

Learning chess

**Manual for
chess trainers**

Step 4

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The fourth Step

It is advisable to follow the lessons in Step 4 only if the previous Steps have been successfully completed. This means not only that the students have passed the relevant exams, but also that they have managed to apply the relevant knowledge to their own games. If the students lack the skills required for Step 4, presenting them with new information is likely to be counterproductive.

As regards the trainer, we assume that he or she is familiar with the didactic approach as outlined in the previous manuals.

Subject material

The level of difficulty of the material in Step 4 is significantly higher than that in the third Step. This is mainly due to the increase in the amount of moves required to solve the assignments. For most exercises the solution is 2½ moves deep (i.e. 5 ply).

As they do, tactics will continue to play an important role in the students' games. In this Step we focus on the last two forms of eliminating the defender, i.e. interfering and blocking. Students will like the second form in particular.

In Step 4, double attacks will be seen to require a preparatory move, since otherwise a double attack is ineffective. We will consider all types of preparatory moves: luring, eliminating the defender, chasing, targeting and clearing.

We will introduce the concept of the preparatory move in the lesson that deals with the placement of the front and the back piece. Other aspects of the pin will not be discussed until Step 5.

Other tactical topics that will be covered include the 7th rank and the magnet.

In addition, we will start to focus on some positional aspects, since at Step 4 level these begin to play a (modest) role in the students' games. Endgames are especially suitable for introducing positional aspects, given that positional play is less concrete than tactical play. The lesson on material advantage and endgame strategy focuses on a number of strategic issues. The lesson on weak pawns will make the students a bit more aware of how to play with pawns. The same goes for the lesson on the opening. In general, it is a good idea to discuss positional factors in relation to the students' own games (see also the concept of 'mini plan' as introduced in Step 3).

Attacks on the king involve a mixture of tactics and strategy. In this Step we focus first and foremost on how to finish off such attacks.

In chess it is important to plan one's actions. Planning plays an important role in the 'Queen versus pawn' lesson. This lesson further underscores the importance of piece cooperation and the relative nature of the value of pieces.

It goes without saying that the specific choice of the topics addressed is a matter of personal taste, based on one's knowledge of and one's experience with the way in which children develop their chess skills.

Chess games

This subject has been dealt with extensively in previous Steps, especially in the manual of Step 3 (under 'Training games'). Unfortunately, much of the training that children receive at clubs is limited to instruction and exercises.

It is essential that the children play positions against each other. This serves a number of purposes:

- 1) Practising practical skills in specific positions.
- 2) Getting acquainted with a particular theme of the opening, middlegame or endgame.
- 3) Creating more varied training sessions (by introducing a competitive element).

It is important that the positions offer a clear illustration of the topic under discussion, so as to guarantee that the children develop specific skills (see 1 above). In this respect the playing strength of the trainer is clearly relevant. When the children are getting acquainted with a new theme (see 2 above) the trainer can check the knowledge that is already present, and so provide new information that suits the specific needs of the children. As regards under 3, it is important that the training sessions involve a good balance of theory and practice. Periods during which the children should be quiet and pay attention should be complemented with periods during which the children can play chess. This setup will allow the children to absorb the theory once more during practical play.

The way in which a position is played to a finish is also important. The position should not be so one-sided as to bore the children and make them lose their motivation. To prevent this, the children should play each position twice, once with Black and once with White. When playing, it is a good idea to ask the students to note down their moves. In this way the games can be discussed on the demonstration board afterwards. With this format none of the children will feel left out. Note,

AIM OF THE LESSON

- learning a new attacking technique
- the importance of a gain of tempo

PRIOR KNOWLEDGE

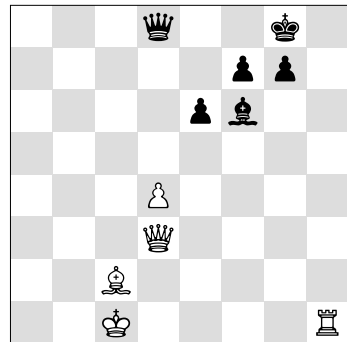
- mating patterns

ACQUISITION**Instruction**

Up to this point we have covered a number of different types of combinations that are aimed at a direct attack on the king. These comprise the different forms of eliminating the defender and the mate in two exercises.

In this lesson we will discuss the final form of a combination aimed at the enemy king.

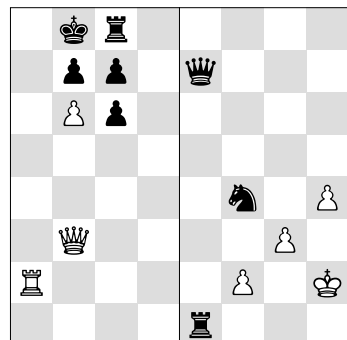
Sometimes, even though you have sufficient material, the enemy king can still escape a mating attack.

*The magnet*

In the diagram (⇒) Black meets the obvious 1. Qh7+ by 1. ... Kf8, after which the king can escape via e7. White must try to keep the enemy king on the kingside. This can be achieved with **1. Rh8+**, which forces the king to h8. After **1. ... Kxh8 2. Qh7** Black is mated. This type of combination is called a **magnet**, a term that speaks for itself.

In the left part of the diagram (⇓), 1. Qa4 is met by 1. ... cxb6. Instead **1. Ra8+** is called for: **1. ... Kxa8 2. Qa4+ Kb8 3. Qa7#**.

On the right, the students have to imagine that White has a forced mate somewhere on the board. This can best be done by putting the



position on a demonstration board. What Black must do is work with a gain of tempo, which is the essence of the magnet. Black can do this by **1. ... Rh1+ 2. Kxh1 Qe1+ 3. Kh2 Qxf2+ 4. Kh1 Qg2#**.

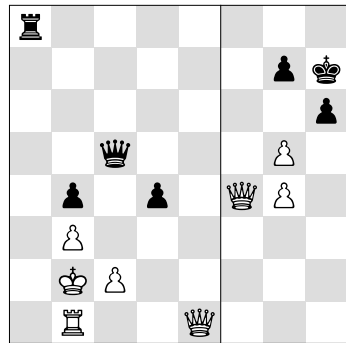
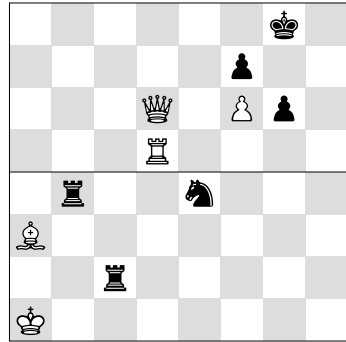
This gain of tempo is of the utmost importance. The piece that has to deliver the mate must be put in position with the help of a check.

We can stress the importance of the tempo by using the upper part of the diagram (↑). The standard attack **1. Qd8+ Kh7 2. Qf8** is too slow. Black has enough time to defend or even organise his own attack. After **1. Qf8+ Kxf8 2. Rd8#**, however, White wins.

In the lower part of the diagram Black is faced with a mating threat, and so he has no time for **1. ... Nc3**. Rather, the knight has to move with tempo (i.e. with check) to c3: **1. ... Ra2+ 2. Kxa2 Nc3+ 3. Ka1 Rb1#**.

In the left part of the diagram (⇒) Black can home in with **1. ... Ra2+** (but not **1. ... Qa5**, when the king escapes to c1) **2. Kxa2 Qa5+ 3. Kb2 Qa3#**. If White does not take on a2 he will be mated on c2.

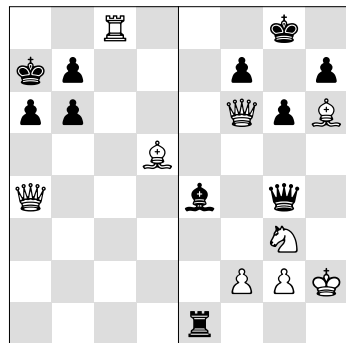
On the right, we see an example of how the king can be lured in front of his protective cover of pawns. After **1. g6+ Kxg6** (or **1. ... Kg8 2. Qf7+**) **2. Qf5#** Black is mated.



Combining motives

The magnet combination is often used alongside other combinatory motifs. In the left part of the diagram (↓) the magnet goes hand in hand with a pin. White forces the king to a8 with the help of a rook sacrifice, thereby pinning the b-pawn: **1. Ra8+ Kxa8 2. Qxa6+ Kb8 3. Qxb7#**.

On the right, we see an example of the same type of combination, but with a twist. The knight is not a good defender of h1, since it is pinned. Black wins with **1. ... Rh1+ 2. Kxh1** (2. Nxh1 Qxg2#) **2. ... Qh3+ 3. Kg1 Qxg2#**.



The diagram (♠) contains two rather more difficult examples. On the left, Black is threatening 1. ... Ra1+ 2. Kb4 Ra4. White has no time to get a new queen, but he does have a solution to his predicament: **1. Bb6+ Kxb6** (after 1. ... Ka8 White queens) **2. c8N+! Ka5 3. b4#**.

On the right, we can see an example of a characteristic attacking position. After the direct 1. Qh4 Black defends with 1. ... Re8, when 2. Qh7+ Kf8 does not give White anything. Another problem for White is the bishop on g7, which prevents 3. Qxf7#. With **1. Rh8+** White kills two birds with one stone. **1. ... Kxh8** obviously runs into **2. Qh4+** and **3. Qh7#** while **1. ... Bxh8** is met by **2. Qh4 Re8 3. Qh7+ Kf8 4. Qxf7#** or **4. Qxh8#**.

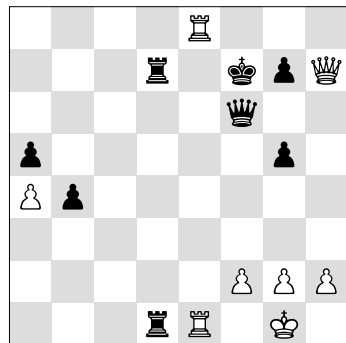
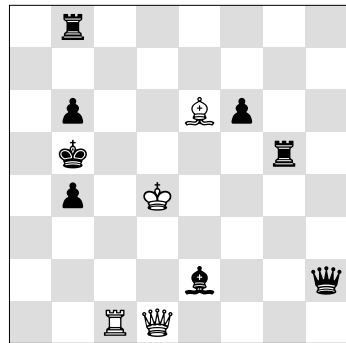
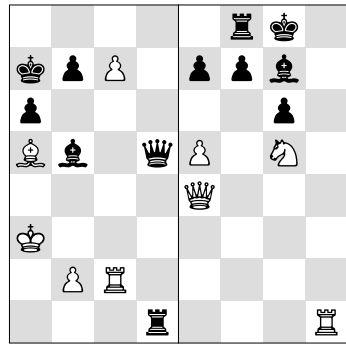
At Step 4 level, students will appreciate the beauty of the magnet in the diagram (♢), in particular if they have searched in vain for a solution. White's only road to victory is **1. Qa4+ Kxa4 2. Ra1+** (this move had to be with a gain of tempo) **2. ... Kb5 3. Bd7#**.

Search strategy

The magnet combination itself is not that difficult. All it takes is a basic knowledge of mating patterns. Having found a suitable mating pattern, the students should go on to find a sacrifice; this makes it possible for an attacking piece to give check with a gain of tempo.

In the diagram (♣) White's problem is that the e1-rook cannot take part in the action. Otherwise, 1. Qg8+ or 1. Qh5+ would win easily. The only mating pattern that White can aim for involves the queen on e8. This can be achieved with the help of a magnet: **1. Rf8+ Kxf8 2. Qh8+ Kf7 3. Qe8+**.

As can be seen, the e1-rook takes part in the action after all. The solution is easy, but most students will nevertheless find this position difficult.



PRACTICE

Workbook

Mate / Magnet: A



Explanation: The magnet sacrifice gives the attacker time to bring out his most important attacking pieces with tempo. With the help of a sacrifice, the enemy king is drawn into a mating net (mate in two, three or four moves).

Mistake: The king can escape.

Help: This means that there was probably no magnet sacrifice. Looking at the position once more is usually sufficient.

Mate / Magnet: B



Explanation: See exercise sheet A.

Mistake: The suggested solution to position 1 is 1. Rc1+ Kd6 2. Qd8#.

Help: Look at the queen on b5 and the king on f1. White is in check! Try again.

ANSWERS

Mate / Magnet: A

- | | |
|--------------------------------------|--------------------------------------|
| 1) 1. Re8+ Kxe8 2. Qe7# | 3. Rf8+ Kd7 4. R2f7# |
| 2) 1. Rh8+ Kxh8 2. Qh7# | 9) 1. Rh8+ Kxh8 2. Qe8+ Kh7 3. Qg8# |
| 3) 1. Qh6+ Kxh6 2. Rh1#; | 10) 1. Rh8+ Qxh8 (1. ... Kxh8 2. |
| 4) 1. ... Ra3+ 2. Kxa3 Qa6+ and mate | Qh7#) 2. Qf7# |
| 5) Drawing | 11) 1. ... Rh2+ 2. Kxh2 Qf4+ 3. Kh1 |
| 6) Drawing | Qf3+ 4. Kh2 Qg2# |
| 7) 1. a4+ Kxa4 2. Qb3+ | 12) 1. Qf6+ Kxf6 2. Be5#; 1. ... Kg8 |
| 8) 1. Qf8+ Kxf8 2. Rxf7+ Ke8 | 2. Be5 and mate |

Mate / Magnet: B

- | | |
|---|--------------------------------------|
| 1) 1. Rc4+ Kxc4 2. Qc3# | 7) 1. Rb8+ Kxb8 2. Rh8# |
| 2) 1. Rxh7+ Kxh7 2. Qf7+ Kh6 | 8) 1. ... Rh1+ 2. Kxh1 Qh3+ 3. Kg1 |
| 3. Qxg6#; 2. ... Kh8 3. Nxc6# | Nf3# |
| 3) 1. ... Qh1+ 2. Kxh1 Bf3+ 3. Kg1 Rd1# | 9) 1. ... Rg1+ 2. Kxg1 Qxh2+ 3. Kf1 |
| 4) 1. Qf8+ Kxf8 2. Rd8# | Qh1# |
| 5) 1. ... Bd3+ 2. Kxd3 Qd1# | 10) 1. ... Ra3+ 2. Kxa3 Qa1+ 3. Kb3 |
| 6) 1. ... Qg1+ 2. Kxg1 Rbxg2+ 3. | a4# |
| Kh1 Rg1+ 4. Rxg1 Nf2#; 2. Rxg1 | 11) 1. ... Bxh3 2. Kxh3 Qf4 and mate |
| Nf2# | 12) 1. Rh7+ Kxh7 2. Qh2+ |

Additional workbooks

As well as the already existing workbooks, Extra workbooks (all Steps), Plus workbooks (Step 1 till 5), Thinking ahead workbooks (only Step 2 so far) and Mix workbooks (Step 1 till 5) have been published. Many students immediately take on the next step as soon as they have completed the current one. Generally speaking, playing strength increases at variable rates. Therefore, the first thing the students should do, is to play more games. The supplementary workbooks allow the students to get more practice at the same level, meaning that they spend more time with the concepts dealt with in a specific step. The important thing is that the degree of difficulty does not rise too quickly. This enables us to some extent to counter any harm that might be done to many students moving on too quickly to the next step and finding that the jump has been too great.

Step 4 extra

A workbook with just a single reminder and apart from that only exercises. The book contains mostly exercises on the same themes as those appeared in Step 4 or lower. First of all these are useful as additional practice. The better each theme is mastered, the more likely it is that it will pop up in a practical game.

Knowledge that has been automated is ready to use from the long term memory, which makes it easy for the working memory to save enough space to think. As we rush through the steps at a very high speed it avenges itself so that too few things go ‘automatically’. Working memory becomes overloaded and that often results in missing elementary things from earlier steps.

In the last part the exercises are all mixed up, and so there is no hint as to the theme of each one. These exercises resemble most closely an actual game. Due to lack of space, there are too few of this type of exercise in the basic workbook which goes with the Step.

Furthermore, repetition is of great significance. Revision is necessary. The reason why we repeat things is not to forget them, so don’t forget to repeat.

Subjects from a previous step which are not covered in Step 4 need to be addressed again.

Step 4 plus

In this book there is space for:

- new themes
 - trapping (preparatory moves: luring, eliminating the defence, chasing, targeting and clearing).
 - vulnerability in the opening
 - mini-plan (opening the position)
 - solving problems
- themes to which not enough attention was paid in the basic Step because of lack of space
- treatment in more depth of important themes
- themes taken from a previous Step, but at a higher level of difficulty

We deal with all the themes in 11 Plus lessons. Many of these can be short. The main point is that the students are able to solve the exercises in the correct way. We don't advice to skip the instruction.

Step 4 mix

This workbook contains exercises with one 'simple' assignment: play the best move. Just like in a real game, you do not know whether you can win or whether you have to defend. The right approach is important. What's going on? Which targets can you exploit? What is the opponent threatening? Is it time to draw? In short, all kinds of stuff.

Apart from 'normal' puzzles the mix book contains thinking ahead positions, the right move(s) must be added. In positions with a multiple choice question the correct circle should be marked. The last eight pages contain mate in two problems. As it was pointed out in lesson 11⁺, solving problems makes sense.

All the tasks could be solved reasonably well if the current step and the previous step(s) have been properly learnt (i.e. lessons, exercises, practice - playing games and discussing the games).

Unfortunately experience shows that, in spite of the results of those trainers who do work in this way, it is not common practice. Although the mix-exercises cannot replace the trainer, they can help to spot the errors that need to be worked on. The answers indicate the theme of the tasks. If it turns out that the same kind of mistakes are being made frequently, it would be wise to repeat this theme. General skills, such as taking into account the possibilities of the opponent will come to the fore

with a lot of players. Also, the solving approach (finding the best move) is to be improved upon: without a search strategy it will not work if the preceding steps have not been rendered sufficiently automatic. Solving exercises only is much less useful than many people think (you learn patterns but there is much more to be gained). The nub is, whether the solution is found in a 'correct' way and not by picking a random move and trying it out. The result is that effective learning remains at a low level when one thinks of the time spent on such exercises. The most important thing of all is that feedback is necessary (see the Manuals under the heading 'Workbook' under explanation, mistake and help).

The target is: learning to play chess better and the right approach has to be applied in a real game as well.

Playing

In the plus lessons we need to make room for playing too, preferably in the form of a simultaneous display. This advice has been given more than once in previous manuals. Unfortunately we see too often that playing is skipped, partly because the trainer cannot always find appropriate positions, or he hasn't the requisite playing strength or...(?).

When playing positions to a finish we can provide the students with tailor-made material. We can adjust the difficulty to the level of the pupil and give him or her feedback directly. "This was good, but you should avoid attacking when you do not have enough attacking pieces." We improve upon their weaknesses through play. The students find playing fun anyway. The nature of the positions is such that they can often beat the trainer in a simultaneous display. It is important that they realise that their playing strength is increasing all the time. This reinforces their motivation and that in turn is necessary to encourage them to tackle even more energetically their study of chess. This again results in longer term improvements in performance. It is all very simple

The steps



Books

The following books are available in the 'Steps Method' series:

Manuals for chess trainers:	Step 1, Step 2, Step 3, Step 4, Step 5
Manual for independent learners:	Step 6
Basic workbooks:	Stepping stones 1, Stepping stones 2, Step 1, Step 2, Step 3, Step 4, Step 5, Step 6
Extra workbooks:	Step 1 extra, Step 2 extra, Step 3 extra, Step 4 extra, Step 5 extra, Step 6 extra
Plus workbooks:	Step 1 plus, Step 2 plus, Step 3 plus, Step 4 plus, Step 5 plus
Mix workbooks:	Step 1, Step 2, Step 3, Step 4, Step 5
Thinking ahead workbooks:	Step 2, <i>Step 3</i>

The title represented in *italic* is only available in Dutch.

Updated information can be found at our website:
www.stappenmethode.nl (EN, FR, DE, NL)

All books can be ordered from this website for worldwide delivery:
www.stappenmethode.nl/en/

Software

The Chess Tutor for Windows is a series of chess learning software based on the 'Steps Method'.

Chess Tutor Step 1, **Chess Tutor Step 2** and **Chess Tutor Step 3** are available as download or as CD.

You can first try the Chess Tutor using a free demo version.



More information at: <http://www.chesstutor.eu/en>