd5 after 1. Qa8+ Kd7.

Below 1. ... Qg1+ Ke2 2. Qxh2+.



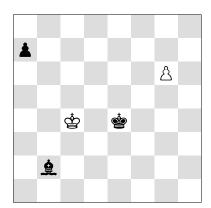


On the left White uses luring to entice Black to interfere the line himself. After **1. b6** the knight must be activated. Unfortunately that can only be via e5, when 2. h8Q follows. On the right White would like to mate with 1. Nf2# or 1. Ng3#. After **1. Re3** White always eliminates one of the defenders: **1. ... Bxe3 2. Ng3#**; **1. ... Rxe3 2. Nf2**#.



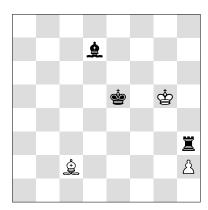
#### **Draws**

The draw is an old acquaintance. Better half a point than none at all. It is useful to remind ourselves of all the ways in which it is possible to draw a game.



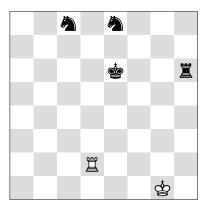
#### Mate is no longer possible

A game is drawn if neither side is able to mate. If you are worse off, you have to try to take or to swap off all your opponent's pawns. In this position White just manages to get rid of the final black pawn in time. The game is drawn after 1. Kb5 Kf5 2. Ka6 Bd4 3. g7 Bxg7 4. Kxa7.



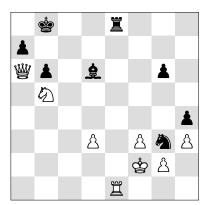
#### Too little material

Though you are material ahead, sometimes you do not have enough of a lead to win. The endgames of rook versus bishop and rook versus knight (without pawns!) are usually drawn. White can draw by stalemate: 1. Bf5. After 1. ... Bxf5 it is stalemate and after 1. ... Rxh2 2. Bxd7 White can draw with good play.



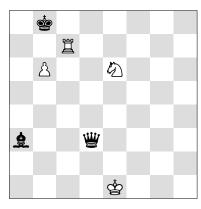
# Forced mate is no longer possible

Sometimes a lead in material is not enough. Mate may be theoretically possible, but only if the opponent makes a silly mistake. You know that two knights alone cannot win. So White must exchange rooks: 1. Rh2 Rg6+ 2. Rg2 Rf6 3. Rf2 with 'perpetual pursuit'.



#### Perpetual check

Perpetual check sometimes crops up during an attack on the king. You have sacrificed too much and do not have enough material left to win. Perpetual check is then a solution with which to secure half a point. Black saves himself with 1. ... Nh1+ 2. Kf1 Ng3+. White cannot escape the perpetual check; 2. Rxh1 Bg3+ 2. Kf1 Re1#.



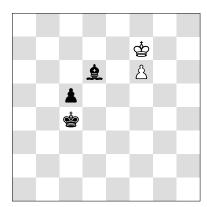
#### **Stalemate**

The only escape square left to the white king is f2. White still has three pieces which can move. White forces stalemate in a clever way:

1. Rb7+ Kxb7 (or else White gives perpetual check: 1. ... Ka8 2. Ra7+ Kb8 3. Rb7+)

2. Nc5+ Bxc5 stalemate. If Black plays 2. ... Kxb6, then

3. Nxd3 is sufficient.



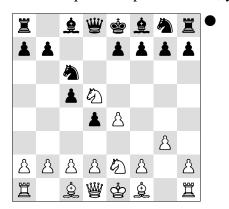
#### Perpetual attack

A perpetual attack is rarer. White can of course win a piece with 1. Ke8 Kd5 2. f7 c4 3. f8Q Bxf8 4. Kxf8, but the black c-pawn will decide the day. It is amusing to pursue the bishop as White now does: 1. Ke6 Bf8 2. Kf7 Bh6 3. Kg6 Bf4 4. Kf5 Bd6 5. Ke6 with a draw. If the bishop moves to another square White wins.

# **Trapping**

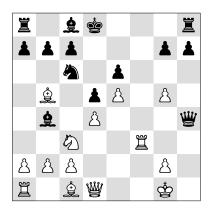
You know five different forms of a preparatory move:

• luring • eliminating the defence • targeting • chasing away • clearing From the practical point of view, you can also use them when trapping a piece.



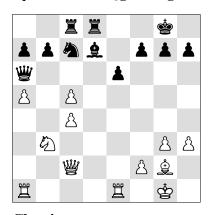
#### Eliminating the defence

We first deprive the Nd5 of the f4-square: 1.... g5, and then attack it with 2.... e6.



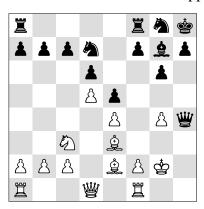
#### Chasing

A piece which cannot be trapped with a single move can be chased on to a fatal square: 1. Rf4 Qg3 2. Rg4.



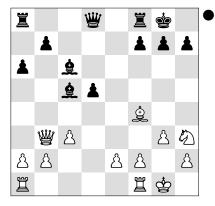
#### Clearing

The c5-pawn is getting in the way. So White clears c5 for his knight. The black queen is trapped: 1. c6 Bxc6 2. Nc5.



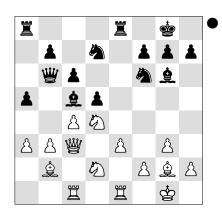
#### Eliminating the defence

After 1. g5 the queen can no longer retreat. Black is helpless against **2. Rh1**.

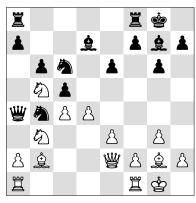


#### **Targeting**

With 1. ... Qd7 Black targets the Nh3. At the same time he threatens to trap the queen with 2. ... Ba4.

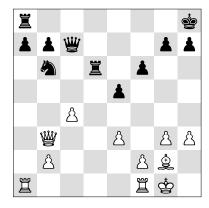


The twofold attack can also help trap a piece: 1. ... Bb4
2. axb4 axb4. The first attacker is sacrificed, the second one completes the attack.



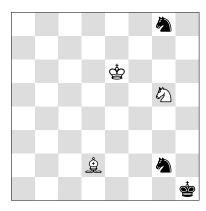
#### **Eliminating the defence**

After 1. Nc3 Qa6 the queen blocks the escape square of the Nb4. White wins: 2. a3.



#### Luring

White lures the black king into the trap with 1. c5. After 1. ... Qxc5 2. Rfc1 the queen has run out of squares.



In the endgame the zugzwang motif is a very strong weapon. White wins both knights: 1. Nf3 Nh6 2. Bxh6 Nh4 3. Nxh4.

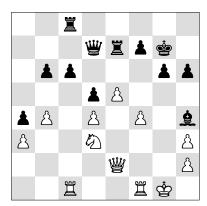
## Mini-plans

Finding the correct move is difficult, even for strong players. Not every move has to be the best one. Whenever you make a move it must either improve your own position or, if that is not possible, keep it the same. In any case the move must not make your position worse. All moves (mini-plans) should: increase your own activity, decrease the opponent's activity, limit your own vulnerability and increase the vulnerability of your opponent. Simple, isn't it?



#### **Develop**

Get all your pieces into play and your king to safety as soon as possible. White can protect c2 with 1. Bd3, but that is followed by 1. ... Nxd3; 1. Bd1 (gets in the way) or 1. Qe4 (shame about the time). The best is **1. 0-0** (1. ... Nxc2? 2. Qa4+).



#### Improve the pawn structure

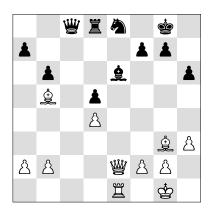
Doubled pawns are not always bad, but they are here. The h pawns are weak and with the disappearance of the g-pawn White no longer controls the f5-square. A good plan for White is to undouble the pawns. He does that with 1. Qg4 Qxg4 2. hxg4, and White once more has a joined-up pawn structure.



#### Position pieces actively

White played 1. Ne2. The knight has no real future on e2.

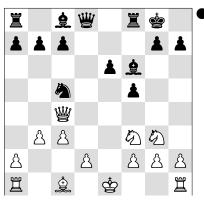
A much better move is **1. Na4**. The knight may be on the edge, but it is active. White goes on to play Ba3 and eventually **Na4-b2-c4**.



#### Provoke a weakness

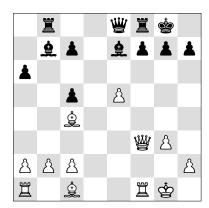
White is better. Above all, his bishops are strong. The black bishop on e6 is not doing much. But what comes next, since the black position is quite stable? Provoking a weakness is a clever method.

1. Bh4 must be followed by
1. ... g5 2. Bg3. The weakness gives White points to target (Qh5 and h4).



#### **Exploit vulnerability**

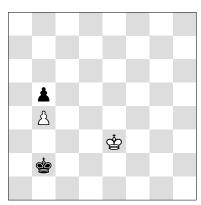
White is attacking the knight. He would also like to play d4. The queen c4 is not only active but also vulnerable. After the correct move 1.... b6 (threatening 2. ... Ba6) it turns out that this vulnerability is causing White major problems.



#### **Exchange active pieces**

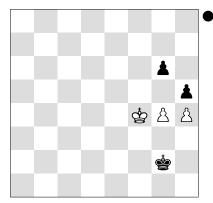
The white queen is under attack. Moving away to f2 looks logical. On the other hand, the bishop on b7 remains very active. Black can even give up f7 after 1. Qf2 Qc6 2. Bxf7+ Kh8. So White has to decide to exchange his good bishop on c4. After all, the black bishop is stronger. The correct move is **1. Bd5**.

# Defending in pawn endings



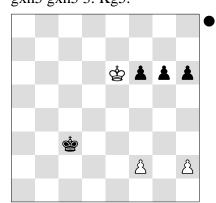
#### **Defending key squares**

1. Kd4 Kb3 2. Kc5 looks attractive, but after 2. ... Ka4 White can resign. The correct way is 1. Kd2 Kb3 2. Kc1 Kxb4 3. Kb2 with a draw.



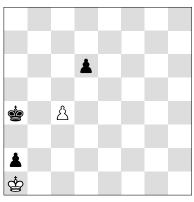
#### Hanging on

It is a draw after 1. ... hxg4 2. Kxg4 Kh2 3. Kg5 Kg3. But 1. ... Kh3? is wrong: 2. gxh5 gxh5 3. Kg5.



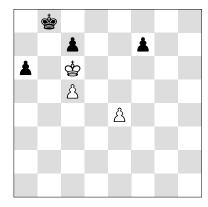
#### **Gaining time**

White can take the black pawns in three moves. After 1.... f5! He needs more time and Black can draw.



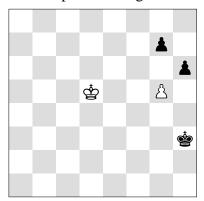
#### Displacing key squares

After 1. Kxa2 Kb4 2. Kb2 Kxc4 Black wins. So White must bring the key squares closer to his king: 1. c5 dxc5 2. Kxa2 Kb4 3. Kb2 and a draw.



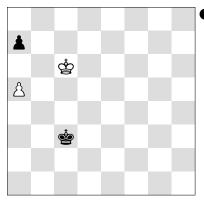
#### **Stalemate**

White saves himself by 1. e5 Kc8 2. e6 fxe6 stalemate. Stalemate happens quite often in pawn endings.



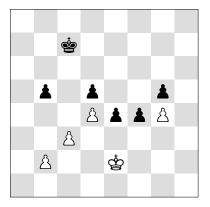
#### **Choosing to counter-attack**

White must keep his pawn with **1. g6**. The attack on g7 is sufficient for a draw; g- and h-pawns queen simultaneously.



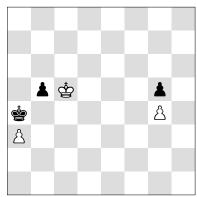
#### **Correct route to the corner**

With a rook pawn, the defending king must get into the corner or shut the opposing king in it: 1. ... Kd4
2. Kb7 Kd5 3. Kxa7 Kc6
4. a6 Kc7.



#### Preventing a passage

White plays **1. b4**. The black king cannot get into the game. There is usually little you can do without the king.

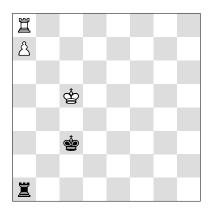


#### Do not be kept at a distance

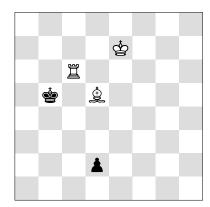
After 1. Kb6 b4! 2. axb4 Kxb4 the white king is kept at a distance. **1. Kc6**, is correct and Black must play **1. ... Ka5**.

# Setting up a battery

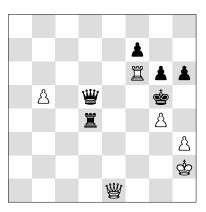
Discovered attack is a powerful weapon, especially also because from time to time our opponent overlooks the battery. In this reminder let's look at positions in which there is as yet no battery. There are three ways for us to set up a battery: positioning a back piece, a front piece or a target piece.



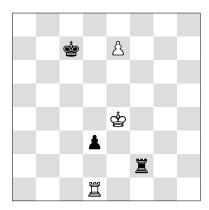
Rc8 positions the back piece in White's battery: 1.
 Rxa7 2. Kb6+. Instead
 Kb6 Rb1+ gets nowhere.



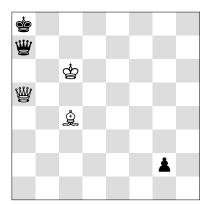
1. Bf3 d1Q 2. Bxd1 Kxc6 is insufficient. So White positions the back piece: **1. Rd6 d1Q 2. Bc6**+.



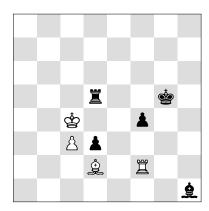
Two unsafe kings. White gets there first with **1. Qe7**. The threat of **2. Rf5**# is deadly (**1. . . . Rd2**+ **2. Rf2**).



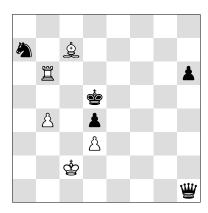
Unfortunately 1. e8Q fails to 1. ... Re2+. There is also the threat 1. ... Kd7. White sets up a battery on the d-file with 1. Kxd3 Kd7 2. Ke3+.



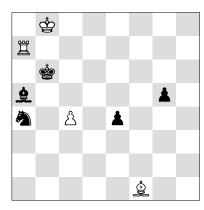
White wins by placing the front piece: **1. Ba6!** Black is suddenly powerless against **2. Bb7+** and **3. Qd8#**.



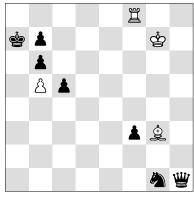
The immediate 1. Rxf4 Kg6 achieves nothing. First 1. Rf1 Be4 2. Rxf4, and on the next move White can use his front piece and win.



White sets up a battery with **1. Rd6+** and chases the king into it. After **1.... Ke5** the move **2. Rxh6+** wins.



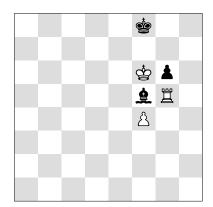
After 1. Ra6+ Black has to choose: 1. ... Kc5 2. Rxa5+ or go in the line of fire of the battery: 1. ... Kxa6 2. c5#.



White sets up a battery with **1. Rf4!**. Black has no choice (mate is threatened on a4): **1. ... Kb8 2. Rh4**+.

# **Endgame technique**

"The rest is a matter of technique" is what you read in the chess column of a newspaper. Technique means actually scoring the win in a winning position. As is so often true, you can improve your technique by following the correct rules. We shall list a few of these rules.

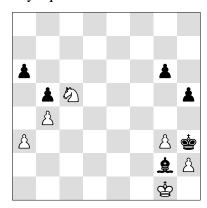


#### **Knowledge required**

To have good technique you need knowledge. You need to know all about key squares. White can only win by taking the bishop or the pawn. Which exchange is correct?

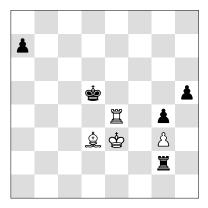
1. Rxg6! (1. Rxf5 gxf5 2. Kxf5 Kf7 would be silly)

1. ... Bxg6 2. Kxg6, and the white king is occupying a key square.



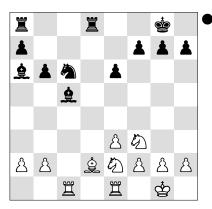
#### Think first, then move!

The a6-pawn will soon be snapped up, but after 1. Nxa6 Bc6 White simply cannot make any progress. Black can exchange a lot of pawns with h4 and g5-g4-g3. A search strategy is necessary in the endgame too. The black king is tied down and does not have a lot of squares he can go to: 1. Nd3! Kg4 (1. ... Bb7 2. Nf2#) 2. Kxg2.



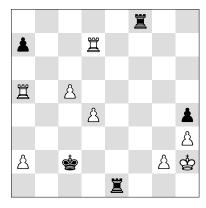
#### What do you exchange?

In an ending the side with more material must make sure that not too many pawns are exchanged. But exchanging pieces is generally in his interest. White cannot protect his last pawn. Luckily, a little trick helps him exchange the rooks: 1. Rxg4 hxg4 2. Be4+ Kc5 3. Bxg2. The position is now easy to win.



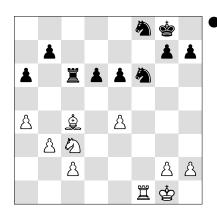
#### Make the correct exchange

Black has a good position. His bishops are strong and the white pieces are inactive. Black can make progress by exchanging his knight for the white bishop. The two bishops (the bishop pair) then become even stronger. 1.... Nb4 2. Bxb4 Bxb4, is good, but there is even better: 1.... Ne5 2. Nxe5 (or else Nd3) 2.... Rxd2 with an advantage.



#### Safety first!

White has so much more material that the win should not be a problem. One golden rule is: safety first! 1. Raxa7 or 1. c6 would be really stupid. Black wins with 1. ... Rff1 2. g4 Re2#. The correct way is 1. Rh7 Rff1 (1. ... Rf4 2. c6) 2. Rxh4. Always keep an eye out for possible threats by your opponent!



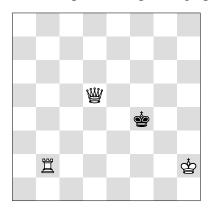
#### Use your king!

This position is from a game between young players. Black played the careless 1.... Ng4 and after 2. Nd5 had to give up the exchange (2.... Nf6 3. Ne7+). The black king must get to e7 (1.... Kf7 is the move) so as to protect the weak pawns. After that all the black pieces can move around the board to their hearts' content.

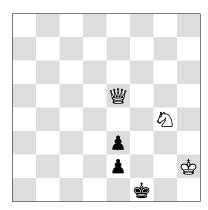
# Chess problems

Chess problems are somewhat different from a game of chess. A problem is an exercise with a clear task set for you, e.g. "White to play and mate in two". Usually White can win in various ways, but there is only one way to win in two moves. Many chess players do not like problems. However, chess problems have something in their favour: they are fun, they encourage logical thinking and creativity. In addition you learn:

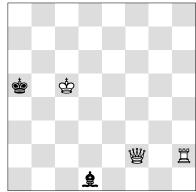
- that all the pieces have to play their part
- to take account of every possible defence
- to have pieces cooperating optimally
- to make use of the whole board
- to make use of zugzwang
- to recognise unknown mating patterns



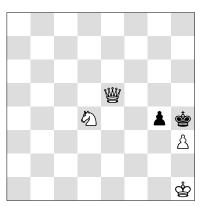
Every move wins, but how does White win in 2 moves? Imagine a mating pattern after 1. ... Ke3 (that won't work) and a mating pattern after 1. ... Kg4. The latter would work with a rook check on the fourth rank. So the logical move is to prevent Ke3: 1. Rb3 Kg4 2. Rc4#.



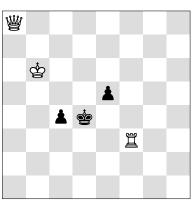
Black has a choice: either 1. ... Ke1 or promotion. After the king move there is only 2. Qc1#. Obviously there is 1. Qb2, which also wins after other moves: 1. ... e1Q 2. Qg2#; 1. ... e1N 2. Nxe3# and 1. ... Ke1 2. Qc1#.



Let's take a look at Black's moves. After 1. ... Ka6
White must mate with Qb6 or Qa8. We try 1. Qb2, but unfortunately Black has 1. ...
Bb3. Or 1. Qg2, but now 1. ... Be2 spoils things for us. How else can the queen get to a8? Correct, via f3. So 1.
Qf3 Bxf3 2. Ra2#; after 1. ... Ka4 there is also 2. Ra2#.



The knight on d4 is not doing much. It can cover escape squares, support the queen or give check. After some cogitating 1. Ne6 turns out to be the best move: 1. ... Kxh3
2. Qh2#; 1. ... g3 2. Qh8# or 1. ... gxh3 2. Qg5#.

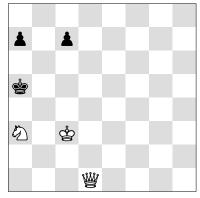


The black king has no moves, so White must threaten mate in one and at the same time watch out for possible moves by the black pawns. That does not work. White must be creative and give the king an escape square with 1.

Kc6, after which it is mate:

1. ... Ke4 2. Kc5#; 1. ... e4

2. Qh8# or 1. ... c3 2. Qa4#.



There are not many mating patterns, only on b5 and on a7. Now 1. Qb1 a6 gets nowhere. But 1. Qd7 is good, with the following options: 1.... a6 2. Nc4#; 1.... c6 2. Qxa7#; 1.... Kb6 2. Qb5# or 1.... c5 2. Qb5#.