

Rob Brunia  
Cor van Wijgerden

# 3 steps



Learning chess  
Manual for  
chess trainers



# Learning chess

## Manual for chess trainers

### Step 3

**Copyright © Cor van Wijgerden 2004**

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any other form or by any means without permission in writing from the publisher.

ISBN 90-77275-39-8

**Information:** [www.stappenmethode.nl](http://www.stappenmethode.nl)

**E-mail:** [info@stappenmethode.nl](mailto:info@stappenmethode.nl)

**Publisher: Van Wijgerden**  
**English translation: Dr. Bert Botma**  
**Drawings: Rupert van der Linden**  
**Cover design: Eric van der Schilden**

# Contents

---

Preface .....	4
The third step .....	5
Thinking ahead .....	5
Knowledge and skills .....	8
Homework .....	9
Training games .....	10
Discussing students' games .....	12
Help .....	13
Competition formats .....	15
Certificate .....	17
How to use this manual: some pointers .....	18
1: Completing the opening .....	19
2: Discovered and double check .....	26
3: Attacking a pinned piece .....	32
4: Mate through access .....	37
5: The square of the pawn .....	43
6: Eliminating the defence .....	49
7: Defending against a double attack .....	55
8: Mini plan .....	61
9: Draw .....	68
10: X-ray .....	74
11: The opening .....	80
12: Defending against a pin .....	86
13: Mobility .....	93
14: Key squares (1) .....	99
15: Pinned pieces .....	104
16: Threats .....	110
17: Key squares (2) .....	117
List of concepts .....	125
Ordering .....	128

The Step-by-Step method has been officially acknowledged by the Dutch Chess Federation. It has been successfully adopted by the majority of chess clubs and schools in the Netherlands and Belgium.

The course consists of six manuals, aimed specifically at chess teachers and trainers, and six workbooks for students. The course introduces the game of chess in a no-nonsense, common-sense way to players from ages 6 up. It introduces many psychological aspects of the game and avoids the pitfalls that characterise many less-extensive courses. It allows anyone of average and above average ability to absorb – at one's own pace – the chess rules and skills that are necessary to become a strong club player. It also tries to remove most impediments that cause players to play below their strength.

Step 3 is not that difficult, provided the student have mastered Step 2 first. The tactics covered in Step 3 are relatively easy, and the lessons about defending against tactics should not cause any problems. The only topic that is somewhat tricky is trapping. Trapping can be compared to mating. The difference is that instead of the king, another piece is the victim. Step 3 also devotes attention to the basic skills required for pawn endgames. For some students this will be child's play, but for those who still have problems with spatial control, learning these skills will prove to be quite a struggle.

In this step we also begin teaching some supporting skills. One of these is 'thinking ahead'. Students are taught to calculate possible variations and visualize new situations which arise on the chess board. The command of this skill will be seen to differ enormously per student.

Not all books of the Step-by-Step course have already been translated into English. Updated information can be found on our website:

**[www.stappenmethode.nl](http://www.stappenmethode.nl)**

For more information, please contact [info@stappenmethode.nl](mailto:info@stappenmethode.nl)

Enjoy your chess lessons!

Rotterdam, July 2004

Cor van Wijgerden

# The third step

---

In Step 3 some new aspects of the chess training will be introduced. It is sensible to follow the lessons in Step 3 only when the two 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 3, 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 first two manuals.

## Thinking ahead

In this Step we begin teaching some important supporting skills. One of these is 'thinking ahead': the student calculates some possible variations and visualizes the positions that arise on the chess board. It is important that we take a sensible approach to teaching this skill.

Our aim is that the students will gradually learn the skill of visualizing and evaluating positions. This skill is of course relevant when doing the set exercises, but there are also other, more specific opportunities for practice. When discussing positions, whether they are from a lesson or from the students' own games, it is useful to ask the question: "What would you play if...?"

In this training method it is essential that students be approached on their own level. Only an individual approach is likely to be successful.

It is also important that we bear a number of factors in mind:

- Each further move increases the degree of difficulty enormously.
- Exercises must be done using board and pieces; this makes it possible to monitor the students' performance.
- The student's level of play (i.e. their knowledge and skills) determines their performance. Stronger players will acquire this skill more quickly.
- Situations that involve 'pieces' are more easily remembered than those involving 'squares'.
- Visualizing and evaluating positions ('What's going on here?') are two different skills, which may nevertheless affect each other.

This training method must also be applied in the form of specific exercises. It is up to the trainer to make sure that there is sufficient opportunity for this. Younger children can also learn to think ahead. It should be noted, though, that it will take younger children much longer to acquire this skill.

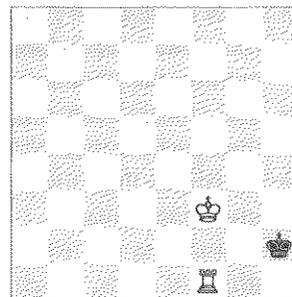
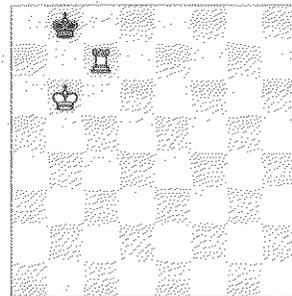
In a normal game, thinking ahead encompasses a number of skills:

- being able to calculate (not just the position but also the function of the pieces)
- being able to oversee the order of the moves
- being able to evaluate new positions
- being able to differentiate between good and bad moves
- being able to 'read' and control planned positions

It takes a while before students have learned to master these skills. A player must first and foremost learn to think ahead without losing the thread of the position. To practise this skill we use mating in two with rook plus king as an example. The reduced material brings with it a number of beneficial limitations. First, students need to take account of the function of three pieces only. In addition, the goal is specific and within reach, it being only two moves deep. What is of the utmost importance is to practise the basic reasoning that is involved in this exercise: "if this, then this".

White cannot give mate in one move. If the black king would be on a8, 1. Rc8# would be possible. How to get the king to a8? By making sure that it is Black's move. This cannot be achieved by 1. Kc6, since there is no mate after 1. ... Ka8 2. Rc8+. A rook move is therefore in order. Such a move is successful only if the rook keeps an eye on c8. We consider, but do not execute on the board, the moves **1. Rc6 Ka8 2. Rc8** mate (the rook moves backwards, then the king is forced to move to the corner, and then the rook can give mate on c8). What is important here is the reasoning; executing the actual moves serves to check whether the reasoning is correct.

In the diagram (b) we see a position in which the kings are not yet positioned opposite each other. The students must recognize this as being an important factor. In order to give mate, the kings must be opposite each other. The



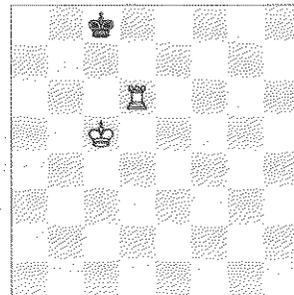
move 1. Kf2 does not take Black's move into account; this is a common phenomenon in this kind of exercise. Only when the student realizes that Black, if to move, must play 1. ... Kh3 does he discover that a random rook move on the bottom rank achieves this goal.

Reasoning: A rook move somewhere on the bottom rank, black king forced to move to h3, white rook to h1, mating.

The two previous positions involved only one determining factor, i.e. that of the position of the black king. Now we will consider some positions that involve a greater variety of factors.

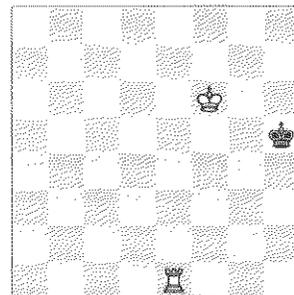
In this diagram mate seems to be far off. The black king can still escape from the bottom rank. White can prevent this with 1. Kb6 or 1. Kc6; in either case the black king must move to b8. Thus: 1. Kb6 Kb8 2. Rd8 mate.

Reasoning: The black king must stay on the bottom rank, hence Kb6; now Black must move his king to b8, which allows Rd8, mating.



In this diagram the black king can still go to g4, h4 and h6. If it is up to White, h6 would be the best square. Thus, the other flight squares must be taken away from the king; for this reason we play the rook move that renders g4 and h4 inaccessible to the king: 1. Re4.

Reasoning: The rook controls the squares g4 and h4; this means that the black king must go to h6, after which Rh4 mates.



Discussing this type of exercise on the demonstration board is important for a number of reasons:

- The students will learn to recognize the important factors.
- Verbalizing the reasoning behind the moves will help the students to acquire the relevant skill.
- The students will learn to understand the reasoning involved.

The exercise sheet *Mate / Mate in two (rook)* from the Step 2 workbook has already been used to find mates in two. Here it is again useful:

- to learn the students to verbalize the reasoning;
- to help build up the students' reasoning;
- to help stimulate the students to think ahead.

Clearly, the role of the trainer is important in these exercises.

## Knowledge and skills

Many young people are very ambitious when playing chess. As a result they are bad at judging their own knowledge and level of play. They want to make quick progress and, guided by their experience at school – ‘working hard pays off’ – they do this by making many exercises.

The aim to work hard sidesteps the fact that one's level of play is formed by integrating both knowledge and skills. As regards training, this means that in addition to sufficient instruction and exercises, there must also be sufficient room for the application of knowledge and skills. The students must be given sufficient opportunity to play chess, in the form of games or finishing game positions.

It is inadvisable to measure progress in terms of the number of completed exercises. (“I have already finished Step 3!”). It is the task of the trainer to establish a connection with the students' level of play in actual games. It is possible to relate the level of play to the quality of the exercises, as well as to the relative ease with which repetitions and tests are done.

Provisions have been made for students who go through the basic exercises, repetitions and tests quickly. There is extra material available which helps these students to further develop their skills. In addition, an extra Step 3 workbook and a ‘plus’ workbook have recently appeared. Thus, there are more opportunities for practice at one and the same level.

Students who work quickly run the risk of not remembering the subject matter. While a student may be able to grasp the subject matter during the acquisition phase, this does not take away the fact that time is needed to fully understand and integrate it. Only then will students be able to apply the subject matter to their own games. We must therefore be careful when it comes to the speed with which we introduce new topics. It is important to bear in mind that this speed varies from child to child, and that it is

overestimated much more often than underestimated. There is an inverse relation between speed and quality. This suggests that we should not wish to work too quickly.

In general, the student will indicate the appropriate speed while the trainer will monitor the skills and provide sufficient repetitions and tests. This will guarantee a proper balance in the student's chess development. The trainer must keep an eye on two 'limits':

- The subject matter is not challenging enough, so that the student will lose interest.
- The subject matter is too difficult, so that the student is discouraged and ultimately demotivated.

Students may also become demotivated if the rate with which new material is introduced goes down. If the level of a new student is underestimated, then the rate with which the initial lessons are presented is likely to be high. This student will protest if the rate subsequently goes down and he does not make any progress any longer. In this case the solution is straightforward:

- Put in place an adjusted starting level.
- Make sure that the rate is as constant as possible.
- Provide a proper balance between the level of knowledge and the level of skills.

## Homework

A question that keeps being asked is whether it is advisable to give students homework for the next training session. Given our remarks in the previous section (i.e. 'Knowledge and skills'), it will not come as a surprise that we consider homework useful only when it is given with moderation and care.

For some students the idea of homework will be unappealing. But even for students who like doing homework, problems often arise.

Some potential problem areas:

- Students are not planning their homework.
- Students have problems finding the right approach.
- Students are not doing their homework.
- Students are satisfied once they have 'done' their homework.
- Homework for the chess training must compete with other homework and with 'free time'.

It is up to the trainer to make sure that homework, when given, is properly integrated in the course. Homework is not properly integrated if:

- it requires students to work independently, whereas they are not used to working independently during training sessions.
- there is no relation in terms of content between the homework and the lesson on which it is based.

Appropriate and useful homework:

- makes sense to the student;
- involves a 'continued' exercise (is based on material discussed in class);
- refers to topics that were covered previously;
- helps students to acquire not only knowledge but also skills;
- involves material that the students have been informed of beforehand;
- involves exercises on paper (and no dictated positions, for instance);
- is adapted to the situation (age, level, length of time before next session).

## Training games

The aim of playing training games and game positions is to make sure that the students maintain a proper balance between knowledge and skills. What is more, playing games and game positions will give the trainer a good indication of whether the topics are introduced at too fast a pace.

When finishing a game position, it is advisable to ask the students to note down their moves. This will make it possible to discuss different variations afterwards. Another possible format is to discuss a position first, and then ask the students to play it to a finish. Notated games also give the trainer an opportunity to monitor whether and to what extent the students apply the covered topics in practice.

The trainer is free to introduce a competitive element to a training session. Children generally find such an element attractive.

Another useful tool is to take a position from one of the students' games as a starting position. It will then transpire that a 'won' position is in many cases not so easy to win after all. The big advantage of this format is that it teaches students to relate a topic to their own games (and game results). This format will also motivate students to finish positions that do not stem from their own games, but do contain important themes.

In group training sessions there are two ways in which game positions can

be played to a finish: either the students play against each other or they play against the trainer. Both formats have pros and cons. In individual training sessions a computer can sometimes be used. A computer is ideal when it comes to winning won positions. Computers are very good losers.

### **Student vs. student**

The students play against each other. Students always like to play a game; however, the question is whether this format is useful for any purpose other than a discussion afterwards. In chess it is not allowed to intervene in a game. This means that coaching during a game is prohibited. Since we are dealing here with training games, these rules do not have to be applied very strictly. For instance, the trainer could agree with the students that offering help during a training game is permitted.

The students' training games also offer other possibilities to bring together instruction and practice.

- Playing with a instruction card

The card contains different search strategies. This format is suitable for training games only.

- Theme competition

The students play a game against each other. Whenever a particular topic (e.g. a double attack) occurs in one of the games, the student will inform the trainer of this. All the trainer has to do is check whether the student is correct, noting this down for later use. All combinatory themes, separate or collective, are suitable for this playing format.

Playing a (theme)game/tournament from a particular starting position can be useful, provided the position offers chances for both sides. In this way, the attraction of playing goes hand in hand with the acquisition of skills.

It goes without saying that a game, once it is finished, must be discussed. At this point it will prove useful if all students have played from the same starting position. When discussing the position on the demonstration board, each of the students will feel as though it is their game that is getting all the attention.

### **Student vs. trainer (simultaneous format)**

The playing strength of the trainer plays an important role in this format. If the chess skills of the trainer do not exceed those of the students much, then this format requires dedicated preparation. Another possibility here would be to invite a stronger player to act as guest trainer, or to have the students play each other. The size of the group also plays an important role. For this format the number of students should not exceed 12; this number requires

considerable playing strength, experience and preparation on the part of the trainer.

This playing format gives the trainer an opportunity to monitor potential problem areas up close.

In the initial stages of the course most of the positions involve unbalanced, lost or bad positions, in many cases with a huge material imbalance. If so desired, it is possible to introduce a competitive element here.

Step 3 offers a wide range of topics that are suitable for the simultaneous playing format:

- opening (applying the golden rules, completing the opening)
- middlegame (converting a material advantage, mini plan)
- endgame (key squares, positions with a huge material imbalance)

Playing the weaker side (which in case of good play will always lose) is not very motivating for the students.

When finishing a game in simultaneous format, the trainer can demonstrate the right approach to the position by thinking aloud, using a question-and-answer dialogue. When playing his own moves the trainer can also make his reasoning clear by thinking aloud. This approach is extremely valuable, regardless of the level of the group. "Your queen is rather short of squares. Can I perhaps trap her majesty?"

The trainer can also steer a game towards one of the topics covered during the lesson. He can for instance allow a particular combination, leave a piece hanging or allow mate. There is no need to actually be mated. It is often sufficient to ask a question like "What would you do if I play this?"

Note, finally, that it is also possible to introduce a theme competition to the simultaneous playing format.

## Discussing students' games

This topic has already been discussed in Step 2. It is nevertheless useful to go through it once more at this point.

At Step 3 level it is important that the students reflect on their own play. The students should aim at being able to formulate both the causes and the consequences of problems.

The chief point of focus in Step 3 is still that of tactics. In this Step we will consider the issues of missed tactical opportunities and opportunities on the part of the opponent. We will also introduce some positional aspects, such as activity and vulnerability. In addition, we will devote increasingly more

attention to the idea that each move must be played with a particular goal in mind. These goals include:

- improving the position of one's pieces (e.g. activating a piece).
- creating attacking chances (placing or aiming pieces at the opponent's side of the board).
- improving one's pawn structure (e.g. undoubling a doubled pawn).
- a proper division of labour between pieces ("This piece is more suitable for protection, that piece is more suitable for attack").
- weakening the opponent's pawn structure (e.g. creating a doubled pawn).
- weakening the position of the opponent's pieces (e.g. by trapping a piece).
- neutralizing the opponent's attacking chances (e.g. by exchanging his strongest attacking piece).

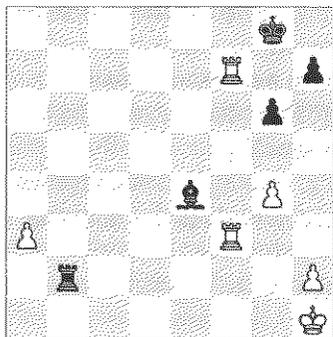
We will use the lessons of Step 3 and their practical application as our point of departure. When discussing a game in front of a group of students we must first and foremost focus on what is instructive. It is important never to let criticism prevail, no matter how poor the quality of the play. A good indication is the students' reaction to the fact that their games are discussed on the demonstration board. Discussing or showing games of top players is useful at this level, but only when these games are characterized by tactical shots. The students like the idea of their games receiving the same attention as those of (grand)masters. Note, however, that playing these games should not take up too much time, and that comments to these games should be brief and to the point. Note also that it is not a good idea to read out parts of books or articles, as this is usually extremely tedious for the audience.

Here, too, the possibilities are by and large determined by the trainer's own skills. All the same, the most important point is that the material discussed suits the level of the group. Unfortunately, this is often not the case in practice. Trainers all too frequently discuss material that is too difficult. This holds in particular for trainers who are themselves strong players!

## Help

The nature of the help given to students changes along with their improved chess skills. At Step 1 level the trainer's main task is to provide structure. At Step 2 level the trainer uses visual tools and introduces extra pieces to positions. The help offered at Step 3 level makes use of these techniques,

but is increasingly aimed at having the students formulate the problems and mistakes themselves. The trainer's task is to help formulate the problem and to keep an eye on the causes and the consequences of these problems.



An example of the exercise sheet *Pin / Attacking a pinned piece: B*.

In this position 1. ... Tb3 is a popular, but incorrect, answer. Help can be provided as follows:

1. Put the position on a board.
2. Ask the student to play the move.
3. Ask the student to give the reasoning behind the move.
4. (At this point a move will be played,

after which Black will win a rook on f3.)

5. Ask whether White has a defence.
6. In case of the correct answer, ask the student about the consequence (i.e. there is no win for Black)
7. After the mistake has been discovered, ask what the correct solution is.

The trainer's help is often required at point 4 only. Points 3, 6 and 7 can be of help when teaching students how to analyze a position independently. This skill is also developed by other activities; however, in those situations where the trainer's assistance is required, asking the student to verbalize the problem and the solution also helps to develop this skill.

Apart from this form of help, there is also occasion to make use of familiar forms of help, as outlined in earlier Steps. Some of these are listed below:

- Simplify the positions:
  - remove irrelevant pieces
  - place relevant pieces closer to each other
- Ask the student to consult the reminder, or directing the students to a specific part of the reminder.
- Refer the student to a similar exercise which has been solved correctly. Asking a student why this exercise was solved whereas the present one is not helps them to understand their mistakes. The student will begin to focus more on the unifying themes and less on the variable situations in which these themes occur. In order to apply the acquired skills in a flexible manner, in exercises as well as in games, students must have a conscious knowledge of how to approach a given position.
- Graphic support in the diagram or on the board. Drawing arrows to

indicate attacks and circling (unprotected) pieces or (important) squares provides students with a visual aid. Doing this helps to make the space on the board more tangible and emphasizes the role that pieces play.

- Indicate the search strategy to the student. This is particularly useful in mixed exercises. “Which pieces are unprotected?”, “Can you spot a battery?” For more discussion, see the various lessons.

Each lesson has a ‘**Help**’ section (which can be found in the **Workbook** section) that contains some additional pointers; this section sometimes deals with one of the trickier exercises. The forms of help outlined above are not repeated in each of the lessons.

## Competition formats

A chess competition is an event that sets flexible demands. Depending on the players’ age and level, we must choose a format with or without clock, with or without notation, and with one or more games per session. For students who have just started playing chess it is advisable to play without a clock. This makes it possible to use a playing format in which more than one game can be played on an evening. Clocks and notation can be introduced at a later stage.

A drawback of a competition in which all students play each other is that sometimes the difference in playing strength is such that many of the games will not be interesting. In that case, it is a good idea to form groups of more or less equal playing strength. It is also a good idea to organize several different competitions throughout the training season.

Some possible competition formats:

- **Cup format**

A knock-out system. If you lose, you will no longer take part in the competition. If a game is drawn, another game is played to decide who will go through to the next round. A variation on this theme is to play mini-matches (of 2 games).

- **Challenger format**

The players each receive a ranking number according to their playing strength. Each player has the right to challenge another player, as long as

this player is ranked at most three places higher on the list. If the higher-ranked player wins, nothing happens. If the game is drawn, the lower-ranked player moves up one place. If the lower-ranked player wins, he will take the place of the higher-ranked player, who will himself move down one place. The advantage of this system is that the students can keep on playing games, and that their playing is directly rewarded.

In the following scheme player number 3 (A) plays player number 6 (B):

	A-B: 1-0	A-B: ½-½	A-B: 0-1
1	1	1	1
2	2	2	2
3A	3A	3A	3B
4	4	4	4A
5	5	5B	5
6B	6B	6	6

- **Rating format**

A simplified rating system can form the basis of a new classification. Players can then play each other more than once. This makes it possible for players of roughly equal strength to play each other more often.

In each of these competition formats it is possible to draw up a period-based table, indicating which players have progressed the most. But what is most important is that the students are given the chance to keep playing games. After all, this is why students show up in the first place.

In order to be able to value all the students, it is sensible to use playing systems that are based not only on results. Some possible playing systems are listed below:

- **Attendance**

Valuing attendance will stimulate the students to show up. Keeping score here requires the trainer to note down the names of those present. This will give the trainer an insight into the way the students experience the course.

- **Concentration**

Valuing concentration is a means to devote attention to the more quiet students, rather than to the more boisterous ones, and is especially useful in groups of young children.

- **Period-based progress**

Devoting attention to progress gained during specific periods may in some cases prove useful or necessary. This is because it is not always possible to measure relative progress in absolute terms.

- **Sportsmanship**

Some students are rather keen on winning.

- **Care of the boards and the pieces**

This values those students who do not just set up the boards and pieces, but also help clear them away at the end of the session. Paying attention to the boards and the pieces helps to raise the attention of the students in this matter.

- **Problem-solving competition**

Solving problems (of different degrees of difficulty) may give beginning players who have not yet won many games a chance to gain some success. The problems can be collected on a sheet of paper, and students can be awarded a given number of 'points' after having solved a certain number of positions. Extra points can be given for correctly notating the moves.

## **Certificate**

After having gone through the lessons of Step 3, the children can take an exam. When they pass this exam they will receive a certificate. The certificate is not a goal in itself. The aim of the chess lessons is first and foremost to build and raise the students' chess skills ('how to learn and play better chess'), not to obtain certificates. However, certificates can be a good stimulus to continue with the course right to the end.

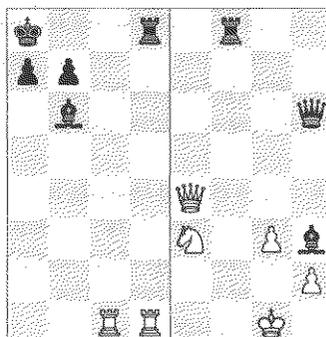
We must also realize that giving children the prospect of a certificate at the beginning of the year will not stimulate them for very long. The point at which they will receive the certificate lies too far ahead in the future. Short-term goals serve as a better stimulus.

When preparing for the exam it is sensible to let the students do a test exam first and, if necessary, a second time. However, it is not advisable to have the students do too many test exams, as this will put a severe strain on their enthusiasm and place too much emphasis on the exams and certificates.

## How to use this manual: some pointers

The manual contains many split diagrams. These must be read and set up on the board as separate diagrams. The left part of this diagram must therefore be set up on an empty demonstration board (i.e. without the position on the right). When discussing the right part, the position on the left has to be removed. This should be borne in mind when preparing for a session.

It is inadvisable to put more than one position on the board at the same time.



The following symbols, which refer to diagrams, are of crucial importance:

↑ refers to the diagram on the top of the page.

⇒ refers to the diagram in the middle of the page.

↓ refers to the diagram at the bottom of the page.

The moves in the answers are sometimes accompanied by an exclamation mark or a question mark, e.g. **1. Bxf2!** or **1. ... 0-0?**

The exclamation mark represents a good move.

The question mark represents a bad move.

The name of the reminder – if present – and the exercise sheets of the relevant lesson can be found in the exercises under the heading **Workbook**. The diamond refers to the reminder, the square stands for the exercise sheet. They can be found in the workbook.

◇ *Discovered and double check*

□ *Mobility / Trapping: A*      ♘

The idea is that sheets marked '♘' can be done by everyone after the lesson. The sheets marked '♘♘' are more difficult and are intended only for the occasional student. They are strongly advised for everyone, but only at a later phase in the training. Most children will not come to the sheets marked '♘♘♘'. These exercises are useful only at the end of the Step or during a subsequent Step, in which case they are ideal test exercises.

# 1 Completing the opening

## GOAL OF THE LESSON

- learning a healthy opening set-up

## PRIOR KNOWLEDGE

- piece activity
- safety of the king

## ACQUISITION

### Concepts

development, loss of tempo, gain of tempo

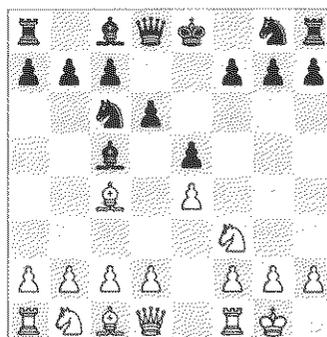
### Instruction

The three golden rules, as outlined in Step 2, provide the basis for correct opening play. In this lesson we will learn more about the opening.

After having applied the golden rules, we have reached the position in the diagram (⇒). As yet a number of White's pieces are idle: Ra1, Nb1 and Bc1. When stressing that these pieces, too, must be brought into play, it is useful to make an analogy with soccer or the army. You don't play soccer with only half of your team. And no-one goes to war with part of their army still in the barracks.

With Nc3 and d3, followed by a bishop move, White can bring all his pieces into play.

White requires a further three moves to finish his development. Black also requires three more moves: Nf6, Bg4 and 0-0. Both sides must also still find a good square for their queen. The right square for the queen



depends in part on the opponent's moves. In some cases the queen is best kept on d1 or d8, at least for the time being.

A great deal of attention must be devoted to acquiring the skill of using all the pieces. If we take stock after 15 moves, it turns out that even stronger players fail to develop their pieces adequately in too many of their games.

We call the theme of piece development 'completing the opening'.

An opening is considered completed if:

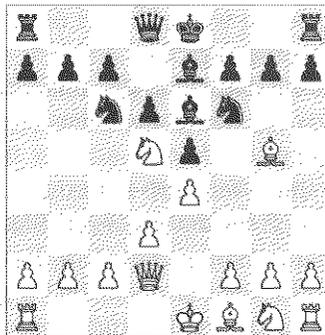
- there is at least one pawn in the centre.
- the pieces have been developed to useful (and, if possible, central) squares.
- the king is safe (castling!).
- the queen has a good position.
- the rooks are connected.

By counting the number of moves required to complete the opening we can find out whether we need more or less time than the opponent. If we are better developed, then our 'extra' time can be used for attacking purposes.

We illustrate some frequently made opening errors with the help of a number of short games. The examples provided are suitable for a demonstration board; however, it is a good idea to use fragments of games that the children have themselves played, as this will stimulate them more.

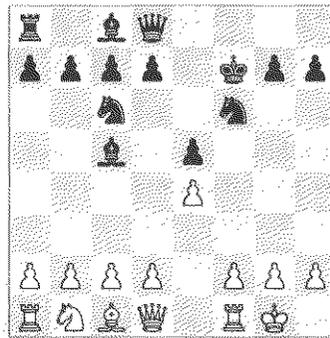
• *Exchanging developed pieces*

In the diagram (D) White plays **1. Nxf6+**, and after **1. ... Bxf6 2. Bxf6 Qxf6** he will have exchanged all of the pieces that he had brought into play. White's remaining pieces are not yet active. Black's minor pieces have all been developed. White requires a further three moves to complete his



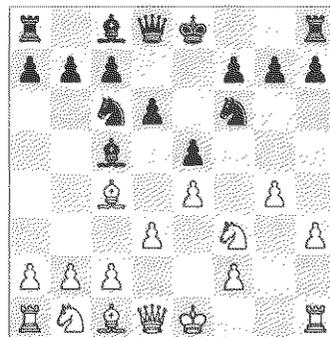
development (Nf3, Be2 and 0-0); Black only requires one more move (0-0).

The following exchange is quite popular: 1. e4 e5 2. Nf3 Nc6 3. Bc4 Bc5 4. 0-0 Nf6 5. Ng5 0-0 6. Nxf7 Rxf7 7. Bxf7+ Kxf7 (diagram ♠). White has lost a lot of time by exchanging two active pieces in return for a rook. Although material is balanced, Black has a greater number of active pieces, and already has the upper hand. This is a good starting position for a simultaneous display; the students play with the black pieces.



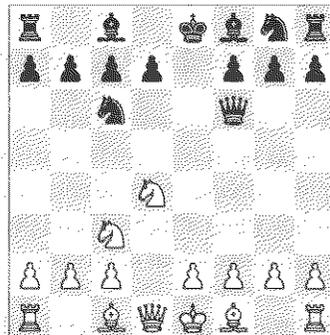
- *Too many pawn moves*

In the diagram (⇔) White has played with his kingside pawns, without developing first. To complete the opening he requires a further four moves (Nc3, bishop and queen move, and 0-0-0); Black only requires two moves (0-0 followed by a bishop move). Black is to move, so he is ahead in development. This means that he can (and should!) attack.



- *Bringing out the queen too early*

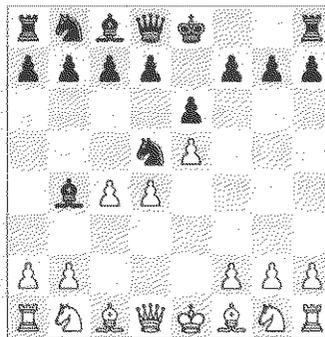
After the moves 1. Nc3 e5 2. Nf3 Nc6 3. d4 exd4 4. Nxd4 Qf6? we arrive at the diagram (♣). The queen has no business on f6. The more valuable a piece, the more vulnerable it is, since any attack on such a piece forms an immediate threat. In addition, the pawn on c7 is now unprotected. White can benefit from this by 5. Ndb5 Qd8. The queen has to retreat, as 5. ... Kd8 6. Nc7 Kxc7? 7. Nd5+ is bad. White continues his development with 6. Bf4 and after 6. ... d6 7. Nd5 Black cannot escape the loss of material.



Two further examples which, if need be, can be discussed:

- 1. e4 c6 2. Nf3 d5 3. e5 Bf5 4. Nh4 Qd7 5. Nxf5 Qxf5 6. d4 e6 7. Bd3

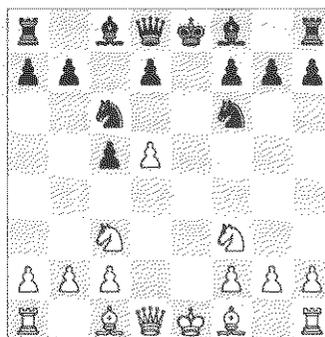
- 1. e4 e5 2. Nc3 Nf6 3. Bc4 Nxe4 4. Nxe4 d5 5. Bb3 dxe4 6. Qh5 Qe7 7. Ne2 g6



- *Seeing check, giving check*

Children like to give check. Sometimes this is good, but usually it is not. After 1. e4 e5 2. Nf3 d6 a bishop move to b5 is not an uncommon sight. Explain that playing with the same piece twice is a loss of time. In chess jargon this is called a 'loss of tempo'. The following game illustrates that in chess time is a precious commodity:

1. e4 Nf6 2. e5 Nd5 3. d4 e6 4. c4 Bb4+ (see diagram ⇐). After 5. Bd2 Black first takes on d2 and then escapes with his knight on d5. A much better reply is the hard-to-find 5. Ke2!, after which Black will lose a piece. 5. ... Nb6 runs into 6. c5 Nd5 7. a3 Ba5 8. b4 and 5. ... Ne7 is met with 6. a3 Ba5 7. b4 Bb6 8. c5.



- *Inviting attack on a developed piece*

Pieces that occupy central squares are often vulnerable to attack, especially from pawns. An example: 1. e4 c5 2. Nf3 e6 3. Nc3 Nc6 4. d4 Nf6 (taking on d4 is better) 5. d5 exd5 6. exd5 (see diagram ⇒). The knight on c6 is attacked, which gives White time to hem in the other Black pieces: 6. ... Nb8 7. d6! Now the bishop on f8 is blocked and the threat is Qe2+. Black has no defence: 7. ... Qb6 8. Qe2+ Kd8 9. Ng5 and White wins.

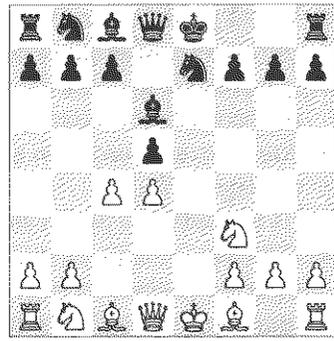
- *Inadequate piece cooperation*

Good opening play is characterized by good piece cooperation: pieces that support each other when attacking, and pieces that protect each other when defending.

It is important that pieces control part of the board together, and preferably a part that

consists of interconnected squares. Pieces that are in each other's way cannot function to their fullest potential. In the worst case, this may even result in the loss of material, as is illustrated by the following game.

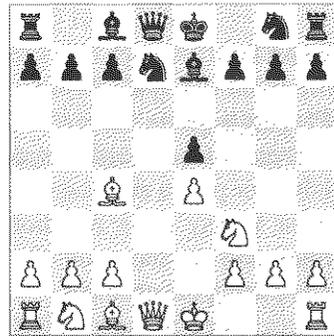
1. e4 e6 2. d4 d5 3. exd5 exd5 4. Nf3 Bd6
5. c4 Ne7 (a very bad move; see diagram ♠)
6. c5, winning a piece.



• *Neglecting vulnerable points*

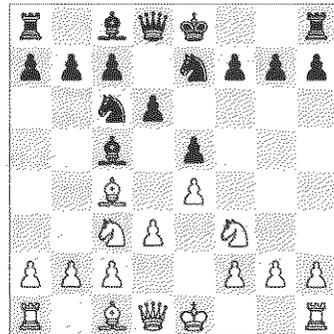
In the initial position the f-pawn is the weakest pawn, because it is protected by the king only. We may still witness an occasional scholar's mate at this level! The weakness of f7 remains a feature of the position for at least a number of moves. Two examples:

1. e4 e5 2. Nf3 d6 3. d4 Nd7 4. Bc4 Be7 5. dxe5 dxe5 (see diagram ⇔)
6. Qd5 and the only way to protect f7 is 6. ... Nh6, which runs into 7. Bxh6. At the cost of a piece Black can escape mate with 7. ... 0-0.



In the other example Black manages to castle, but here, too, f7 remains vulnerable:

1. e4 e5 2. Nf3 Nc6 3. Bc4 Bc5 4. Nc3 Nge7. Not the best square for the knight; from e7 it controls only one central square. White continues his development: 5. d3 d6? (diagram ♠ – 5. ... 0-0 is much better)
6. Ng5 0-0 (6. ... d5) 7. Qh5 attacking both f7 and h7. Black must do something against the mate: 7. ... h6 8. Nxf7 Qe8 9. Nxe6+ Kh7 10. Nf7+ Kg8 11. Qh8 mate.



**Search strategy**

If necessary, the exercises that accompany this lesson can be done at a later time.

The themes of the exercises were introduced in Step 2. Provide the following search strategy:

1. Which pieces are unprotected?  
(Is there a double attack possible?)
2. Is it possible to check the enemy king?  
(Is there a double attack possible?)
3. Are there any pieces on a single file, row or diagonal?  
(Is it possible to pin an enemy piece?)
4. Which piece is an important defender?  
(Can I eliminate the defender by capturing it, chasing it or luring it away?)

Nearly all students will find these exercises quite difficult. It is unadvisable to introduce any new material if the results of these exercises are unsatisfactory.

## PRACTICE

### Playing a game

Ask the students to play a game against each other (or play a simultaneous game) and tell them to pay extra attention to the golden rules and to focus on the importance of completing the opening.

Check whether the students follow this advice, and check whether their games contain any examples of (in)correct opening play.

## Workbook

### Test / Mix (2<sup>o</sup> step): A

**Explanation:** This practice sheet contains exercises from Step 2. It is advisable to first reiterate the list of possible topics. These include double attacks (queen, knight, rook, bishop, pawn or king), pins, mate, eliminating defenders (by capturing, chasing or luring away) and discovered attacks.

**Mistake:** The right topic is not discovered.

**Help:** The help provided must be as general as possible (at least initially). Ask the student to describe the position first. Which attacking possibilities are there? Which moves do

these suggest? Do not immediately offer the correct search strategy. Give the student the theme of the position only if all else fails.

□ *Test / Mix (2<sup>e</sup> step): B* ♔ ♕

Explanation: See practice sheet A

Mistake: Position 7 is not solved.

Help: Have the students find out that Black is in check. Once they have discovered this the solution is not hard to find.

Mistake: Position 8 is not solved correctly. The suggested solution is often 1. e5, but then Black can play 1. ... a6.

Help: Pinning against a specific square is difficult. Ask where the bishop on c2 would like to go to. Students will quickly respond with d5; the response c6 will take them longer. Which of these two squares is within easy reach?

Mistake: The answer given for position 12 is 1. ... b4.

Help: A logical mistake. The defender of Be2 is chased away. Unfortunately, White can bring his bishop into safety first, since the b-pawn is pinned. Have the students find this out. Which other ways to eliminate the defender are there?

ANSWERS

□ *Test / Mix (2<sup>nd</sup> step): A*

- |   |                         |
|---|-------------------------|
| 1) 1. ... Qa5+                                      | Qxf3)                   |
| 2) 1. Bd5   | 7) 1. Kd6               |
| 3) 1. ... Rxh3+ (1. ... Qxf3? 2. Bxf3 Rxh3+ 3. Kg2) | 8) 1. Qa6+ Kc7 2. Qb7#  |
| 4) 1. Ne1   | 9) 1. Qc5               |
| 5) 1. Be5   | 10) 1. Qd3+ Ke6 2. Qd7# |
| 6) 1. ... Ne2+ (1. ... Nf3+? 2.                     | 11) 1. d6+              |
|   | 12) 1. Bxd6+            |

□ *Test / Mix (2<sup>nd</sup> step): B*

- |                                 |   |
|---------------------------------|---|
| 1) 1. Rxd4 Qxb4 2. Rxb4         | Qxb7 Rxb7   |
| 2) 1. Rf7                       | 8) 1. Ba4 Ra5 2. Bc6#                               |
| 3) 1. Ne7+ Kh7 2. Rxf8          | 9) 1. Qa3   |
| 4) 1. Ne7+; 1. Qxb6? Bxg6       | 10) 1. ... Rxa3 2. bxa3 Rxc3                        |
| 5) 1. Qg6 Kg8 2. Qxa6           | 11) 1. Ne7+ and 2. Qxh7#                            |
| 6) 1. Qe7                       | 12) 1. ... Rxc3 and 2. ... Rxe2; 1. ... b4? 2. Bf1! |
| 7) 1. ... Rf4 2. Bxf4 Bxf3+; 2. |   |

# 2 Discovered and double check

## GOAL OF THE LESSON

- learning different forms of discovered attack

## PRIOR KNOWLEDGE

- discovered attack

## ACQUISITION

### Concepts

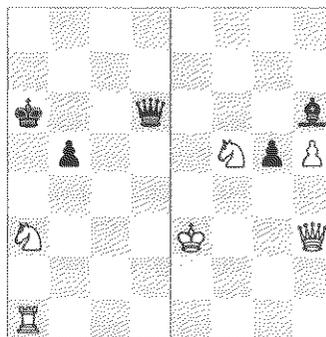
discovered check, double check, hanging pieces

### Instruction

One of the topics covered in Step 2 was that of the discovered attack. A special type of discovered attack is that of discovered check. The back piece of the battery indirectly attacks the king. The front piece must find its own attacking target; this target may include material or an important enemy square.

In the diagram (♠), initially without the pawn on b5, White plays **1. Nc4+**, attacking the queen. Black is in check as a result of the back piece on a1. This 'discovered check' is an effective weapon, since the front piece is free to attack whatever it fancies. If we now add a black pawn on b5, White can also play his knight to c4. Since Black must deal with the check, he has no time to capture the knight.

In the diagram on the right the back piece is under attack. However, this does not need to worry Black, since the front piece's attack, i.e. **1. ... g4+**, is much more



important.

In the left part of the diagram (♠) White must bear in mind that the back piece, i.e. the rook, is attacked. The correct move is therefore **1. Bb3+**.

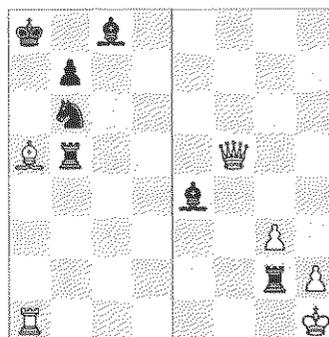
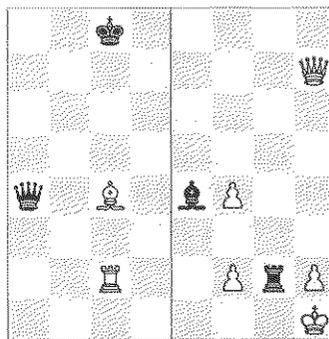
In the right part of the diagram Black must be careful because the bishop on e4 is 'hanging'. Capturing the queen will cost the rook; **1. ... Rg7+ 2. Qxe4** is also bad. After **1. ... Rg6+**, a much better move, White will be mated on the next move.

It is useful to ask the students to construct examples of discovered attacks themselves. Apart from the basic type (the front piece is used to attack an enemy piece), students may discover some other functions for the front piece. If that is too much to ask, then the two examples in the diagram (⇒) can serve to illustrate this point.

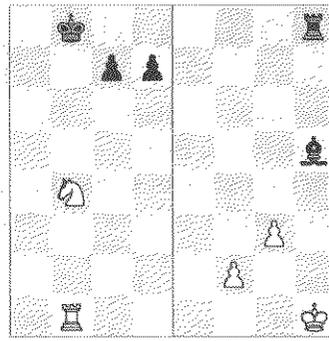
In the left part of the diagram White does not play the obvious **1. Bxb6+**, but **1. Bb4+** followed by **2. Bd6#**. Here the discovered check helps to set up the mate.

In the right part of the diagram Black first plays **1. ... Re2+**, protecting the bishop, and then proceeds by taking the queen.

An even more effective attacking motif is that of double check. In the diagram (♣) the Black queen attacks the unprotected White rook. All the same, White can ignore this threat and play **1. Nb6+**, after which both the knight and the rook give check. The queen cannot take the rook, since the knight is giving check at the same time. Similarly, the knight cannot be taken by the pawn, since the rook is also giving check. The only defence against a double check is a move with the king, for instance **1. ... Kb7**, after which White wins the queen with **2. Nxc4**.



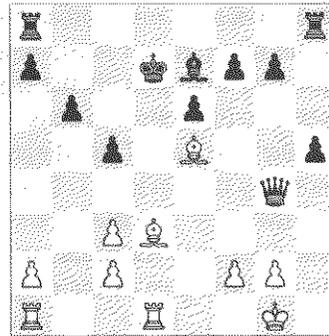
In the right part Black can give a double check by both 1. ... Nf2+ and 1. ... Ng3+. After 1. ... Nf2+ the White king moves to g1, giving Black nothing; 1. ... Ng3+, on the other hand, nets the White queen.



The use of a double check is not restricted to winning material. Double checks often play a role in mating combinations. This is because, as was noted, the only reply to a double check is a king move.

In the diagram (↑) White plays 1. Nc6+ with the intention to give mate with 2. Rb8 after both 1. ... Kc8 and 1. ... Ka8:...

In the right part of the diagram Black plays 1. ... Bf3+ 2. Kg1 Rh1 mate. Note that it does not matter that the pieces giving check are attacked: a double check can only be met by a king move.



Exercises involving these types of double check can be found on the second practice sheet of this lesson only.

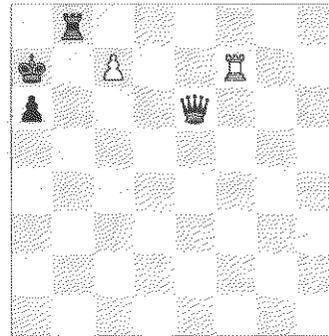
The following two examples are suitable only for those groups that have not had any problems with the material covered so far.

In the diagram (⇒) the obvious move is the discovered check 1. Be2+ (1. Bf5+ Qxd1+), but after 1. ... Kc6 2. Bxg4 hxg4 White cannot boast an advantage. Much better is the double check 1. Bb5+, which allows a forced mate: 1. ... Kc8 2. Ba6#. This will prove to be a quite difficult exercise.

The students will like the last two positions of this lesson very much.

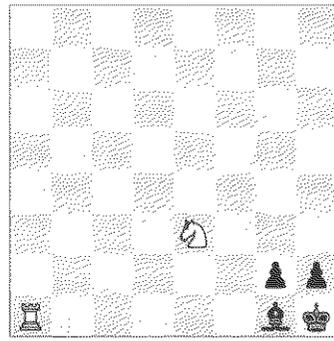
In the diagram (↻) White can take on b8 and promote to a queen. The problem with this move is that the double check is innocuous, since after 1. ... Kxb8 White will be down a queen against a rook.

The correct move is 1. e8N+. The black king has no choice, and after 1. ... Ka8 2.



**Ra7** Black will be mated.

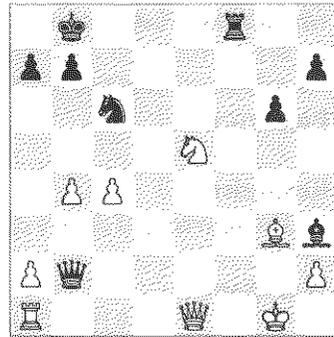
In the diagram (♁) there is no battery and nor is there a winning move that is immediately obvious. The knight can give mate on g3, but, unfortunately, Black is stalemated after the preparatory 1. Nf5. A knight move to f1 does not result in stalemate, but instead runs into 1. ... gxf1Q. Another possibility is 1. Ng4, intending mate on f2, but then Black will also be stalemated. However, mate on f2 is what White should aim for. The correct way is to play 1. Nd1, which, after 1. ... Bd4, allows 2. Nf2#.



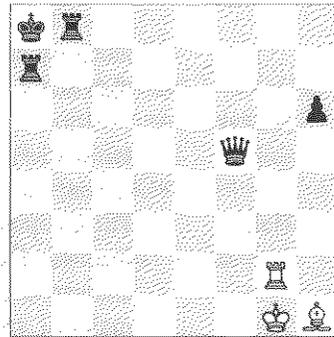
### Search strategy

The diagram (♁) must be introduced as a tool for finding the right solution to the exercises. The search strategy is as follows:

1. Find the battery.
- (In case of discovered and double check the battery is always positioned on the same line as the enemy king.)
2. Find a target for the front piece.
3. Don't be satisfied with the first target that you spot. Make sure that you always check to see whether there is a better target.



4. Can your opponent still defend himself? White can take a knight with double check (1. Nxc6+) or win a rook (1. Nd7+). However, both moves run into 1. ... Ka8, threatening mate on g2. For this reason, White plays 1. Nd3+, winning the queen.



The position in the diagram (♁) is also suitable for teaching the students the different steps included in the search strategy. Although they will eventually find the

correct solution, this will prove to be quite a challenge. Consider first some incorrect moves:

- 1. Rg3+? Qf3! 2. Bxf3+ Rab7
- 1. Rg4+? Qe4! 2. Bxe4+ Rab7
- 1. Re2+? Qe4! 2. Bxe4+ Rbb7
- 1. Rd2+? Qd5! 2. Bxd5+ Rbb7
- 1. Rc2+? Rbb7!

The discovered check **1. Rg6+** is the only winning move: **1. ... Rbb7** (1. ... Rab7 2. Ra6#) **2. Rg8+ Qc8** **3. Rxc8#**.

Make sure that you do not only show the students the correct approach during the acquisition phase, but that you also check whether they make use of it in practice.

## PRACTICE

### Reminder

◇ *Discovered and double check*

### Workbook

*Double attack / Discovered and double check: A* 

Explanation: The side that is to move can win material with a discovered or double check. The students must locate the battery and find an appropriate target for the front piece. Some of the positions contain a tempting, but incorrect, distraction. This will serve to emphasize the point that the students should not be content with the first move that they see.

Mistake: Position 8 is not solved correctly. 1. Bg5+ is a strong temptation. It looks as though this move will win the queen, making the reply 1. ... Qf2 easy to miss.

Help: Put the position on the board, play 1. Bg5+ and ask the students find Black's reply. (Note, incidentally, that the answer is not entirely incorrect, as White will still gain material after the strong 2. Bh4!). After asking whether

the bishop on f4 can attack another target, the right move will usually be found fairly quickly.

*Mate / Mate in two (double check): A*



Explanation: A double check makes it possible to give mate in two moves. In most of the positions more than one double check is possible. It is important to focus on the escape squares that are available to the enemy king. Make sure that the students note down all moves until mate.

Mistake: Position 12 is not understood, or is solved incorrectly. The problem is that the correct solution does not start with a double check. Wrong answers include 1. Bf5 (planning a winning double check) and 1. Rxf6 (planning to give mate with 2. Bf5+).

Help: Put the position on the board, play the incorrect move, and ask what the students think of this move. If necessary, you can ask questions like "What does this move threaten?" The incorrect moves given above can both be met by 1. ... b5.

## ANSWERS

*Double attack / Discovered and double check: A*

- |                        |                         |
|------------------------|-------------------------|
| 1) 1. Nc6+             | 7) 1. ... Rd1#          |
| 2) 1. ... Bb4          | 8) 1. Bxd6#             |
| 3) 1. Ne3+ (1. Nxd6+?) | 9) 1. ... Bb4#          |
| 4) 1. Bb5+             | 10) 1. Rd8#             |
| 5) 1. Nxb6+            | 11) 1. Nf6#             |
| 6) 1. ... Bxa3+        | 12) 1. Rd7+ Ke8 2. Rxc7 |

*Mate / Mate in two (double check): A*

- |                            |  |
|----------------------------|--|
| 1) 1. Bg5+ Ke8 2. Rd8#     | 8) 1. ... Nh3+ and 2. ... Qg1#               |
| 2) 1. Rxh5+ and 2. Rh8#    | 9) 1. ... Nd4+ and 2. ... Nc2#               |
| 3) 1. ... Bd3+ 2. Ke1 Rf1# | 10) 1. ... Nf2+ and 2. ... Nxb3#             |
| 4) Drawing                 | 11) 1. Bxe5+ Kb6 2. Bc7#; 1. ... Kd7 2. Rc7# |
| 5) Drawing                 | 12) 1. Re8+ Kd7 2. Bb5#                      |
| 6) 1. Nf6+ Kh8 2. Qh7#     |  |
| 7) 1. ... Ne3+ 2. Kg1 Rf1# |  |

# 3 Attacking a pinned piece

## GOAL OF THE LESSON

- exploiting a pin

## PRIOR KNOWLEDGE

- recognizing a pin
- value of the pieces

## ACQUISITION

### Concepts

counterattack, cross-pin

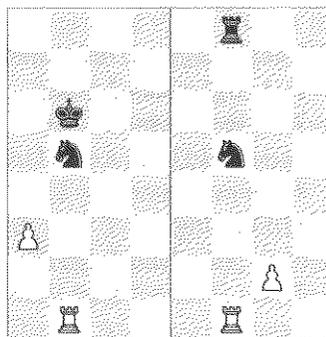
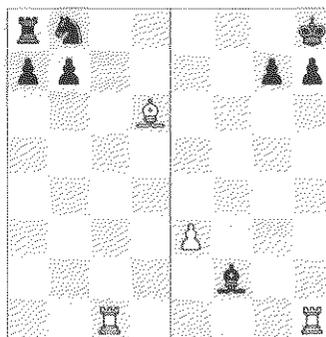
### Instruction

Up to this point the pin has been used only as a direct attacking weapon. A pin makes it possible to win material. We refresh this knowledge using the diagram (⇔). In the left part of the diagram **1. Rc8**, pinning a piece, nets the knight on b8.

In the right part of the diagram we see a pin against a square. By playing **1. Rf1** White wins the bishop on f2.

In the lesson at hand we take as our starting position a pin which, on its own, is not yet sufficient to gain material.

In the left part of the diagram (⇕) the pin requires an additional element to ensure material gain, i.e. an additional attack on the pinned piece. The black knight is pinned. On its own this pin does not result in the loss of material. However, White can attack the knight once more with the pawn on a3. This will net White a piece, since the knight cannot move. Attacking the pinned piece therefore proves to be successful.



In the right part of the diagram we see a pin against an enemy piece. Here, too, White can attack – and win – the pinned knight by playing **1. g4**.

In the examples discussed, pinning against a square is the most difficult pinning form. The degree of difficulty depends on the mating pattern that is involved. The left part of the diagram (♁) offers the familiar sight of mate on the bottom rank. White can win the pinned bishop with **1. b4**.

In the right part of the diagram the knight on g3 is pinned. If the knight moves, White is mated on account of the twofold attack of queen and bishop on h2. Thus, attacking the knight with **1. ... h4** wins material.

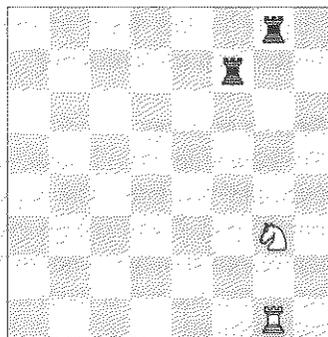
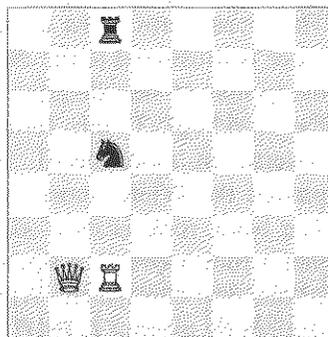
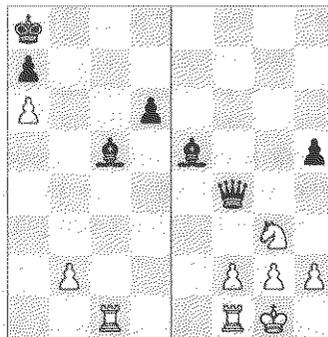
Make sure that the students also invent some examples of pins on their own, which their neighbours can solve. Good examples can be shown on the demonstration board.

Not all attacks on pinned pieces are successful. The diagram (♁) shows three incorrect ways of attacking a pinned piece. White has a range of options available to attack the pinned knight. Of these, only two are correct. Finding these moves will prove to be a challenge for the students. Correct are **1. Qb5** and **1. Qa3**. Incorrect is **1. Qc3**. The value of the queen is such that the pinned piece is still sufficiently protected. A move like **1. Qb4** is also incorrect, since it runs into the counterattack **1. ... Nd3** (**1. Qc1 Nb3**; **1. Qb6 Nd7** etc.).

In the diagram (♁) **1. ... Rfg7** is the right move. If Black plays **1. ... Rf3** White can unpin the knight with **2. Ne2**.

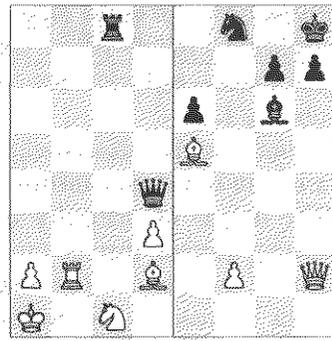
Summarizing, attacking a pinned piece is insufficient if:

- the attacking piece is too valuable;
- a counterattack is possible;



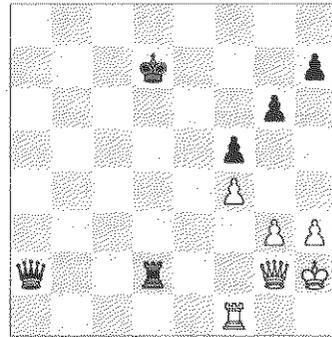
- the front (i.e. pinned) piece can protect the back piece.

In case of a pin against the king the front piece cannot usually move. This means that there is an additional opportunity to attack the pinned piece. In the left part of the diagram (⇕) Black can play **1. ... Rc2**; in the right part of the diagram White can play **1. Qh6**. In general, students will have problems with attacks in which one of the pieces is paralyzed on account of a pin.



In the positions on the exercise sheets all forms of pinning can be found: pins against the king, pins against material, and pins against an important square.

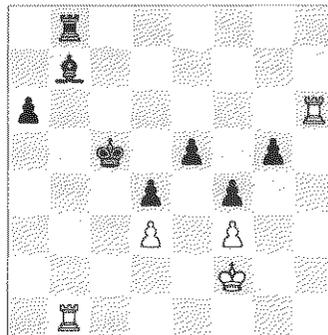
The nicest form of an attack on a pinned piece is illustrated in the diagram (⇔). The discussion of this diagram is optional. In the workbook 3<sup>+</sup> this form of pinning is covered in more detail. Black has just pinned the White queen with **1. ... Rd2**. The black rook is itself also pinned: note that a rook move to a square on the d-file would cost the queen. White can exploit this pin by playing **2. Rd1!** The front piece is now pinned twice. White combines the pin with an attack on a pinned piece. Black's problem is that he is unable to take on d1 because of the pin on the second rank that is already present. The pieces that participate in this form of pin form a cross; hence the term 'cross-pin'.



### Search strategy

To conclude this lesson, we discuss an example position. The topic 'attacking a pinned piece' will not give many problems; the search strategy is not difficult, the point being that the pin is itself already present in the position.

1. Which piece is pinned?
2. Can I attack this piece once more (using the 'cheapest' piece)?
3. After I have played my move, does the opponent still have defence?



In the diagram (♠) White must attack the pinned bishop on b7. There are two ways in which the rook on h6 can achieve this. After 1. Rh7 Black can defend with 1. ... Kc6. This shows that White must not allow the king access to c6. The correct move is therefore 1. **Rhb6**, winning a piece.

## PRACTICE

### Reminder

◇ *Attacking a pinned piece*

### Workbook

□ *Pin / Attacking a pinned piece: A* ♙

**Explanation:** Each position contains a pin. The pinned piece must be attacked in such a way that it will be won. The students must first find the pin. Only then can they start thinking about how the pinned piece can best be attacked.

**Mistake:** The attack on the pinned piece is incorrect; i.e. there is still a possible defence.

**Help:** Ask the student if he can find this defence by considering the position from the opponent's perspective. The student can then start thinking about an alternative way to attack the pinned piece.

**Mistake:** A pin against a square is not spotted.

**Help:** If there is an easy mating pattern, the following question will be of help: "Which of your opponent's pieces would you like to see removed?" The students will in most cases choose the pinned piece. From this it is a small step to attacking the pinned piece.

If there is a more difficult mating pattern, it is useful to set

up the same mating pattern on an empty board, using the same pieces if possible.

□ *Pin / Attacking a pinned piece: B* ♔ ♕

Explanation: See exercise sheet A.

Mistake: The pinned piece moves in the same way as the piece that attacks it. This is the case in some of the positions, including those that involve cross-pins.

Help: These exercises illustrate that pinned pieces are bad defenders (and so can be seen as a prelude to this theme). Some of the students will find it hard to realize that pinned pieces cannot move, and therefore cannot capture an attacking piece. If these problems persist, then, as a last resort, the piece in question can be replaced by another piece (a knight usually does the trick).

Mistake: The suggested answer for position 8 is 1. ... Rd8.

Help: Ask the students to find White's reply 2. Rxd8 on the board. This move shows that Rd7 must be attacked in a different way.

ANSWERS

□ *Pin / Attacking a pinned piece: A*

- |                               |                                  |
|-------------------------------|----------------------------------|
| 1) 1. Bg4                     | Qxc6                             |
| 2) 1. Rc4                     | 8) 1. ... f5 (1. ... Re8 2. Qc4) |
| 3) Drawing                    | 9) 1. Qf5+ (1. Qf4 Rxd7+)        |
| 4) 1. Ng5                     | 10) 1. g6                        |
| 5) 1. e5                      | 11) 1. c4                        |
| 6) Drawing                    | 12) 1. ... Bh3                   |
| 7) 1. ... Bd5 (1. ... Bh3? 2. |                                  |

□ *Pin / Attacking a pinned piece: B*

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| 1) 1. ... f4                        | 7) 1. ... Bf3                       |
| 2) 1. ... Nc6 (1. ... Nf5? 2. Qxf5) | 8) 1. ... Ra7 (1. ... Rd8? 2. Rxd8) |
| 3) 1. Rad1 (1. Red1 Ke7)            | 9) 1. ... Ne7                       |
| 4) 1. ... Rf2 (1. ... Rb3? 2. Kg2)  | 10) 1. Rf4                          |
| 5) 1. ... Ne4                       | 11) 1. g3 Nh3 2. Bh6#               |
| 6) 1. Bh6 (1. Bd4? Rxd4)            | 12) 1. Qh6 (1. Qg5 Ng6)             |

# 4

# Mate through access

## GOAL OF THE LESSON

- Improving the skill to finish a game

## PRIOR KNOWLEDGE

- mate in one and mate in two

## ACQUISITION

### Concepts

access, pawn shield, opening ('hole')

### Instruction

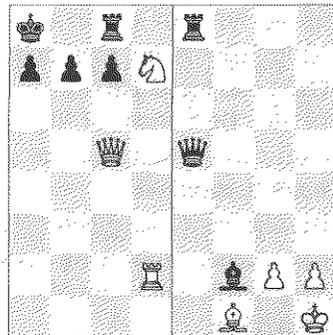
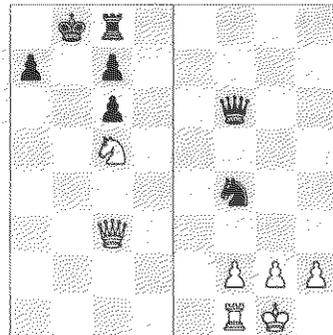
In the mate-in-two positions considered so far the pieces giving mate had direct access to the enemy king. To refresh the relevant knowledge some of 'mate-in-two positions' from Step 2 can be repeated.

This lesson deals with mating a king that, having castled, is tucked away 'safely' behind a shield of pawns. In the diagram (⇒) we see two castled kings. On the left, the weakened position of the king spells doom for Black. A check with the queen on the b-file will quickly seal Black's fate.

On the right Black must work a bit harder to gain access to the enemy king. This can be achieved by the twofold attack 1. ... Qg5. However, this does not need to worry White too much, as he can cover the mate with 2. g3.

A clever plan is required to get at the king by forcing an opening, or 'hole', in the protective shield of pawns.

In the left part of the diagram (♠) White plays 1. Qxa7+. This forces Black to take,



after which White mates by playing the rook to a2.

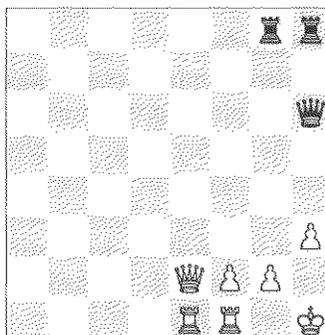
In the right part of the diagram a similar approach yields the desired result: **1. ... Qxh2+ 2. Kxh2 Rh8#.**

In both cases the attacker forces an opening in the pawn shield by means of a sacrifice. The defender has no choice but to play forced moves.



The diagram (♠) contains a typical position that results after queenside castling. Owing to the bishop on f4 the Black king lacks breathing space. White can crash through with a rook sacrifice: **1. Rxc6+ bxc6 2. Ba6 mate.** Point out the mating pattern with the two bishops. Mate through access always involves the same types of mating patterns. It pays off to remember these.

In the diagram (⇒) we find an example of the mating pattern with two rooks: Black wraps things up with **1. ... Qxh3+ 2. gxh3 Rxh3 mate.**

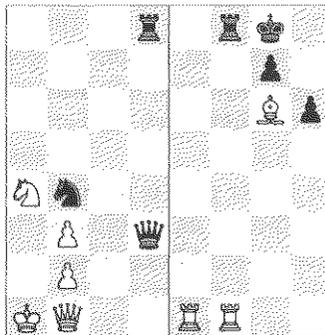


The position of the pawns in front of the king can also be occupied by pieces. In that case, too, a sacrifice may prove decisive, although an ordinary exchange may also be sufficient.

In the left part of the diagram (♠) Black trades queens and then delivers mate: **1. ... Qxb1+ 2. Kxb1 Rd1#.**

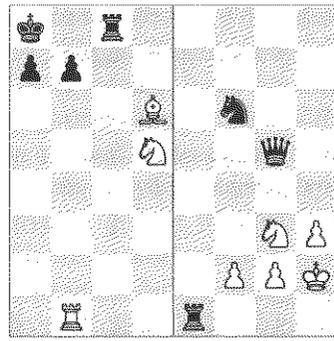
In the right part of the diagram White trades rooks and delivers mate: **1. Rxf8+ Kxf8 2. Re8#.**

Besides capturing, there is another way to gain access to the king. One of the defending pawns can be lured away by means of a sacrifice.



In the left part of the diagram (⊕) White plays **1. Nb6+**, forcing Black to capture with **1. ... axb6**. This opens up the a-file, so that Black is mated after **2. Ra1#**.

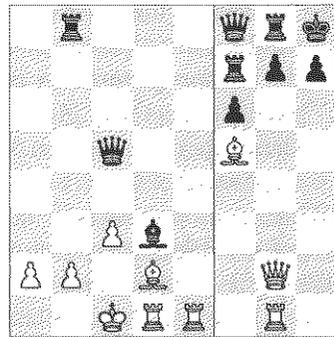
In the right part of the diagram the position of the White king looks secure, despite the presence of the invading rook. However, looks can be deceiving. With **1. ... Ng4+** Black manages to expose the White king. After the forced **2. hxg4** Black gives mate with **2. ... Qh4**. With practice, these mating patterns can be mastered with comparative ease.



The two examples in the diagram (⇒) are more difficult, since the first move does not involve check. It is up to the defender to choose how he is mated.

In the left part of the diagram there is no escape for White after **1. ... Qa3**. After **2. bxa3**, **2. ... Rb1** mates. If White does not take on a3, Black plays **2. ... Qxb2#**.

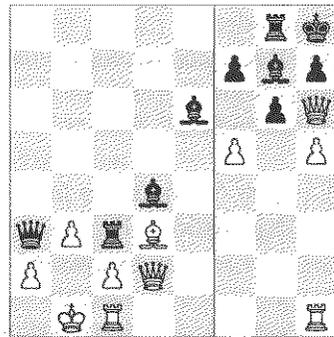
In the right part of the diagram **1. Bxh7** looks attractive, since capturing the bishop invites a mate with the queen or rook on the h-file. However, Black is not forced to capture, and after **1. ... g5** it is hard to see how White can make any progress. The correct move is the pretty **1. Qg6**, after which Black cannot avoid mate.



New topics sometimes make it possible to repeat topics from earlier lessons. In the case at hand, access goes hand in hand with double-check.

In the left part of the diagram (⊖) Black cannot gain access to the White king by playing **1. ... Rxb3+**, since after **2. cxb3 b2** is protected. The correct method is **1. ... Qb2+** **2. Kxb2 Rxb3** mate.

In the right part of the diagram the white queen is in danger. White can respond by



taking h7 with the queen. After 1. ... Kxh7 it is mate after 2. hxg6#.

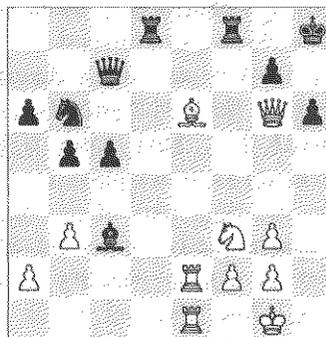
When it comes to mating the enemy king, knowledge of different mating patterns is indispensable. It is a good idea to construct a couple of mating patterns together with the students. Be sure to take a combination of pieces and a characteristic mating pattern (e.g. ♖♖, ♔♖, ♖♔, ♖♗, ♗♗).

### Search strategy

The search strategy for correctly solving the exercises is discussed using the diagram (⇒).

1. The king is the target.
2. Find a mating pattern. The reminder and the mating patterns as indicated on the exercise sheet may prove useful here!
2. Break open the position of the king.
3. Give mate!

White does not achieve anything with 1. Bf5 Rxf5. Black's h-pawn must be made to disappear. The correct 1. Ng5 threatens mate on h7 and forces Black to capture: 1. ... hxg5 2. Qh5 mate.



## PRACTICE

### Reminder

◇ *Access and mating patterns*

### Workbook

□ *Mate / Mate in two (access): A* ♗

Explanation: This exercise sheet consists of mating patterns with two rooks and with queen + bishop. The first and seventh diagram contain examples of the aforementioned piece combinations. The exercises contain examples of each

possible combination (mirror image, colours reversed, etc.). Make sure that students recognize the appropriate mating pattern first. This will enable them to find effective moves. The main goal of these exercises is the recognition of characteristic mating patterns. Tell the students to use the diagrams with the mating patterns, if necessary.

- Mistake: The suggested move does not lead to mate.  
 Help: In general, little help is required. If so desired, the appropriate mating pattern can be pointed out.
- Mistake: Position 11 is not solved correctly. The correct solution begins with a 'quiet move', i.e. a move that does not involve a capture or check.  
 Help: The position only allows one type of mating pattern. In order to arrive at this mating pattern, the pawn on g6 must be eliminated. This pawn can be forcefully removed with 1. Nxc6, but this leads to nothing after 1... fxc6. Ask the students if they see another way (luring away).

□ *Mate / Mate in two (access): B* 

Explanation: This exercise sheet consists of mating patterns with rook + knight and with rook + bishop. The first and seventh diagram contain examples of the aforementioned piece combinations. The exercises contain examples of each possible combination (mirror image, colours reversed, etc.).

- Mistake: Position 5 is not solved correctly. There are many 'distracting' moves; the initial move is in fact a quiet move. What complicates matters is that there are possible mating patterns involving queen + bishop and queen + knight.

Help: Ask the students to refute their own solutions. Many students will try to achieve a mating pattern with the queen on h7. The problem here is that 1. Qh4 h6 does not lead to mate: 1. Qg6 costs a queen. It is therefore likely that this move will not be considered for too long. Ask the students to spend some more time on this move.

□ *Mate / Mate in two (access): C* 

Explanation: This exercise sheet consists of mating patterns with two bishops and with mixed mating patterns. The first diagram contains characteristic examples involving two bishops.

The exercises contain examples of each possible combination (mirror image, colours reversed, etc.).

Mistake: The suggested solution does not lead to mate.

Help: The mating patterns are somewhat more difficult, since more pieces are required to achieve mate. Put a similar mating pattern on a board and discuss.

## ANSWERS

### □ *Mate / Mate in two (access): A*

- 1) 4 mating patterns ♖♗
- 2) 1. Qxa7+ Kxa7 2. Ra2#
- 3) 1. ... Qxh2+ 2. Bxh2 Rhxh2#
- 4) 1. Qxg7+ Kxg7 2. Rh7#
- 5) 1. Ne6+ fxe6 2. Rf1#
- 6) 1. Qxh6+ (1. Rxh6+ Kg8!) 1. ... Bxh6 2. Rxh6#
- 7) 4 mating patterns ♜♝

- 8) 1. Rxc6+ bxc6 2. Qa6#
- 9) 1. ... Rxh2+ 2. Kxh2 Qh4#
- 10) 1. Bxb7+ Kxb7 2. Qc6#
- 11) 1. Nh5 gxh5 2. Qxh7#
- 12) 1. Ng5+ hxg5 2. Qh5#
- 11) 1. ... Qxh2+ 2. Kxh2 Bf1#
- 12) 1. ... Qa3 2. bxa3 Rb1#

### □ *Mate / Mate in two (access): B*

- 1) 4 mating patterns ♜♝
- 2) 1. Qxh7+ Kxh7 2. Rh3#
- 3) 1. ... Qxa2+ 2. Kxa2 Ra8#
- 4) 1. Qxh7+ (1. Ng6+? hxg6) 1. ... Kxh7 2. Rh2#
- 5) 1. Qg6 (1. Qh4 h6; 1. Nxh7 Nf5; 1. Bxh7 Re7) 1. ... hxg6 2. Rh3#
- 6) 1. Qc8+ (1. Nc7+ Kb8) 1. ...

- Bxc8 2. Nc7#
- 7) 4 mating patterns ♜♝
- 8) 1. Qxd8+ Kxd8 2. Re8#.
- 9) 1. ... Rxh2+ (1. ... Re1+ 2. Nf1) 2. Kxh2 Rh8#
- 10) 1. Qxf5+ (1. Qg2 Bxc5) 1. ... exf5 2. Rg8#
- 11) 1. ... Qxh2+ 2. Kxh2 Bf1#
- 12) 1. ... Qa3 2. bxa3 Rb1#

### □ *Mate / Mate in two (access): C*

- 1) 4 mating patterns ♜♝
- 2) 1. Qxa6+ (1. Bg2 Ba7) 1. ... bxa6 2. Bg2#
- 3) 1. Qxf7+ (1. Bb3 Rf8) 1. ... Kxf7 2. Bb3#
- 4) 1. Qxc6+ (1. Nb5 Qxh2+ 2. Kxh2 hxg5+) 1. ... fxe6 2. Bg6#
- 5) 1. ... Qxc3+ (1. ... Qf5 2.

- Bb3) 2. bxc3 Ba3#
- 6) 1. ... Qf3+ 2. gxf3 Bh3#
- 7) 4 mating patterns: mix
- 8) 1. ... Nf3+ 2. gxf3 Reg8#
- 9) 1. ... Ng4+ 2. hxg4 Rh6#
- 10) 1. Qxh5 (1. Bxg6 fxg6) 1. ... gxh5 2. Bh7#
- 11) 1. ... Qxh3 2. gxh3 Bf3#
- 12) 1. ... Qxf2+ 2. Kxf2 Bc5#

# 5 The square of the pawn

## GOAL OF THE LESSON

- teaching the basic skills of pawn endgames

## PRIOR KNOWLEDGE

- spatial organization of the board

## ACQUISITION

### Concepts

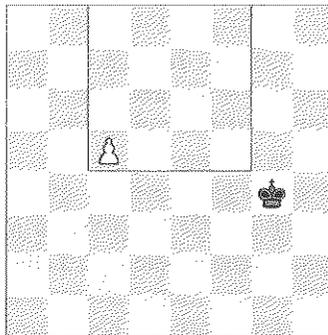
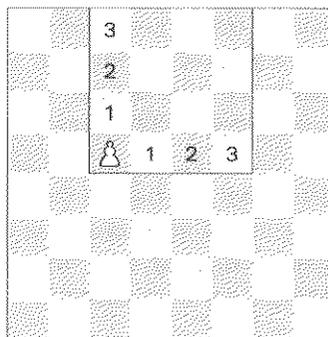
the square of the pawn, stopping a pawn, assisting a pawn, obstacle

### Instruction

In this lesson the students will learn in which positions a king can successfully stop a pawn, and in which positions a pawn triumphs over a king.

The diagram (⇔) displays the square of the c5-pawn. We can construct this square by counting the number of remaining pawn moves first (3), and then the same number of squares sideways (either to the left or to the right, depending on the position of the enemy king). If for instance the black king is positioned on f5, then the king will catch up with the pawn, even if White is to move first. An example variation is: **1. c6 Ke6 2. c7 Kd7 3. c8Q+ Kxc8**. We illustrate this variation on the demonstration board.

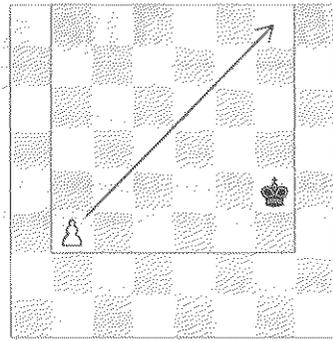
In the diagram (♚) the king is positioned outside the square of the pawn. The pawn can only be stopped if it is Black's move, in which case the king can step inside the square of the pawn. If White is to move first, Black will no longer be able to catch



up with the pawn.

A further comment is in order regarding the square of the pawn. A pawn on b4 has a 5x5 square while a pawn on b3 has 6x6 square. Note, however, that a pawn on b2 also has 6x6 square, since this pawn can move straight to b4, i.e. **1. b2-b4!** Show this to the students.

To determine the square of the pawn we use a diagonal line. In the diagram (♠) we draw an imaginary line from b3 to g8 to help us determine the size of the square. This gives us an quick and easy means to check whether the king can stop the pawn. The imaginary line always points forward and in the direction of the enemy king. It goes without saying that the square of a pawn on the second row starts on the square that is immediately before the pawn.

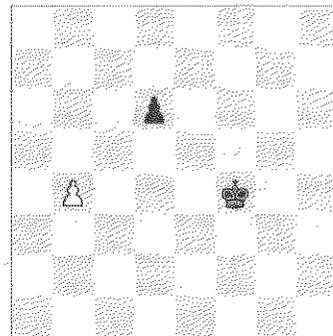


Now that the rule of the square has given us a means of determining whether a pawn can be stopped, it is time to discuss some special circumstances.

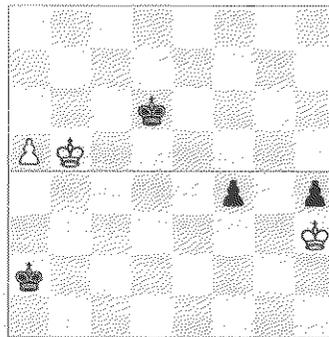
In the diagram (♣) the black king stands within the square of the b4-pawn. This can be illustrated by playing the moves **1. b5 Ke5 2. b6 Ke6 3. b7 Kd7 4. b8Q**. White manages to queen his pawn because the black king is forced to take a detour. This shows that the rule of the square must be applied with due care. Make sure that you take into account any barriers (or obstacles) along the way!

Put the d6-pawn on c7 and add a white pawn on d5. Now White must first put in place an obstacle with **1. d6 exd6 2. b5**.

The white king can also assist his pawn by shielding off the black king, as illustrated



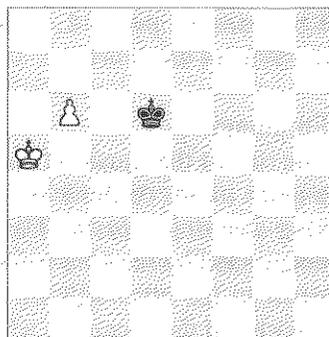
in the diagram (♁). In the upper part of the diagram the black king is inside the square of the pawn, so that an immediate pawn advance is doomed to fail: 1. a6 Kc7 2. a7 Kb7. The correct approach is to first shield off the enemy king by 1. Kb6 Kd7 2. a6 Kc8 3. a7. Note here that the king and the pawn together shield off the black king.



In the lower part of the diagram Black has two pawns, which he threatens to lose after 1. ... Kb2 2. Kxh4 Kc3 3. Kg4 Kd4 4. Kxf4. The f-pawn must therefore shield off the king with 1. ... f3. If the king takes on h4 now, he will end up outside the square of the pawn. The white king is also left without a chance after 2. Kh2 Kb2 3. Kg1 h3! 4. Kf2 h2.

In other cases the march of a pawn to the other side of the board must be assisted by the king. In such cases, it is vital to know when to advance the pawn and when to play a king move.

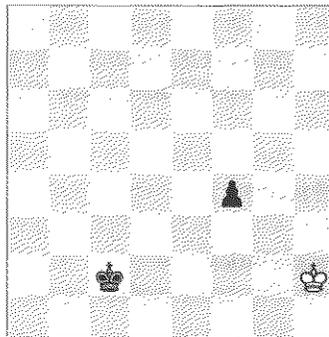
In the diagram (♂) White plays: 1. Ka6! (and not 1. b7? Kc7 2. Ka6 Kb8 3. Kb6 stalemate) 1. ... Kc6 2. b7 Kc7 3. Ka7. The pawn reaches the other side of the board thanks to the help of the king.



In the diagram (♁) the black king must help prepare the advance of the pawn with 1. ... Kd2 2. Kg2 Ke2, securing a safe passage.

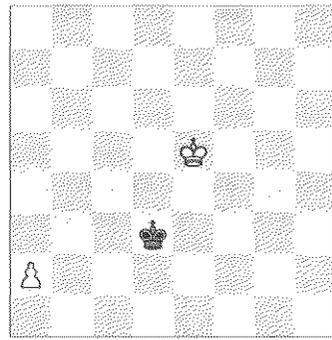
Advancing pawns without due preparation is a natural urge, which must in some cases be suppressed.

We give some hints that help the students tackle the exercise sheet. The following questions will prevent hasty and incorrect solutions to the test positions:



1. Is the enemy king positioned within the square of the pawn?
2. Can I force the enemy king to take a detour?
3. Can my king shield off the enemy king?
4. Can my king assist my pawn?

In the diagram (♠) the black king is positioned inside the square of the pawn, without an obstacle in sight. White threatens to lose his a-pawn (with 1. ... Kc3-b4-a3!). 1. a4 runs into 1. ... Kc4, and the white king being too far off, it cannot come to the rescue. Shielding off the black king is the solution: **1. Kd5 Kc3 2. Kc5** (the king must be shielded off once more, since 2. a4 Kb4 loses the pawn) **2. ... Kd3** (2. ... Kb2 3. a4) **3. a4** and wins.



### Summary

The rule of the square of the pawn gives us a quick means to check whether the enemy king can stop a pawn. The square can be determined by drawing a diagonal from the pawn to the other side of the board. This square and the square on which the pawn is positioned form the corners of the square of the pawn.

If the enemy king is positioned inside the square of the pawn, then the side with the pawn can employ a number of strategies:

- put in place an obstacle
- provide assistance with the king
- shield off the enemy king

### PRACTICE

#### Reminder

◇ *The square of the pawn*

## Workbook

### *Pawn ending / The square of the pawn: A*

**Explanation:** In the first two positions the students can draw the square of the pawn on the diagrams. In the remaining positions it is sufficient to indicate the first move and the result of the game (1-0, 0-1 or ½-½). For other positions it is possible to note down more moves. It is also possible to number the moves in the squares of the diagram; in this case, all moves by Black should be indicated with a circle around the number. The students must write down the result of the game for all positions.

**Mistake:** The result of the game is incorrect.

**Help:** The topic 'the square of the pawn' is a spatial topic, and will therefore present problems for some children. Put the position in question on a board, and ask the students to play their suggested solution. As such, any spatial problems will be reduced to a minimum.

### *Test / Repetition: A*

**Explanation:** The positions are familiar. Problems are to be expected only if the subject matter has been mastered insufficiently. If this is the case, it is advisable not to introduce any new material, but to repeat old material first.

### *Test / Mix: C*

**Explanation:** The themes of the positions have been covered in the first lessons of Step 3: discovered and double check, attacking a pinned piece, mate through access, and the square of the pawn. The themes need not necessarily be discussed with the students; this depends on the students' experience with doing mixed tests. Another possible approach is to have an in-class discussion of the first three positions.

**Mistake:** The correct solution is not found.

**Help:** Pointers for help can be found in the relevant lessons. The theme of each of the exercises has been indicated under the heading 'Answers'. One way to help the students is to indicate the theme of a particular exercise. It should be borne in mind, however, that this goes against the purpose of mixed exercises.

Mistake: Position 12 is not solved. A popular, but incorrect, answer is 1. Qe5.

Help: Put the position on a board and play the move. Ask the student to explain why he has chosen this solution. After this, point out the appropriate defence, i.e. 1. ... Nxd3. This type of defence against a pin will only be dealt with at a later point in this course. All the more reason why the students should try to find this move themselves! Having discussed the drawback of 1. Qe5, go on to ask whether there is another way to attack the knight on b2. This will almost certainly draw the students' attention to the somewhat concealed bishop.

## ANSWERS

### Pawn ending / The square of the pawn: A

- |                              |                               |
|------------------------------|-------------------------------|
| 1) 1. ... Kf5; ½-½           | 7) Drawing                    |
| 2) 1. ... Kf3 2. a4 Ke4; ½-½ | 8) Drawing                    |
| 3) 1. Kf4; 1-0               | 9) 1. Ka6; 1-0                |
| 4) 1. Kc6 Ke7 2. Kc7; 1-0    | 10) 1. e6 fxe6 2. c5; 1-0     |
| 5) 1. Kd5; 1-0               | 11) 1. Kc6 or 1. e6; 1-0      |
| 6) 1. ... Kc2; 0-1           | 12) 1. ... e4 2. dxe4 h5; 0-1 |

### Test / Repetition: A

- |                 |                              |
|-----------------|------------------------------|
| 1) 1. Ne3+      | 7) 1. ... e4 2. dxe4 h5; 0-1 |
| 2) 1. Ka6       | 8) 1. Qxd8+ Kxd8 2. Re8#     |
| 3) 1. Bxe5+     | 9) 1. ... Bxa3+              |
| 4) 1. Nf6#      | 10) 1. ... Rf2               |
| 5) 1. ... Qxc3+ | 11) 1. Re8+ Kd7 2. Bb5#      |
| 6) 1. ... Bd3+  | 12) 1. Rf4                   |

### Test / Mix: C

- |   |                                  |
|---|----------------------------------|
| 1) 1. Ke6+                                | 7) 1. Ra3+                       |
| 2) 1. Kd4                                 | 8) 1. Kb7 Ke7 2. Kc7             |
| 3) 1. ... Rh5+; 2... Rh4#                 | 9) 1. Rxa6+ Kxa6 2. Qa1#         |
| 4) 1. ... Rd5                             | 10) 1. Nf6+ Kh8 2. Rh4#          |
| 5) 1. ... Bb4+ and 2... Re1#              | 11) 1. f6 exf6 2. e6; 1. e6?? f6 |
| 6) 1. ... Rg4+ 2. hgx4 Qh2#; 2. Kh1 Qxh3# | 12) 1. Be5! (1. Qe5? Nxd3)       |

# 6

# Eliminating the defence

## GOAL OF THE LESSON

- Learning attacking skills

## PRIOR KNOWLEDGE

- mating patterns
- capturing/capturing + material

## ACQUISITION

### Concepts

hole (flight square for the king)

### Instruction

In this lesson we return to the topic of 'eliminating the defence', a technique that involves the gain of material by capturing, chasing and luring away enemy pieces.

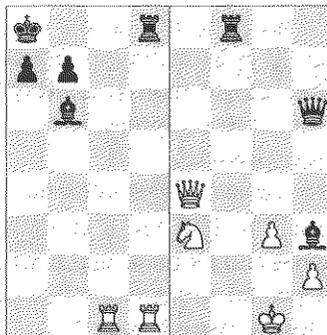
We provide some examples from Step 2 to check whether the students have mastered the relevant skills, and to establish a link with the lesson at hand.

In the present lesson, capturing, chasing and luring away have a different aim: mate.

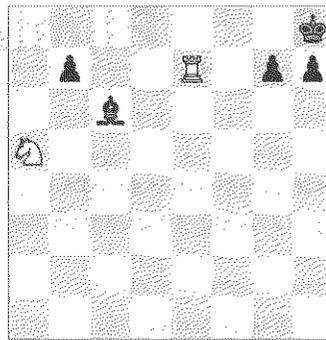
We eliminate the defender that is preventing mate.

In the left part of the diagram (♣) the rook on d8 is the defender. It protects c8, which would otherwise be available for the rook on c1, in which case it would be mate. By exchanging rooks White gets hold of the defender, after which the mating square will be unprotected. Not hard to see, given that the mating pattern – mate on the bottom rank – is straightforward.

In the right part of the diagram the knight

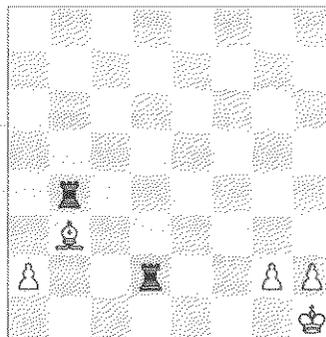


on e3 is defending against the mate on f1. Black can take the knight by 1. ... Qxe3+, and after 2. Qxe3 Rf1# he has achieved his goal. Here the preparatory move does not involve an exchange but a sacrifice. In both cases, the operative phrase is 'capturing + mate'.



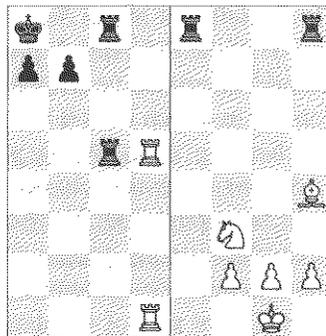
In the above examples the defending side is forced to capture. This is not always the case, however.

In the diagram (♠) White cannot give mate on e8 on account of the bishop on c6. Of course, White eliminates the defender with 1. Nxc6. But besides recapturing on c6, Black can also make air for his king (e.g. by 1. ... h6). In that case Black will not be mated, but he will lose material. We will nevertheless call this scenario capturing + mate, the point being that we capture the defender with the aim of giving mate.



The diagram (⇒) offers much the same picture. Black plays 1. ... Rxb3 (a sacrifice), aiming to give mate on d1.

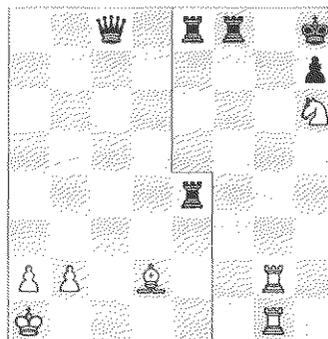
A quite different type of capturing + mate involves 'luring away' of the defender. In the left part of the diagram (♣) the rook on c8 is both defending the bottom rank and protecting the rook on c5. 1. Rxc5 Rxc5 eliminates the defender of the bottom rank by luring it away.



In the right part of the diagram the knight on f3 is defending e1. Black can lure away this knight with 1. ... Rxh4. White is not forced to recapture; if he does not, he will lose material.

In the above positions the defender has to perform two tasks at the same time, i.e. protecting a piece and a mating square. We term the combination that cashes in on this 'luring away + mate'.

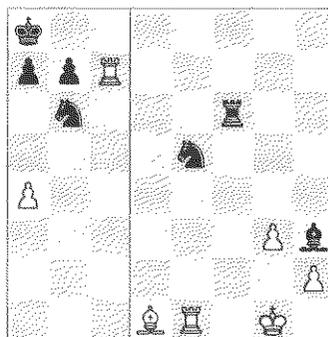
In the left part of the diagram (♁) Black would like to deliver mate on the bottom rank. He has a simple method to lure away the defender. After **1. ... Re1+** the bishop is forced to capture the rook, and in doing so relinquishes the protection of c1. Black then gives mate with the queen on c1.



In the right part of the diagram the rook on f8 is also protecting two mating squares. One of these squares is also protected by Re8, which means that **1. Nf7+** can be met by **Rxf7**. The correct method is to play **1. Rg8+ Rxf8 2. Nf7** mate.

Besides luring away it is possible to chase away a piece. In this case the defender is attacked by a less valuable piece.

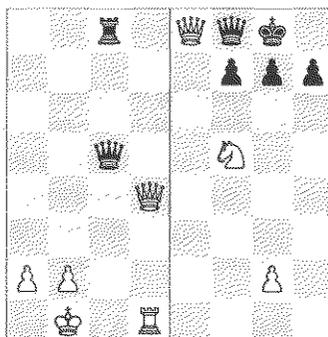
In the left part of the diagram (♁) White attacks the defending knight with **1. a5**. If the knight moves, Black will be mated.



In the right part of the diagram Black plays **1. ... Nd3**, chasing away the rook. Note that it is relatively difficult to chase away a rook or a queen. Since these pieces move forwards, backwards and sideways, they can cover squares from a long distance. In this position the rook does not have enough room on the bottom rank, however.

The piece that can be chased away most easily is the king.

In the left part of the diagram (♁) Black is not yet able to give mate on c1. But after a check on c2 the king can no longer control c1: **1. ... Qc2+ 2. Ka1 Qc1+** and mate.



In the right part of the diagram a check succeeds in chasing away the king: **1. Ne7+ Kh8 2. Qxf8** mate.

The various forms of chasing away a piece followed by mate will be referred to simply as 'chasing away + mate'. Chasing away involves an attack while luring away may

involve an exchange or a sacrifice.

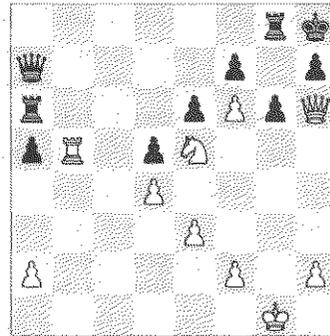
The relative difficulty of eliminating-the-defence combinations depends on the kind of sacrifice, and on the familiarity and complexity of the mating pattern. The examples discussed here each involve a straightforward mating pattern.

### Search strategy

The diagram ( $\Rightarrow$ ) serves as a tool to learn the correct search strategy.

1. Which pieces play an important defensive role?
2. Find a mating pattern.
3. Eliminate the defender by capturing it, chasing it away, or luring it away.

White can give mate with 1. Qg7 (if the defending rook on g8 is eliminated) or with 1. Nx7 (if the defending queen on a7 is eliminated). With the beautiful 1. Rb8 White lures away one of the two defenders. The threat is now 2. Qg7 mate. There is no escape for Black.



### PRACTICE

#### Reminder

◇ *Eliminating the defence*

#### Workbook

- Eliminating the defence / Capturing + mate: A* 

Explanation: The piece defending the mate can be captured, either by exchanging it or by means of a sacrifice. Emphasize that sometimes mate can be prevented not by recapture, but by another move. In that case, there will be a material gain.

Mistake: Students can almost always correct any incorrect solutions themselves.

Help: A step-by-step approach never fails to work. "Where can

you give mate? Which defender should be eliminated to achieve this? Which piece can you use to eliminate the defender?"

Mistake: Position 12 is not solved correctly. Black must first of all sacrifice his queen. What complicates matters is that this position does not only involve chasing away + mate; the queen on c2 is also defending c5, and must therefore be lured away.

Help: Move the queen from c2 to d3 and ask the students to try again.

□ *Eliminating the defence / Luring away + mate: A* ♙

Explanation: This exercise sheet contains mating patterns that involve the bottom rank only. Emphasize that mate can in most cases be prevented, and that recapture is not obligatory. In other words, it is sufficient to achieve a material gain.

Mistake: The student remarks that there is no mate.

Help: See under 'explanation'.

Mistake: Positions that involve an initial capturing move present problems. The reason is that students consider the topic to be 'luring away + mate' rather than 'capturing + mate'. From this they conclude that capturing is not the right answer.

Help: Point out that the defender must be eliminated. If we capture the defending piece, the topic is that of 'capturing + mate'. If we capture a piece other than the defender, this piece is likely to be protected by the defending piece. In that case, the topic is that of 'luring away + mate'.

□ *Eliminating the defence / Chasing away + mate: B* ♙ ♘

Explanation: Sheet B contains a variety of mating patterns.

Mistake: The correct solution is not found.

Help: Some of the positions are quite hard. Try the step-by-step approach. "Where can you give mate? And which defender should be eliminated to achieve this? And which piece can you use to eliminate the defender?" Note that in some cases it is possible to simplify the position by removing irrelevant pieces.

□ *Eliminating the defence / Capturing + mate: A*

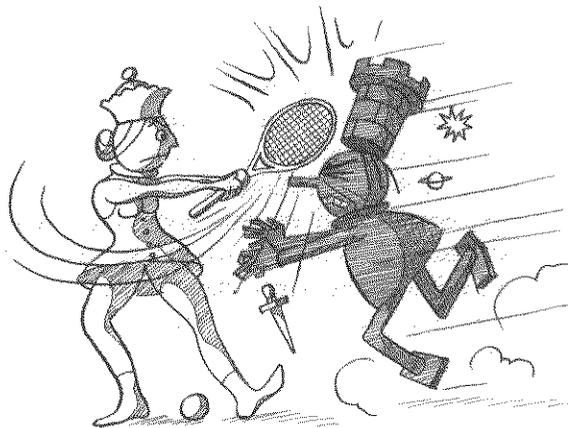
- |                              |                                |
|------------------------------|--------------------------------|
| 1) 1. Qxh8+ and 2. Rd8#      | 7) 1. Qxd4+ and 2. b6#         |
| 2) 1. ... Qxh4 and 2... Nf2# | 8) 1. Qxf6+ and 2. Re8#        |
| 3) 1. Nxc7+ Bxc7 2. Bb5#     | 9) 1. ... Rxc4 and 2. ... Ba3# |
| 4) 1. ... Rxd1 and 2... Bf3# | 10) 1. Qxg7+ Nxg7 2. Nh6#      |
| 5) 1. Nxh7+ Nxh7 2. Ng6#     | 11) 1. Qxb8+ and 2. Bxb5#      |
| 6) 1. ... Rxd1+ 2. Nxd1 Qf1# | 12) 1. ... Qxb3 and 2. Bc5+    |

□ *Eliminating the defence / Luring away + mate: A*

- |                               |  |
|-------------------------------|--|
| 1) 1. ... Rc1+ 2. Bxc1 Re1#   | 8) 1. ... Re3+ 2. fxe3 Qg3#                        |
| 2) 1. Ra8+ Lxa8 2. Re8#       | 9) 1. Qxf6+ Rxf6 2. Rd8+                           |
| 3) 1. Rd8+ Qxd8 2. Qxc3+      | 10) 1. ... Rb1+ 2. Bxb1 Qf1#                       |
| 4) 1. ... Rxd4 2. Nxd4? Qxh2# | 11) 1. ... Qxb2+ (1. ... Rc1 2. Qa8+) 2. Rxb2 Rc1# |
| 5) 1. ... Nd4 2. Nxd4+? Rc1+  | 12) 1. ... Ne3+ 2. fxe3 Qf1#                       |
| 6) 1. ... Qb6+ 2. Rxb6? Rf1#  |  |
| 7) 1. Qh8+ Kxh8 2. Rxf8#      |  |

□ *Eliminating the defence / Chasing away + mate: B*

- |                              |                             |
|------------------------------|-----------------------------|
| 1) 1. Qxf6+ Rxf6 2. Rd8+     | 7) 1. Qh8+ Kxh8 2. Rxf8#    |
| 2) 1. ... Re3+ 2. fxe3 Qg3#  | 8) 1. ... Ne3+ 2. fxe3 Qf1# |
| 3) 1. Rd8+ Qxd8 2. Qxc3+     | 9) 1. Qxg6 hxg6? 2. Rh4#    |
| 4) 1. ... Rxd4 2. Nxd4? Qh2# | 10) 1. ... Re3 2. Qxe3 Qh1# |
| 5) 1. ... Nd4 2. Rf2 Nxe2    | 11) Drawing                 |
| 6) 1. ... Qb6+ 2. Rxb6 Rf1#  | 12) Drawing                 |



# 7 Defending against a double attack

## GOAL OF THE LESSON

- learning how to defend against specific kinds of attack

## PRIOR KNOWLEDGE

- different forms of defence
- double attack

## ACQUISITION

### Concepts

counterattack

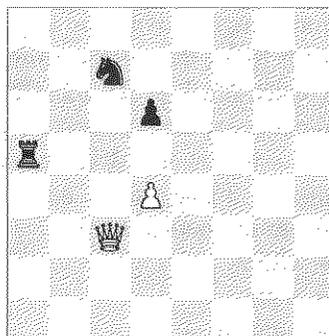
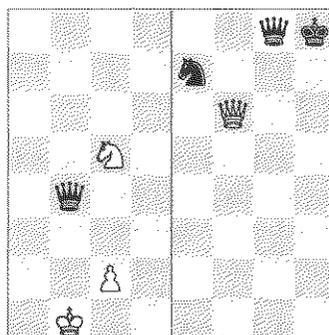
### Instruction

In Step 1 we outlined a number of different forms of defence. Here we briefly reiterate these, giving examples of each:

1. moving away
2. protecting
3. capturing (including exchanging)
4. interposing

Matters are somewhat complicated in the diagram (⇒), where two different forms of defence are necessary. In the left part of the diagram we see a straightforward double attack of the queen (i.e. king + material). White can defend by interposing the knight on b3. This move is, in a sense, an example of moving away and interposing at the same time.

In the right part of the diagram Black can defend by interposing the queen on g7. From g7 the queen also protects the knight. In the diagram (♘) two of Black's pieces are under attack. Black can save himself by playing 1. ... Ra7. The rook moves away

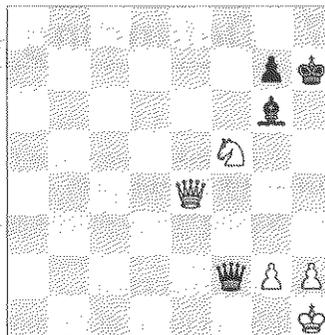


and protects the knight in the process.

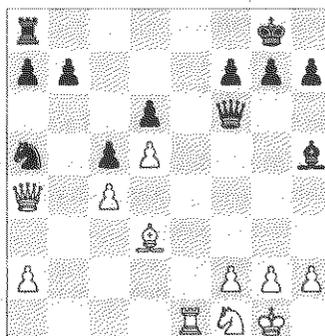
In the diagram (†) the knight on f5 is in danger and mate is looming on f1. What saves the day is an exchange of queens: after **1. Qh4+** White has little to worry about. Note that the alternative **1. g4** runs into **1. ... Qf1** mate.

When it comes to defending against double attacks, the important point is that two forms of defence must be combined (the only type of defence that cannot be combined is capturing).

It is a good idea to ask students to invent some examples of this form of defending on their own boards. The positions dealt with so far are straightforward, and hardly ever pose problems. Positions with more pieces are trickier.



An example of such a position is displayed in the diagram (⇔). As Black, a natural first reaction would be to play **1. ... b6**. But since we are dealing with a defence against a double attack, this move is likely to fall short. Indeed, closer inspection reveals that Black must also find a defence against mate on e8. The correct move is therefore **1. ... Qd8** (protecting + protecting).

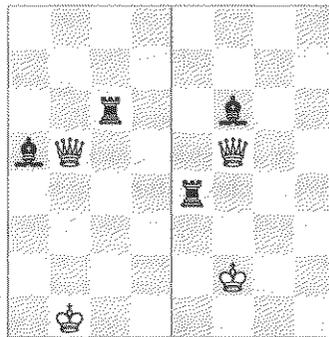


In addition to the four forms of defending mentioned above, this lesson introduces a fifth form, that of the **counterattack**. The counterattack is the most difficult form of defence, since it requires a player to focus not only on the defence, but also on the attack. There are a number of different forms of counterattack:

- check
- a pin
- a threat

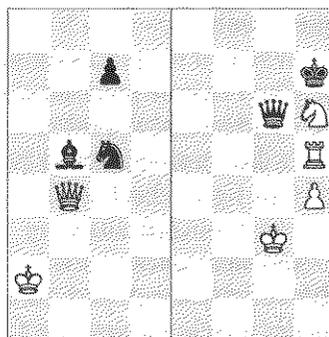
In the left part of the diagram (♁) Black pins the White queen with **1. ... Rb6**. This parries the double attack and even nets Black a queen against a rook.

In the right part of the diagram we see that White attacks a bishop and a rook at the same time. The bishop can move to h4 with check. After the white king has moved, the black rook escapes. By checking the king, Black manages to save both his pieces.



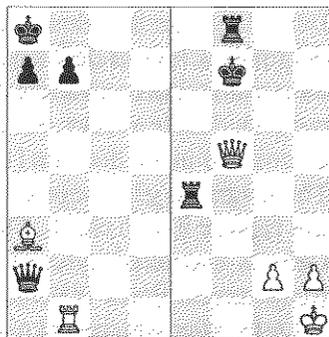
The diagram (♁) contains two examples of a counterattack that involves the creation of a threat. In the left part of the diagram Black's prospects seem bleak. The bishop and the knight are both under attack, and none of the defensive manoeuvres covered so far are possible. However, Black does have a surprising resource. By playing **1. ... Na4!** Black 'immunizes' the bishop, since **2. Qxb5** runs into **2. ... Nc3+**, i.e. a double attack with the knight. Hence, the bishop is protected indirectly. White is ill-advised to capture on b5.

In the right part of the diagram White has a similar resource. **1. Ng4** covers the rook indirectly: **1. ... Qxh5** **2. Nf6+**. Observe that **1. Rg5** is not correct, since this leaves the knight unprotected.



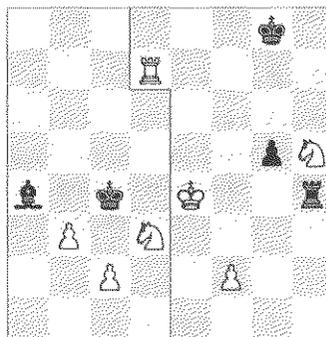
Two examples of counterattacks involving mate are displayed in the diagram (♁). In the left part of the diagram White defends against the double attack with **1. Rc1**. This move threatens mate on c8. Black must deal with this threat first, thus giving White time to rescue his bishop.

In the right part the king moves to g7. White does not have time to capture on e4 on account of the mate on f1. A king move to the e-file is not a good idea; in that case, White can take the rook on e4 with check.



In some cases counterattacks involve other types of combinations. In the left part of the diagram (♠) **1. ... Bxb3**, an example of ‘capturing + material’, is a good defence. After **2. cxb3+** Black plays **2. ... Kxd3**. If White checks the king with his knight, the king reacts by attacking the knight.

In the right part of the diagram White counterattacks with **1. Kf5 Rxh5 2. Kg6**. The double attack will net White a rook.

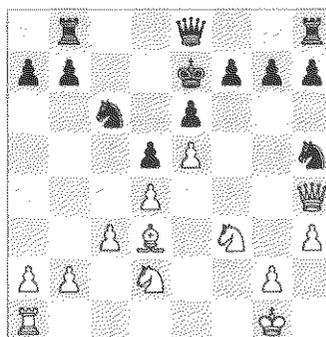


### Search strategy

The diagram (⇒) serves as a tool to teach students the appropriate search strategy for the exercises.

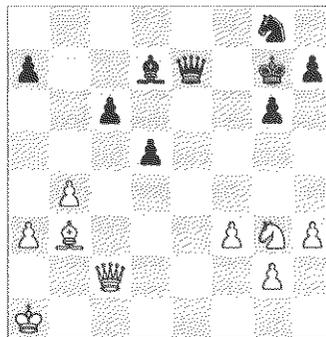
1. Which of my pieces are in danger?
2. Can I capture (exchange) the attacker?
3. Can I interpose, protect or move away?
4. Is there a counterattack possible?
5. Can I give check with an attacked piece, can I pin an attacking piece or can I threaten mate?

Black is in check and the knight on h5 is under attack. Interposing the knight on f6 does not help on account of the pawn on e5. Black can protect the knight and get out of check by playing **1. ... f6**.



Defending against a double attack does not only play a role in defence, but also when we consider the opponent’s defence against our own double attacks. An example of this is provided in the diagram (♣).

The knight on g3 is unprotected, and Black can capture it with check. The obvious **1. ... Qe5+** is countered by **2. Qb2**, pinning the Black queen. Black is better off playing **1. ... Qe1+**, after which the knight is doomed.



## PRACTICE

### Reminder

◇ *Defending against a double attack*

### Workbook

- Defending / Defending against a double attack: A* ♙
- Explanation: For each position, ask the students to first circle the two targets of attack. Finding the right form of defence – and thereby the right move – will then be a piece of cake.
- Mistake: The suggested move loses material.
- Help: Put the position on the board and ask what the opponent would play. This question is essentially a Step 1 exercise: win material. The student will realize that another defence is called for. Go through the list if necessary: protecting, capturing, moving away or interposing.
- Mistake: The counterattack is not spotted.
- Help: Which counterattacks are there? (Check, pin, threat)  
Ask the students to check which of these is possible.
- Double attack (queen) / Temptation: A* ♙ ♙
- Explanation: This exercise sheet requires the students to be on the lookout for a possible defence against a double attack. In each of the exercises there are at least two ways in which a double attack with the queen is possible. There is an appropriate defence against only one of these attacks. Ask the students to note down a correct and an incorrect attack (asking them to motivate the latter). It is sufficient to indicate the correct attacking move by means of '+' and the incorrect attacking move by means of 'x'.
- Mistake: The student chooses a tempting – but incorrect – solution.
- Help: Play the move on the board and ask what the opponent can play now.

## ANSWERS

- Defending / Defending against a double attack: A*
- |               |               |
|---------------|---------------|
| 1) 1. ... Bg7 | 3) 1. ... Bf6 |
| 2) 1. ... Rd5 | 4) 1. ... Qe6 |

- 5) 1. Ng3
- 6) 1. Nf3
- 7) 1. ... Bb7
- 8) 1. ... Rb6

- 9) 1. ... Bd4! / 1. ... Bxb2
- 10) 1. ... Bc5+
- 11) 1. Ba3+
- 12) 1. ... Rf6+

□ *Double attack (queen) / Temptation: A*

- |  |  |
|--|--|
| 1) 1. Qh4+; 1. Qc3+? Ne5               | 7) 1. Qe5; 1. Qd5 / c5? Ng3+                           |
| 2) 1. ... Qb8+; 1. ... Qd2+? 2. Ne2    | 8) 1. Qd2; 1. Qe5? Nb4+                                |
| 3) 1. ... Qc3; 1. ... Qb6 / d8? 2. Ra1 | 9) 1. ... Qd1+; 1. ... Qd5+? 2. Qg2                    |
| 4) 1. Qb3+; 1. Qd5+ Be6                | 10) 1. ... Qh3+; 1. ... Qg4+ 2. Ng3; 1. ... Qd3 2. Re3 |
| 5) 1. ... Qc1+; 1. ... Qc5+? 2. Bf2    | 11) 1. ... Qd8+; 1. ... Qd6+ 2. Bd3                    |
| 6) 1. ... Qa3+; 1. ... Qg5+? 2. Rd2+   | 12) 1. ... Qb6+; 1. ... Qg4+? 2. Ng2 or 2. Ng3         |



**GOAL OF THE LESSON**

- Learning basic strategic skills

**PRIOR KNOWLEDGE**

- activity and vulnerability

**ACQUISITION****Concepts**

duo, pawn structure, manoeuvre

**Instruction**

Playing a good game of chess involves a lot more than just making moves. A game of chess must be played with a goal in mind, and this requires that we must devise a plan (or a strategy). Before such a plan can be executed, however, we must have a clear picture of a number of aspects:

1. the goal of the action
2. the means of the action
3. the time required for it
4. a (counter)action of the opponent

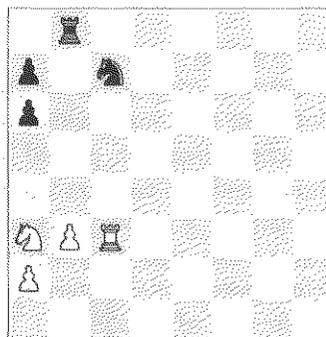
Evidently, executing a plan is a complex issue, and for this reason we will introduce this topic using 'scaled-down' versions of plans. In these scaled-down plans the goal of an action will be directly visible, e.g. in the form improving one's position, and the means are straightforward. We will discuss a number of examples of scaled-down plans in this lesson. It should be noted, however, that students tend to prefer examples from their own games to serve as an illustration.

The required time for an action will in most cases be limited to a single move. As a result, the opponent will not have time to launch any counteractions. We will refer to these scaled-down plans as 'mini plans'. Mastering these mini plans is the first step towards good positional play.

When we talk about strategy, the terms 'activity' and 'vulnerability' are important. A good strategy is characterised by:

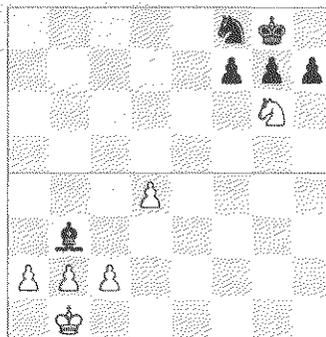
- increasing your activity
- removing your vulnerability
- neutralizing your opponent's activity
- increasing your opponent's vulnerability

Let us consider pawns first. Generally speaking, doubled pawns are a weakness. Getting rid of doubled pawns is therefore a good mini plan. In the diagram (⇒) Black can play **1. ... Nb5**. White is forced to capture, and after **2. Nxb5 axb5** Black's doubled pawn has disappeared; that is, the weakness is no longer there.

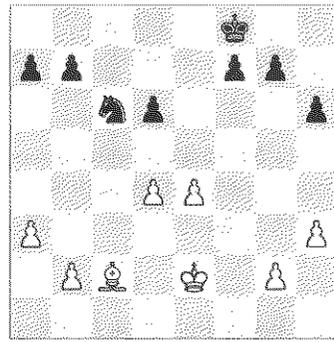


In upper part of the diagram (⇕) Black is best advised to avoid a doubled g-pawn by playing **1. ... Nxg6**. Although recapturing with a piece can result in a temporary disadvantage (the piece may end up in a bad position, for instance), recapturing with a pawn often leads to a lasting disadvantage.

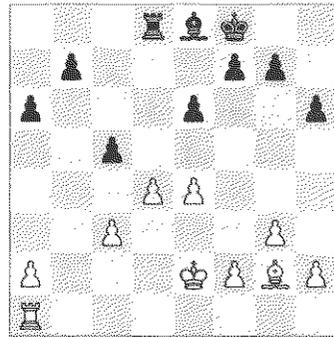
In those cases where a doubled pawn is unavoidable, it is generally best to capture in the direction of the centre. In the bottom part **1. axb3** is therefore the right move. After **1. cxb3** pawn d4 can no longer be protected by a pawn. Another advantage of **1. axb3** is that White ends up controlling more squares (d3 is still under White's control).



Two pawns standing next to each other, i.e. a 'duo', are an asset. Together, such pawns control four squares. If we advance one of the two pawns, we end up controlling only three squares. This principle plays a role in the diagram (♠). The d4-pawn is attacked. In such cases the easiest solution is often to advance the pawn. The problem is that this weakens the pawn structure. Specifically, it weakens the e5 square, which Black can now occupy with his knight. In addition, the bishop on c2 is hemmed in by the d5-pawn. This suggests that White should not advance the d-pawn. Instead, the correct move is a king move: **1. Ke3**.



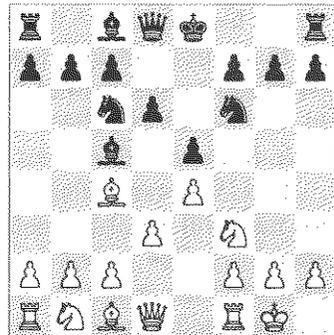
In the diagram (♢) White can win a pawn with 1. dxc5. In their own games students will generally not hesitate when this kind of opportunity presents itself: grab all you can! Unfortunately, a capture on c5 shatters White's pawn structure. Aside from this, Black can easily regain the pawn with 1. ... Re8. The question of how White should protect the pawn is an interesting one. The best move is **1. Ke3**. The rook on a1 has other work to do: it can become active on the b-file. Pieces must cooperate and divide the work.



It is important to have a plan in mind when playing moves. Moves should be aimed at improving your own position or at weakening the position of your opponent.

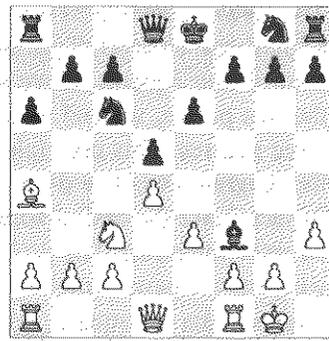
The diagram (♣) shows an example from the initial phase of a game. White plays **1. Be3**. After **1. ... Bxe3 2. fxe3** White can boast the following advantages:

- an extra pawn in the centre, allowing the possibility of d3-d4
- greater activity for the rook
- control of the d4-square



Although it is true that White has a doubled pawn, on balance the position favours White.

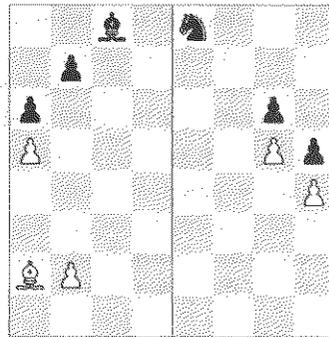
In the diagram (♁) it goes without saying that White should capture on f3 with the queen rather than with the pawn. However, White should first of all capture on c6. After **1. Bxc6+ bxc6 2. Qxf3** White can follow up with **3. Na4**. The doubled pawn on the c-file is a major weakness. With White having a firm grip on c5, Black is unable to get rid of the doubled pawn. In addition, the pawn on a6 is weak now that it is no longer protected by the b-pawn. Note, finally, the improved position of the White knight.



Improving the position of your pieces is a good mini plan in any position. This plan may include:

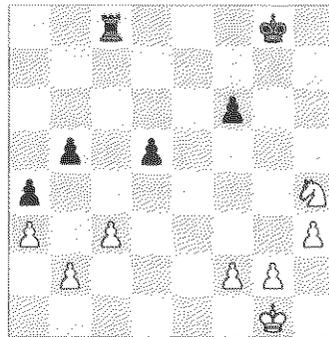
- increasing piece mobility (developing pieces, moves aimed at the centre)
- attacking your opponent's pieces
- tying up your opponent's pieces

In the left part of the diagram (♂) White plays **1. Bd5**. This move further activates the bishop, attacks the pawn on b7 and ties the black bishop to c8. It is clear that with this move White has improved his position considerably.

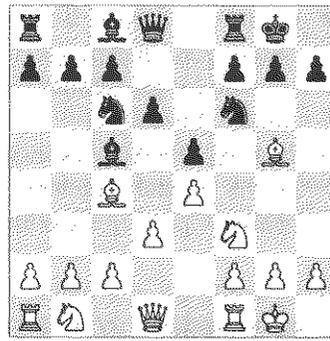


In the right part Black can increase the activity of his knight with the manoeuvre **Ne8-g7-f5**. From f5 the knight attacks the pawn on h4 and controls part of the centre.

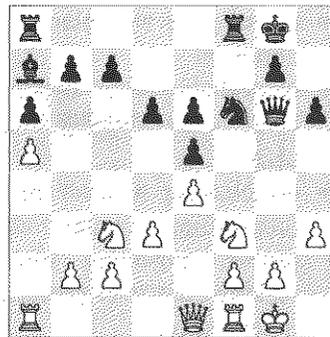
In the diagram (♁) Black must activate his rook. Students will suggest **1. ... Re8** or **1. ... Rc4**. However, after **1. ... Re8 2. Kf1** the rook will have to remain passive, while after **1. ... Rc4 2. Nf5 Nd4** White is still restricting the rook (and the king, at least for the time being). The correct move is **1.**



... **d4**, a temporary pawn sacrifice, with the aim of penetrating with the rook. After **2. cxd4 Rc2** (or, better still, **2. ... Rc1+ 3. Kh2 Rc2**) the b2-pawn drops, after which Black's queenside pawns are unstoppable. In the diagram (↑) White plays the natural developing move **1. Nc3** with the aim of going to d5, from where the knight attacks the pinned Black knight on f6. With this manoeuvre, White threatens to demolish Black's kingside position. This is another example of a mini plan.



Finding the correct move in the diagram (⇒) presents more of a challenge. The problem for the students is that all the pieces are already occupying reasonably good squares. Experienced players will be quick to play **1. ... Nh5** here. Although the knight is played to the edge of the board, its potential is much increased. In addition, Black introduces two threats: **2. ... Ng3** (winning the exchange) and **2. ... Rxf3** (winning a piece). White can counter both threats with **2. Kh2**, but then Black can play **2. ... Nf4** (threatening mate on g2). Black's position has improved, since the knight on f4 controls more squares on the opponent's side of the board.



The objective of the 'mini plan' is to teach children to think more effectively during their games. Here is a summary of the mini plans considered so far:

- improving your pawn structure (forming a duo or undoubling a doubled pawn)
- weakening your opponent's pawn structure (creating a doubled pawn)
- improving the position of your pieces (e.g. activating your pieces)

- ensuring a proper division of labour between your pieces (this piece is more suitable for protection, this piece is more suitable for attack)
- creating attacking chances (aiming your pieces at the opponent's side of the board, or placing them there)

The examples discussed in this chapter need not necessarily be covered in a single lesson. What is more important is that the various mini plans outlined are discussed in relation to the students' own games. Other mini plans that can be taken into account include:

- exchanging well-placed pieces of your opponent
- neutralizing your opponent's attacking chances (exchanging strongest attacking piece)
- establishing a good piece cooperation (controlling squares, attacking enemy pieces, protecting your own pieces, making sure your pieces are not in each other's way)
- weakening the position of your opponent's pieces (e.g. by fencing them in; see also lesson 13)

The workbook Step 3<sup>+</sup> contains more examples.

## **PRACTICE**

The ideal acquisition for this lesson is a simultaneous display. During this display the students must pay extra attention to the subject matter of this lesson. Students must experience the importance of having a goal in mind when playing a game.

## Workbook

- Mini plan / Weakening the opponent's pawn structure: A* ♔

**Explanation:** The problem with the exercises that deal with mini plans is that, in the eyes of the students at least, they have 'mini-effects': the rewards gained from a mini plan are small. Fortunately, the drawing in the workbook suggests that minor actions can produce major effects.

**Mistake:** The suggested solution is incorrect.

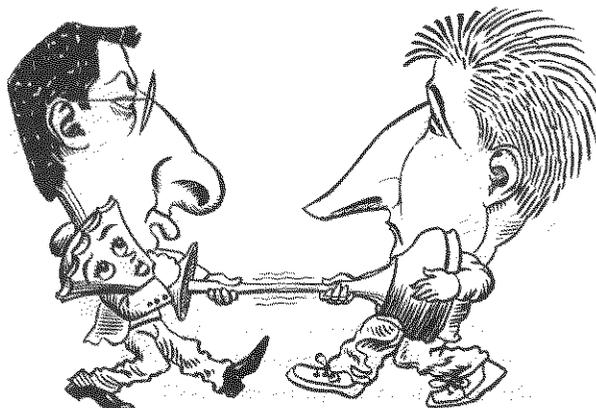
**Help:** Ask the student why he thinks his move is good. Make sure you also give your own evaluation of the move. It is likely that the student's suggestion has not resulted in a change in the pawn structure. Ask the student to try another move.

## ANSWERS

- Mini plan / Weakening the opponent's pawn structure: A*

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1) 1. c6 bxc6 2. Bxa6               | 2. Nxc5                    |
| 2) 1. e6 fxe6 2. Ng5                | 8) Drawing                 |
| 3) 1. Bxf5 gxf5 2. Nh4              | 9) Drawing                 |
| 4) 1. a6 bxa6 2. Bxc6               | 10) 1. f6                  |
| 5) Drawing                          | 11) 1. ... c6 2. Bxc6 Rxb2 |
| 6) Drawing                          | 12) 1. ... c5 (to stop d4) |
| 7) 1. Bxf6 gxf6 2. Nh4; 1. ... Bxf6 |                            |

Boris Gelfand and Michael Adams



**GOAL OF THE LESSON**

- learning to save difficult positions

**PRIOR KNOWLEDGE**

- draw (Step 1)
- recognizing danger

**ACQUISITION****Concepts**

perpetual

**Instruction**

In Step 1 the students have learned two ways to make a draw:

- insufficient material (2 kings)
- stalemate

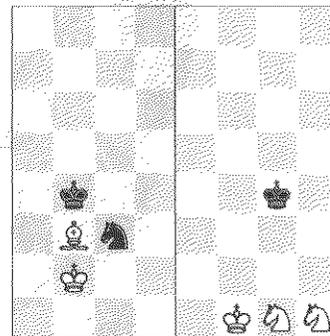
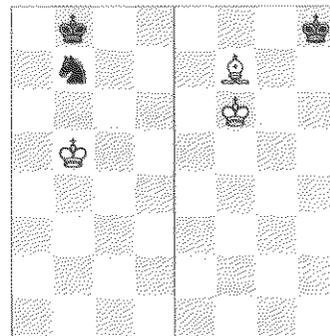
This chapter considers these two ways to make a draw in more detail. In addition, three novel ways to make a draw will be introduced.

We begin this lesson by looking at some other positions which lack the amount of material required for mate.

The positions in both parts of the diagram (⇒) speak for themselves. It is impossible to construct a mating pattern with just a knight or a bishop, let alone give mate.

The diagram (⊕) shows piece combinations with which it is possible to achieve mate; however, when it comes to *forcing* mate, these piece combinations are insufficient.

The position with two knights alone is the hardest to grasp. Why is it that a 6-point advantage is insufficient? It is no problem



to think up a mating pattern with the king in the corner. But in a real game this can be achieved only if Black cooperates; and this is, of course, not likely to happen.

At Step 3 level stalemate is a quite frequent occurrence, because students find it hard to keep their concentration. It is important to stress that the students should stay focused when their opponent has hardly any moves left.

Stalemate can also be used as a weapon. It is a good plan to play for stalemate in a lost position. This requires you to cleverly lose the last of your mobile pieces!

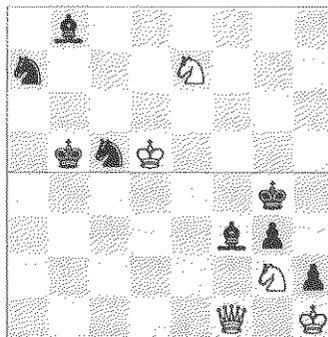
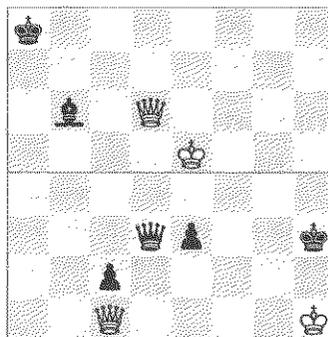
In the diagram (⇒) Black is way down on material. But after 1. ... **Bc7** White is more or less forced to play 2. **Qxc7**, stalemating Black.

In the lower part of the diagram little can be done against 1. ... **Qd1+**; yet here, too, the weaker side succeeds in achieving stalemate: 1. **Qxe3+ Qxe3**.

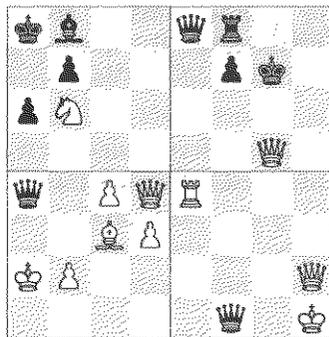
The diagram (♠) contains two examples that are more difficult. In the upper part of the diagram White must make sure to get rid of the black bishop. As we have seen, two knights are insufficient for a win. Thus, White can achieve his aim with 1. **Nc6 Nd7** 2. **Nxb8 Nxb8**, leaving a drawn position. Black can also respond with 1. ... **Nxc6**, but in that case White is stalemated.

In the lower part of the diagram the rule of stalemate offers Black an attractive escape. He plays 1. ... **Kh3**, after which White has nothing better than 2. **Qxf3**.

The first novel form of drawing introduced in this lesson is that of perpetual check. This method can sometimes be used as a kind of 'emergency brake'. By continually giving check, a draw can be achieved.



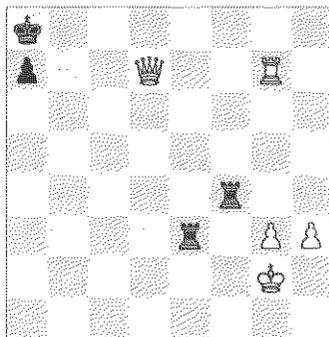
The diagram (♁) illustrates four different forms of perpetual check. In the top left-hand corner Black is two pawns up, but his king lacks breathing space. After 1. ... **Ka7** 2. **Nc8+ Ka8** 3. **Nb6+** Black cannot escape the checks.



In the top right-hand corner White is down a rook and a pawn. Still, White can draw by giving a perpetual check on g5 and h5.

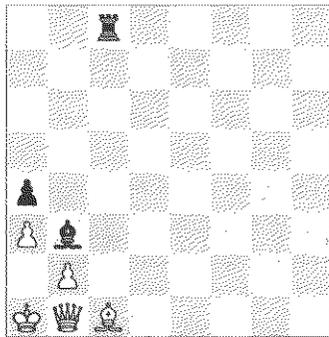
The bottom left-hand corner offers much the same picture. After 1. **Kb1 Qd1+** 2. **Ka2 Qa4+** 3. **Kb1 Qd1+** White must agree to a draw.

The bottom right-hand corner offers a quite different picture. The white king is unable to escape; White can only get out of check by interposing his queen. All the same, it is a perpetual check after 1. **Qg1 Qh3+** 2. **Qh2 Qf1+**. Note that 1. ... **Df3+** 2. **Dg2** is not such a good idea.



These examples show that it is sensible to make a draw only if you are (way) down on material. The possibility of perpetual check comes in handy when you are faced with a mating threat that cannot be countered.

An example of the latter case is illustrated in the diagram (♁). White not only has an array of mating threats with the queen, but he also attacks the rook on f4. Black can reach a draw by means of a perpetual: 1. ... **Re2+** 2. **Kg1!** (2. **Kh1?** **Rf1** mate) 2. ... **Re1+** 3. **Kg2** (3. **Kh2?** **Rf2** mate) 3. ... **Re2+**.



A perpetual attack resembles a perpetual check. In this case, it is not the king that is the target of attack but a valuable piece, in most cases the queen.

The first example is provided in the diagram (♁). Black forces the white queen to a2 by 1. ... **Bc2**. After 2. ... **Bb3** the queen

is forced to go back to b1, after which Black once more plays the bishop to c2.

A similar situation can be observed in the diagram (♠). Here the White knight keeps 'chasing' the queen: after 1. Ng6 Qh7 2. Nf8 Qh8 we arrive once more at the diagram position.

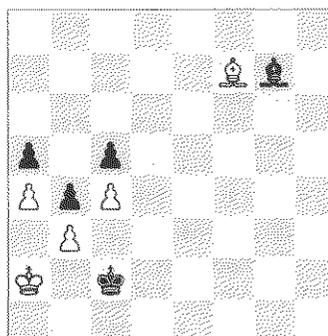
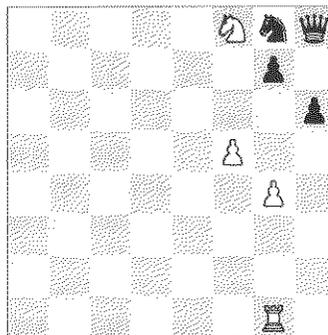
In both examples the same position can be reached a couple of times. If the same position is reached at least three times, with the same player to move, it is possible to claim a draw. The game will then end in a draw.

The last drawing form to be discussed is a draw by agreement. Sometimes a position arises in which, although there is sufficient material left for mate, neither side is likely to lose (provided that no grave mistakes are made, of course). In such cases the players can agree to a draw.

In the diagram (♣) Black has come a long way towards winning. Still, if White keeps playing bishop moves (e.g. Bf7-d5-f7-d5), Black will not be able to make any further progress. This is therefore an example of a position in which a draw can be agreed.

We end this discussion with an overview of the different forms of drawing:

- insufficient material to give mate
- stalemate
- perpetual check
- perpetual attack
- draw by agreement



## PRACTICE

### Reminder

◇ Draw

## Workbook

*Draw / Perpetual check: A* 

Explanation: The positions on this exercise sheet are such that the side that is to move must manage to achieve a draw. He can do this by giving a perpetual check. In their answers the students need to write down one repetition of moves only.

Mistake: The enemy king can escape.

Help: Ask the students to correct their mistakes themselves. No further assistance is required.

*Draw / Stalemate: A*  

Explanation: The side that is to move must try to lose his pieces in a clever way. Another strategy that can be employed is to pin one's own pieces. Make sure, too, that the king has no more moves left.

Mistake: The king can still make a move.

Help: Ask the students to correct their mistakes themselves. If need be, the students can mark the escape squares that are available to the king. No further assistance is required.

*Draw / Mix: A*  

Explanation: Ask the students to first find the correct drawing method. It is preferable to look for general characteristics first, and only then for specific moves. The themes include forcing stalemate, giving perpetual check, perpetual attack, and drawing on account of insufficient material.

Mistake: The exercise has not been solved correctly.

Help: Ask the student to explain his suggested solution. Adapt your assistance to the answer given.

## ANSWERS

*Draw / Perpetual check: A*

- |                       |                   |                     |
|-----------------------|-------------------|---------------------|
| 1) 1. Qe8+ Kh7 2.     | Qf1+              | Nf6+                |
| Qh5+ Kg8 3. Qe8+      | 4) Drawing        | 7) 1. Rxc6+ fxc6 2. |
| 2) 1. Qg5+ Kh7 2.     | 5) Drawing        | Qxc6+ Kh8 3.        |
| Qh5+ Kg7 3. Qg5+      | 6) 1. Nf6+ Kf8 2. | Qh6+                |
| 3) 1. ... Qf2+ 2. Kh1 | Nxh7+ Kg8 3.      | 8) 1. Nf7+ Kg8 2.   |

- Nh6+ Kh8 3. Nf7+ 10) 1. ... Ne3+ 2. Kg1 Qg5+ Kh8 3. Qf6+  
 9) 1. ... Rd2+ 2. Kb1 Nf5+ 3. Kf1 Ne3+ 12) 1. ... Ng3+ 2. Kh2  
 Rd1+ 11) 1. Nh5+ gxh5 2. Nf1+ 3. Kh1 Ng3+

□ *Draw / Stalemate: A*

- |  |  |                               |
|--|--|-------------------------------|
| 1) 1. Dd4+ (1. Db4+?<br>axb4) 1. ... Kxd4<br>stalemate       | 5) 1. De7+ Dxe7<br>stalemate                             | 9) 1. Kh4 Txh3<br>stalemate   |
| 2) 1. Kc4 Txb8<br>stalemate                                  | 6) 1. Dg6+ Lxg6<br>stalemate                             | 10) 1. Ka6! Dxc6<br>stalemate |
| 3) 1. Tc1 Dxc1<br>stalemate (1. ...<br>Kd3 2. Txc3+<br>Kxc3) | 7) 1. Db7+ Dxb7<br>stalemate                             | 11) 1. Pe2+ Dxc3<br>stalemate |
| 4) 1. ... Kh8 2. Dxf7  | 8) 1. Df5+ Dxf5<br>stalemate (1. ...<br>Kh6 2. Df6+ Dxf6 | 12) 1. Pd5+ Lxd5<br>stalemate |

□ *Draw / Mix: A*

- |                               |   |  |
|-------------------------------|---|--|
| 1) 1. ... Ne5+ 2. Kf5<br>Nxd7 | 6) 1. Rf4+ Qxf4<br>stalemate            | 10) 1. Rf6+ Bxf6<br>stalemate; 1. ...<br>Kxf6 2. Kxb2          |
| 2) 1. Bg3 Qxg3 pat            | 7) 1. ... c1N+ (1. ...<br>c1Q? 2. Qa2#) | 11) 1. Rxg7+ Kxg7 2.<br>Qg5+ Kh8 3. Qf6+                       |
| 3) 1. Rh7+ Kg8 2.<br>Rg7+     | 8) 1. ... Qe6+ 2. Qxe6<br>stalemate     | 12) 1. ... Bg5 2. Qg3<br>Bf4 3. Qh4 (3. Qf3<br>Bg5) 3. ... Bg5 |
| 4) 1. Rb2+ Nc2 2.<br>Rxa2     | 9) 1. Bb6 Qe7 2. Bc5<br>Qd8 3. Bb6      |  |
| 5) 1. Rb2 and 2. Rxc2         |   |  |



**GOAL OF THE LESSON**

- learning a new attacking technique

**PRIOR KNOWLEDGE**

- twofold attack

**ACQUISITION****Concepts**

X-ray check, X-ray attack

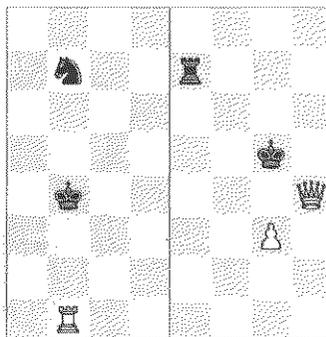
**Instruction**

This lesson introduces a special form of the twofold attack, i.e. the X-ray check and the X-ray attack, and outlines the various types of X-ray combinations that line pieces can execute. This type of combination is also referred to as 'skewer'. We have instead opted for the term X-ray, since this makes it possible to distinguish between X-ray check, X-ray attack and X-ray protection.

An X-ray attack involves a single piece that attacks two targets, one of which is placed behind the other. The most simple example of this type of attack is the X-ray check.

In the diagram (♠) the rook attacks the king. The king is forced to move aside, after which White is free to take the knight. That is, the rook 'sees' the knight through the intervening king; the king is the front piece, the knight is the back piece. This scenario is similar to that of an X-ray photograph.

In the right part of the diagram the white queen is giving check. If the king moves,



the queen can take the rook. This, then, is another example of an X-ray check: the white queen sees right through the king, as it were. In X-ray checks the front piece is always the king, and therefore a more important piece than the back piece. Students are expected to have few problems grasping the concept of X-ray check.

The X-ray attack is in some respects more difficult than the X-ray check. First of all, an attack on a piece other than the king is less forcing. In addition, it is in some cases possible for the front piece to protect the back piece.

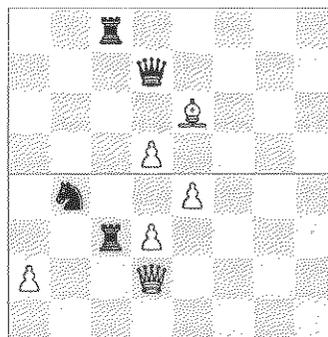
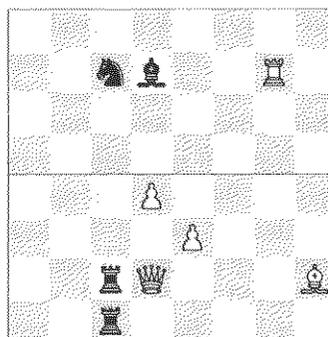
The upper part of the diagram (⇒) contains an example of an X-ray attack. The rook attacks the bishop; if the bishop moves, the rook can take the knight.

In the lower part of the diagram the white queen is attacked. If the queen moves, the bishop will be unprotected. Since the queen is unable to protect the bishop, the bishop will be lost. What makes an X-ray attack similar to an X-ray check is that here, too, the attacking piece can see the back piece 'through' the front piece.

The front piece is usually a more valuable piece than the back piece. More discussion on this issue can be found at the end of this lesson, under the header 'Information'.

The upper part of the diagram (⇓) contains an example of an X-ray attack that involves a profitable exchange. The bishop attacks the queen, and through the queen the rook. After the queen moves, White can win the exchange.

In the lower part Black will lose material on account of White's pawns. The black rook cannot move to b3 or c4; the knight cannot move to d5 to protect the rook.



In the diagram (†) we can see a back piece that is attacked once and protected once. With an X-ray attack White can attack the back piece for the second time.

In the upper part of the diagram White can play **1. Rc8**. After **1. ... Qg5** (protecting the knight) White continues with **2. Rxc8**, the rook being supported by the bishop on e6.

In the lower part of the diagram we can see a scenario that occurs regularly in actual play. After the X-ray check **1. ... Rh1+**, the c1-rook is insufficiently protected.

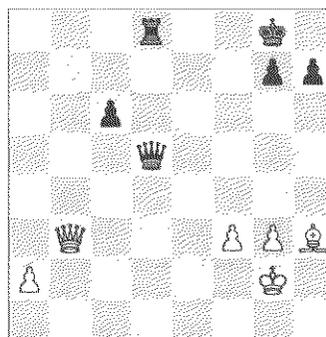
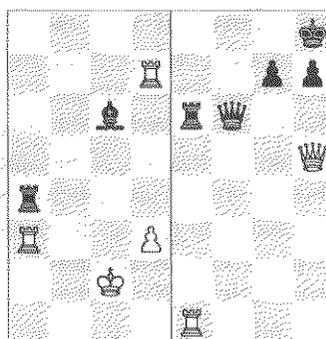
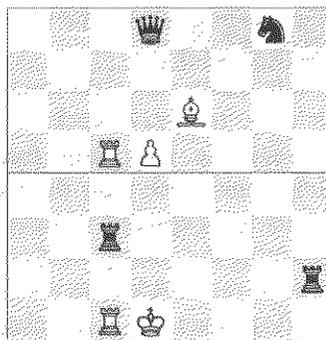
Queens, rooks and bishops that attack each other also exert an indirect influence on the squares behind the enemy piece. This type of X-ray attack is already familiar from the lesson on 'defending against mate' in Step 2, and it offers a range of possibilities to both attacker and defender. With this type of X-ray, it is possible to protect your own pieces 'through' your opponent's pieces.

In the left part of the diagram (⇒) White must try to save his rooks. This cannot be achieved by **1. Rxa4**, which costs a rook after **1. ... Bxa4+**. The correct defence is **1. Ra7**, after which both rooks are protected. This move will continue to amaze the students!

In the right part of the diagram the e1-rook is seeing right through his colleague on e6. White can give mate with **1. Qe8+ Rxe8 2. Rxe8+**.

This defensive type of X-ray can also be used for attacking purposes. In the diagram (♣) **1. Qxd5** is simply met with **1. ... cxd5**. Note, however, that the queen controls e6 by X-ray, so that White has the surprising – and decisive – **1. Be6+**.

The X-ray motif can also play a role in



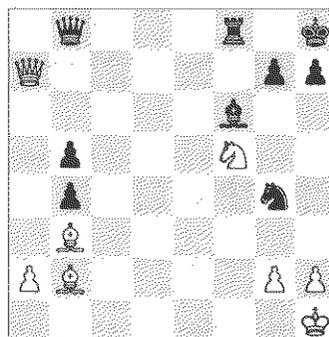
other types of combinations; see lesson 1<sup>+</sup> of Step 3<sup>+</sup>.

### Search strategy

How should the students go about solving this lesson's exercises?

The search strategy:

1. Which pieces are positioned on the same line (file, row or diagonal) as the king?
2. Give a clever check, which will allow you to take the back piece after the king has moved.
3. Which pieces are 'seeing through' their colleagues?



In the diagram (♠) the bishops on the long diagonal are attacking each other. Hence, the white bishop is also indirectly attacking g7. The pawn on g7 is attacked three times and protected only twice. The right move is therefore easy to find: **1. Qxg7+ Bxg7 2. Bxg7#.**

## PRACTICE

### Reminder

◇ *X-ray*

### Workbook

- Double attack / X-ray check: A* ♠

Explanation: The attack is aimed at the king. Giving check will win material. Give check in such a way that the king must move and the back piece can be captured.

Mistake: Being inattentive.

Help: Tell the student to try again.

- Double attack / X-ray attack: A* ♠

Explanation: The attack is now aimed at an important piece, behind which another piece is positioned. This piece has a greater

- Mistake: value than the piece executing the attack.
- Mistake: Being inattentive.
- Help: Tell the student to try again.

## ANSWERS

### Double attack / X-ray check: A

- |                |                            |
|----------------|----------------------------|
| 1) 1. ... Rh5+ | 7) 1. Rc7+                 |
| 2) 1. ... Bh7+ | 8) 1. Qc6+                 |
| 3) 1. ... Rh1+ | 9) 1. Qh8+                 |
| 4) 1. Bg5+     | 10) 1. Bc5+ (1. Bh4+? Kd7) |
| 5) 1. Rc8+     | 11) 1. ... Bh5+            |
| 6) 1. ... Rc1+ | 12) 1. Qd6+                |

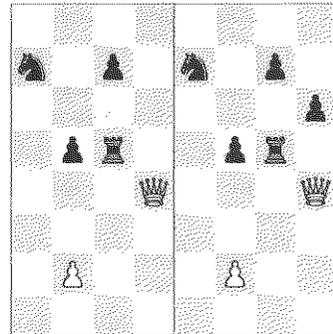
### Double attack / X-ray attack: A

- |               |               |
|---------------|---------------|
| 1) Drawing    | 7) 1. Bd5     |
| 2) Drawing    | 8) 1. Be6+    |
| 3) 1. ... Rc8 | 9) 1. ... Bb8 |
| 4) 1. ... Bg5 | 10) 1. Bd6    |
| 5) 1. Bc5     | 11) 1. Qh2    |
| 6) 1. ... Ba6 | 12) 1. Be7    |

## INFORMATION

The concept of the X-ray attack is similar to that of the pin. In a pin the back piece is **always** the most valuable piece. Hence, it is tempting to suggest that in an X-ray attack it is always the front piece that has the greatest value. This is indeed almost always the case.

In the left part of the diagram (♣) we can see an X-ray attack. In the right part of the diagram the front piece is more valuable than the back piece; but, given that 1. Qxg5 is not a threat, we are not dealing with an X-ray attack. The rook cannot move, and is therefore pinned. Hence, after 1. f4 we are

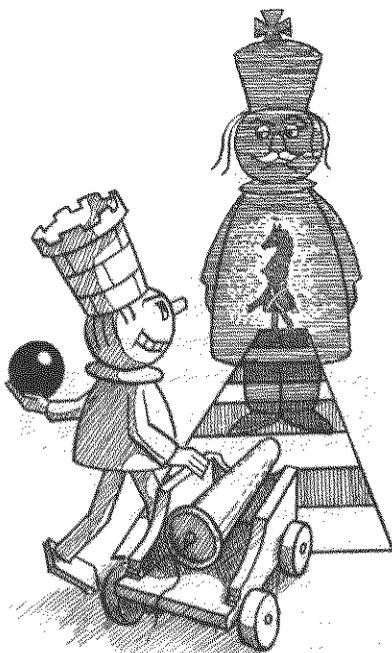
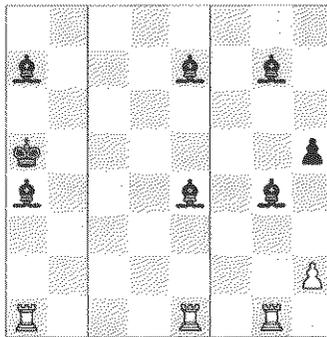


dealing with an attack on a pinned piece.

In the left part of the diagram (♠) we can see that the bishop on a4 is pinned. The back piece is more valuable.

In the middle part of the diagram the front and back piece are of equal value. In line with the terminology adopted, we consider this to be an example of an X-ray attack (note, however, that we might also regard this to be an example of a pin). The point to note is that the front piece is in danger of being captured.

In the right part of the diagram we can see an example of a pin rather than of an X-ray attack. Although the bishop on g4 is not in immediate danger, it is pinned. White can attack the pinned bishop with **1. h3**.



**GOAL OF THE LESSON**

- learning good, healthy opening play
- using opening play as a weapon

**PRIOR KNOWLEDGE**

- piece activity
- the three golden rules

**ACQUISITION****Concepts**

ignoring

**Instruction**

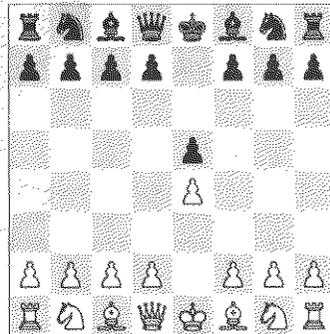
Two previous lessons have been devoted to the opening:

- the 3 golden rules;
- completing the opening; being ahead in development.

If we apply these rules to our games, our pieces will end up on good squares. All the same, we have not yet discussed some of the factors that are relevant in opening play. The aim of this lesson is to offer a number of guidelines for good opening play. These will allow us to better understand which moves to play.

After the moves **1. e4 e5** we arrive at the diagram (♘). From White's point of view the black pawn on e5 is in the way, since it keeps White's pieces from the important d4-square. White should therefore try to attack e5. This can be done in four different ways: by **2. Nf3**, **2. f4**, **2. d4** and **2. Qh5**.

Let us consider the knight move first. After



1. e4 e5 2. Nf3 White attacks the pawn on e5, which Black can protect with 2. ... Nc6. The stage is set: White is attacking, Black is defending. In chess, it is important to try and force your opponent to perform unpleasant tasks.

This goes for White as well as for Black, of course. Consider next 2. f4. After 1. e4 e5 2. f4, Black has a choice between three basic plans: capturing, defending and ignoring (diagram ♠).

1) capturing: 2. ... exf4

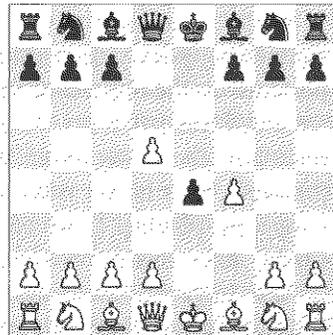
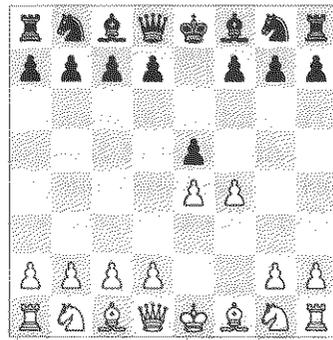
Black takes the pawn that is on offer, and thereby moves his own pawn away from the centre of the board; White sacrifices a pawn in return for a central advantage, and hopes to regain his pawn at a later stage in the game. Capturing the f-pawn has taken Black some time, which he could otherwise have used to develop a piece. White's central advantage and gain of time (i.e. one move) is counterbalanced by Black's extra pawn. Whether White's set up is justified, the rest of the game will tell.

2) defending: 2. ... Nc6

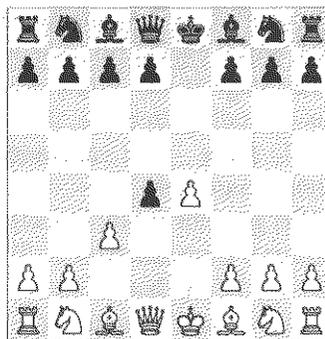
Black defends by playing a waiting move and develops a piece in the process.

3) counterattack: 2. ... d5

With this move Black is turning the tables: now White has the option of taking a pawn. Note, however, that 3. fxe5 is countered by 3. ... Qh4+, winning on the spot. 4. g3 runs into 4. ... Qxe4+, with a double attack that nets Black a rook. 4. Ke2 is also hopeless. Black wins the queen after 4. ... Qxe4+ 5. Kf2 Bc5+ 6. Kg3 Qxe5+ 7. Kf3 Qh5+. This shows that White must meet 2. ... d5 with 3. exd5. Black then proceeds with 3. ... e4 (diagram ♡), which prevents White's piece development. This will gain Black some



time because, unlike White, he can develop his pieces unhindered.



The third way to attack e5 is by playing 2. d4. After 1. e4 e5 2. d4 Black can take on d4: 2. ... exd4. If White plays the unwise 3. Qxd4, Black can respond with 3. ... Nc6, developing a piece and forcing White to make another queen move. For this reason it is advisable to play 3. c3 (diagram ♠) rather than 3. Qxd4.

White offers another pawn in order to gain time and take control of the centre.

The fourth and last way to attack e5 (i.e. 2. Qh5) can no longer be taken serious at Step 3 level. While it is true that this is an active move, the queen is too vulnerable on h5 on account of her value. All Black has to do to gain the upper hand is be careful. After 2. ... Nc6 3. Bc4 g6 the queen has to move. White's queen moves cost precious time, which is better spent developing.

The aspects of opening play discussed can be summarized as follows:

1. sacrifice a pawn for more control of the centre and/or gain of time;
2. defending and maintaining;
3. ignoring (i.e. counterattacking).

When it comes to attacking play (1 and 3), it is vital to bring the pieces out to good squares as quickly as possible so as to put pressure on the opponent. So, after 1. e4 e5 we attack the pawn on e5, and when Black maintains the pawn on e5 we increase the pressure. That is, we refrain from losing a tempo by playing 1. e4 e5 2. d4 exd4 3. Qxd4, since this move can be met with 3. ... Nc6. In general, we select a playing style (i.e. a strategy) that we consider to be the

most attractive. When discussing students' games, it is important that we show them alternatives to the moves they have played at appropriate points in their games (it is particularly important to show that the best move is not always a capturing move!).

## PRACTICE

### Finishing a game(-position)

It is very useful to have the students finish a game using one of the positions discussed as starting position. A simultaneous display is best suited for this purpose, although the students can also play against each other. Students who have finished playing can go on to do a mixed exercise sheet.

## Workbook

*Test / Repetition: B*



Explanation: The positions are familiar. Problems are to be expected only if the students have insufficiently mastered the subject matter. In that case it is advisable to repeat old material rather than to continue with new material.

*Test / Mix: D*



Explanation: The themes of the positions have been covered in lessons 6–10 of Step 3: eliminating the defence (capturing + mate, chasing away + mate, luring away + mate, defending against double attacks, drawing, X-ray checks and X-ray attacks). The various topics need not necessarily be discussed again; rather, this depends on the students' previous scores with mixed exercises. An in-class discussion of the first few positions is usually a good start.

Mistake: The suggested solution is incorrect.

Help: Successfully tackling mixed exercise sheets requires using the correct search strategy. Ask the students to first list the

characteristics of the position, and then ask them to give the right search strategy. With the correct approach, the students' performances will in many cases exceed their own expectations.

*Test / Mix: E*



Explanation: The themes of the positions do not only involve those outlined in Step 3, but also those discussed in Step 2.

**ANSWERS**

*Test / Repetition: B*

- |                            |                                |
|----------------------------|--------------------------------|
| 1) 1. Qf7+ Kh8 2. Qf8#     | 7) 1. ... Bf6                  |
| 2) 1. Bd6                  | 8) 1. ... Rxc4 and 2. ... Ba3# |
| 3) 1. Nxc7+ Bxc7 2. Bb5#   | 9) 1. Rb2                      |
| 4) 1. ... Qe6+ 2. Qxe6 pat | 10) 1. ... Rf6+                |
| 5) 1. Rxc6+ fxc6 2. Rxc6+  | 11) 1. f5                      |
| 6) 1. Qh8+                 | 12) 1. ... Ng3+                |

*Test / Mix: D*

- |   |  |
|---|--|
| 1) 1. Nxf6+ Qxf6 2. Qxh7#<br>(capturing + mate)               | 8) 1. Kh1 (1. Bxc5+ Kxc5 is winning for Black) 1. ... Qxf2 (stalemate)                     |
| 2) 1. ... Qf5 (X-ray attack)                                  | 9) 1. ... Rh7 en 2. ... Rxb7 (draw due to insufficient material)                           |
| 3) 1. ... Rd8 2. Qxb6 Rxd1+<br>(attack on a pinned piece)     | 10) 1. ... Qd8+ (double attack of the queen; tempting – but wrong – is 1. ... Qf4+ 2. Be3) |
| 4) 1. Nxd7 Rxd7 2. Rxh6#<br>(capturing + mate)                | 11) 1. Qf3 (double attack of the queen; tempting – but wrong – is 1. Qb7 Nxd4)             |
| 5) 1. ... Rd1+ 2. Bf1 Qh1#; 2. Rf1 Qxg2# (luring away + mate) | 12) 1. Ba4+ Kd5 2. Bb3+ (draw by perpetual check)  |
| 6) 1. ... Ra1+ 2. Ke2 Rxc1 (X-ray check)                      |  |
| 7) 1. ... Rg6 (defence against a double attack)               |  |

*Test / Mix: E*

- |  |  |
|--|--|
| 1) 1. Ng6+ (1. Nc6+ Kf7 2. Nxd8 is insufficient; White is too far down on material) 1. ... Kf7 2. Nxc8# (double check) |  |
|  | 2) 1. Qxc7 Qxc7 2. Re8+ (luring away + mate) |
|  | 3) 1. Qg6+ (perpetual check)                 |

- 4) 1. ... Ke4 (square of the pawn, shielding off)
- 5) 1. ... Qg7 (defence against double attack)
- 6) 1. Rf4+ Kxf4 (stalemate)
- 7) 1. e4 (attack on a pinned piece)
- 8) 1. ... Rf8 (pinning)
- 9) 1. Qxc5+ Qxc5 2. Ba6# (capturing + mate)
- 10) 1. Qxh5 gxh5 2. Bh7# (mate through access)
- 11) 1. Bxg6# (double check)
- 12) 1. Qc5+ and 2. Qxb4!; 2. Qxa7? Re1# (double attack by the queen)



# 12 Defending against a pin

## GOAL OF THE LESSON

- learning how to defend in specific situations

## PRIOR KNOWLEDGE

- the three forms of pinning

## ACQUISITION

### Concepts

none

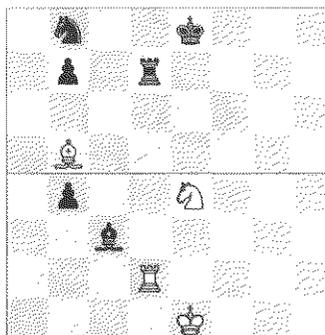
### Instruction

So far we have considered the pin as an attacking weapon only. In this lesson we will look at the different ways in which we can take defensive measures against a pin. This will involve the – by now – familiar forms of defending: interposing, capturing, protecting and moving away.

The upper part of the diagram (⇒) contains a straightforward example. Interposing the knight on c6 renders the pin innocuous; the front piece, i.e. the rook, is protected.

The lower part of the diagram contains a simple example involving a capture. The d2-rook is pinned. White can free himself from this pin simply by taking the pinning bishop with the knight.

Defending by means of protecting offers a greater variety of options. The diagram (♠) lists the various possibilities. Consider first a piece that, while not itself involved in the pin, protects the pinned piece. In the upper part of the diagram Black can play either **1. ... Bb7** or **1. ... Bd7**. These moves do not



neutralize the pin completely, but the extra support does mean that the pin is harmless, at least for the time being.

Another defensive possibility involves the back piece protecting the front piece. In the lower part of the diagram White can play either **1. Rf1** or **1. Rd3**, thereby eliminating the pin and protecting the pinned piece.

The third defensive possibility involves the front piece protecting the back piece. In the left part of the diagram (♠) White can play **1. Bb2** or **1. Bd2**. With these moves, White eliminates the pin without losing material. It goes without saying that this method can be successful only if the back piece is not worth more than the pinning piece.

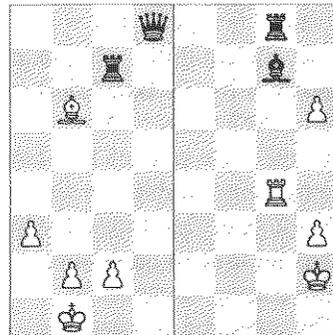
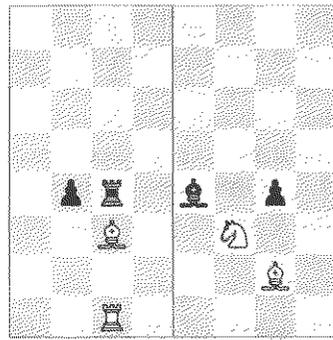
In the right part of the diagram White can play the knight to e1 or h4; after which the bishop is protected.

The next defensive possibility, i.e. that of counterattack, is familiar from the lesson on defending against a double attack. The most straightforward counterattack is one that involves check. Two such types can be distinguished: either the front piece gives check or the back piece gives check.

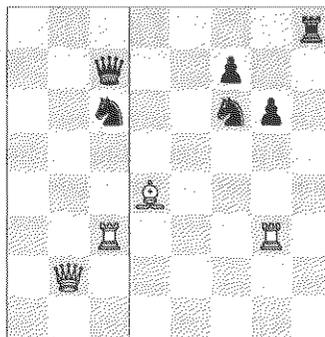
The diagram (♚) gives an example of each type. In the left part of the diagram the back piece can escape the pin. Black plays **1. ... Qd1+**, after which the rook is free to play.

In the right part of the diagram Black can eliminate the unpleasant pin against his bishop by giving check on e5.

The form of counterattack that is by far the most difficult, but also the most attractive, is one which does not involve check. As is the case for counterattacks with check, both the front and the back piece can execute this type of attack.



In the left part of the diagram (♁) we can see a counterattack of the back piece on an important enemy piece (this piece should be more valuable, or at least as valuable as, the front – i.e. pinned – piece). Black plays **1. ... Qb8**. Now capturing on c6 is out of the question on account of the unprotected queen on b2.

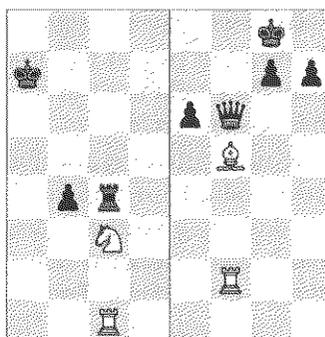


Defending against a pin by a counterattack on a piece of equal value can be successful only if the attacked piece is unprotected.

In the right part of the diagram the front piece can execute an attack on an important piece with **1. ... Nh5** or **1. ... Ne4** (2. Re3 Re8)

A familiar type of counterattack against a pin is the discovered attack. This form of attack is possible if the back piece is a line piece (i.e. a queen, rook or bishop). These pieces look indirectly at the pinning piece.

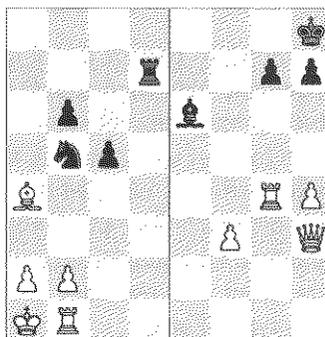
The diagram (♁) contains two examples. In the left part of the diagram White wins the exchange with **1. Nb5+**. In the right part of the diagram White wins the queen with **1. Bxh7+**.



The last type of counterattack that must be considered is that of a mating threat. Here, too, the counterattack can be executed by both the front and the back piece. In the left part of the diagram (♁) the knight on b5 cannot be saved, but with **1. ... Nd4** Black can successfully eliminate the pin. The point is that **2. Bxd7** runs into the sobering **2. ... Nc2** mate.

In the right part of the diagram Black has an uncomfortable pin against white's rook. White can free himself with **1. Rf4**. Black has no time to capture on h3 on account of the mating threat on f8.

The material discussed so far has already



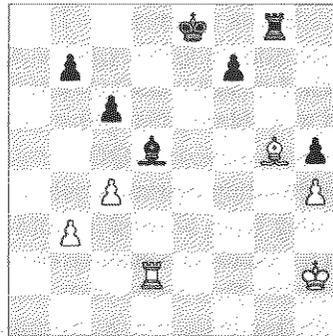
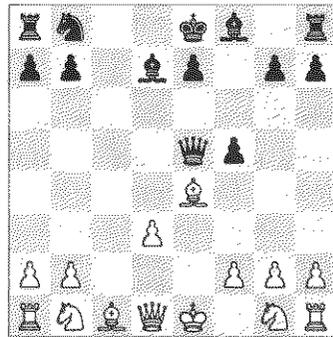
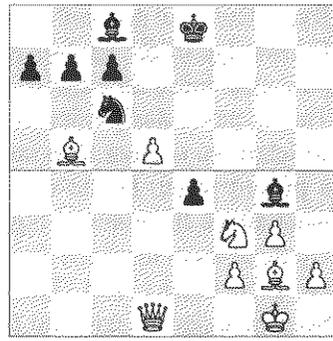
been covered in previous lessons. The main relevance of the present chapter is therefore to repeat certain points made earlier. In our experience, the students have few problems doing this lesson's exercises. Applying the various defensive strategies to their own games is, unfortunately, another matter altogether.

We now continue our overview by looking at some positions that often arise during actual play. In the diagram (♠) we can see a familiar pin. White has just attacked the pinned piece with 1. d5. The right defence is to attack the pinning piece with 1. ... a6. After 2. dxc6 axb5 Black has little to complain. It is better for White to play 2. Ba4 b5 3. dxc6 (if the bishop moves, the knight will also move) 3. ... bxa4. Black is left with a number of weak pawns, but this is preferable to the loss of a piece.

The diagram below also contains a pin that occurs fairly regularly in practice. Here the attack on the pinning piece is insufficient: 1. h3 exf3 2. hxg4 3. fxg2. If the black king is still on e8, 1. Qe1 is often possible (this is usually better than 1. Qe2, since then the pin remains in force).

Chasing away the pinned piece is likely to have more success if we are dealing with a queen. In the diagram (⇒) White can save his bishop on e4 with 1. Nf3 Qe6 2. Ng5 Qe5 3. d4 (or 3. f4).

In the diagram (♣) the d5-bishop is pinned and attacked by the pawn on c4. Moving the bishop away is impossible on account of the mate on d8. Black's defence lies in a straightforward counterattack. 1. ... f6 kills two birds with one stone: Black prevents the loss of a piece by attacking Bg5 and creates a flight square for his king. After 1.



**Bxf6** Black can proceed with **1. ... Be6**.

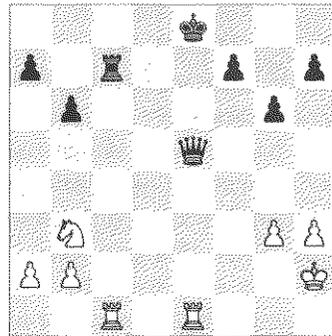
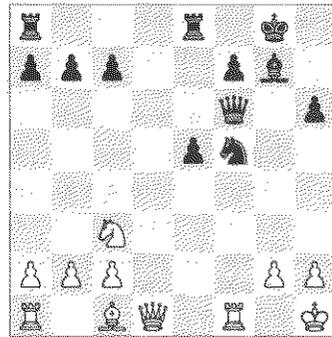
Knowledge of the various defences against pins also helps to exploit your own pins. This is particularly relevant in positions in which there is more than one way to attack a pinned piece. In the diagram (♁) White must attack the pinned knight on c5. There are three ways in which this can be done: 1. b4, 1. Ne4 and 1. Rc1. The pawn move has been included to reiterate the 'en passant' rule. This pawn move does not occur very often, and not all students will remember it correctly. The knight move also does not yield White anything. After 1. Ne4 Black can get out of the pin simply by trading the knights on e4 with check. Thus, the correct move is **1. Rc1**, winning a piece.

We now remove both bishops from the starting position, and ask the students if they can still see a winning move for White. There is not: 1. Rc1? Nd3+.

The back piece in a pin is in many cases a line piece. In such cases the pinning side must be careful, as the defender may come up with unexpected discovered attack. In the diagram (♁) the knight on f5 is pinned. White has a number of ways in which he can further attack the pinned piece.

Ask the students to note down the various possibilities, together with a list of possible defences (if present). The list should look like this: 1. Qh5? Ng3+; 1. Qg4+? Ng3+; 1. Qd7+? Ng3+; 1. Qd3? e4! 2. Nxe4 Rxe4 3. Qxe4 Ng3+; 1. g4? Qc6+. The correct queen move is **1. Qf3**.

Defending against a pin may also involve other types of combinations. In the diagram (♁) Black can uncork the beautiful **1. ... Rc2+**. This move lures the c1-rook away, forcing it to give up the protection of Re1.



If White replies with a king move to h1, Black continues with **1. ... Rxc1**, pinning the rook on e1.

In games it is generally advisable to try and get out of a pin, since pins always present a latent danger.

### Search strategy

The search strategy for the exercises is straightforward:

1. Find the pin.
2. Defend by means of interposing, moving away, protecting or capturing.
3. Is it possible to launch a counterattack?

In the diagram (⇒) Black can save the pinned knight on c5 with a counterattack:

**1. ... Qb6**. White has no time to capture on c5 because of the threat **2. ... Bh2+**.



### PRACTICE

#### Reminder

◇ *Defending against a pin*

### Workbook

□ *Defending / Defending against a pin: A* 

Explanation: The pin on the board threatens to cost material. In each of the positions there is a possible defence which prevents the loss of material. In some cases the defence against the pin even nets material, but this is not usually the case. It is a good idea to inform the students of this, given that most of the exercises in the workbook require winning material.

Mistake: The pin costs material.

Help: Students should find out themselves why their suggested move is insufficient. After this, the different defensive options can be discussed in a step-by-step fashion.

*Defending / Defending against a pin: B* 

Explanation: See exercise sheet A.

## ANSWERS

*Defending / Defending against a pin: A*

- |                                       |                              |                  |
|---------------------------------------|------------------------------|------------------|
| 1) 1. ... c6                          | Qg5? 2. Rae1 ; 1. ...        | 9) 1. ... Nxf3+  |
| 2) 1. ... Ne6 (1. ...<br>Ne4? 2. f3)  | Qe6 2. Bc4 and 3.<br>Rfe1)   | 10) 1. ... Ne6   |
| 3) 1. ... Rd7 (1. ... Rc7<br>2. Rxc7) | 6) 1. ... Rxe2               | 11) 1. Ne2       |
| 4) 1. Ne2                             | 7) 1. Bd3; 1. Rfb2 ?<br>Rcb7 | 12) 1. ... Qxg2+ |
| 5) 1. ... Qxc2 (1. ...                | 8) 1. Be2                    |                  |

*Defending / Defending against a pin: B*

- |                                       |  |                |
|---------------------------------------|--|----------------|
| 1) 1. Ng5+                            | 5) 1. Bxf7+                            | 10) 1. Nb4     |
| 2) 1. ... Nxf3! 2. Rxc2<br>Ne1+       | 6) 1. ... Rxd1; 1. ...<br>Rd4? 2. Qe8+ | 11) 1. Qh5+    |
| 3) 1. Rh1                             | 7) 1. ... Qf6                          | 12) 1. ... Qa8 |
| 4) 1. ... Nd3+; 1. ...<br>Ng4+ 2. Kg3 | 8) 1. ... Rd8                          |                |
|                                       | 9) 1. Nd3                              |                |

**GOAL OF THE LESSON**

- learning the relation between the value, position and function of pieces

**PRIOR KNOWLEDGE**

- activity and vulnerability

**ACQUISITION****Concepts**

temporary, lasting, permanent

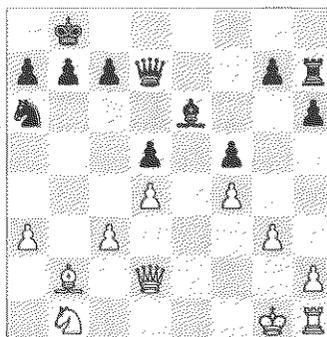
**Instruction**

Each chess piece has a certain value. This value is relative and depends on a number of factors. For instance, we have already seen that a piece can function optimally only at certain positions. Pieces that do not function optimally generally lack mobility. Pieces that lack mobility:

- cannot function properly, or to the best of their potential.
- can be lost (run the risk of being lost).

Pieces that do not function properly include pieces that are positioned at the edge of the board as well as pieces that are positioned on squares from where there are no or only bad moves available. Some examples are given in the diagram (♠):

- The black knight on a6 is on the edge of the board and can only move backwards.
- The black rook on h7 is obstructed by its own pawns.
- The black bishop on e6 is hemmed in by the pawns on d5 and f5.
- The white rook on h1 is out of play on



account of the king and the pawn.

- The white bishop on b2 is hemmed in by its own pawns.
- The knight on b1 is unable to play since it is hindered by its own pieces.

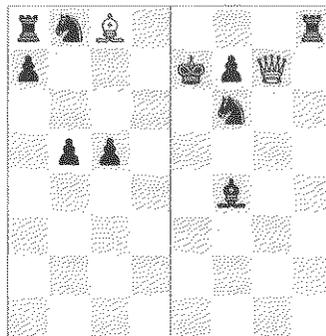
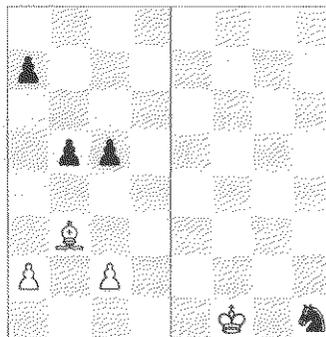
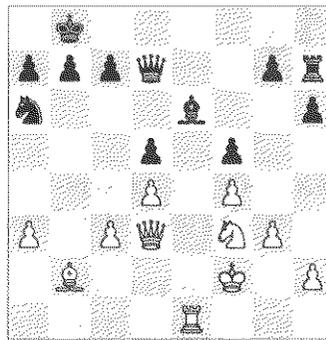
The situations as illustrated in the diagram should if possible be avoided. Pieces must have sufficient mobility. White can easily move his queen, rook and knight to better positions. This is what has happened in the diagram (♠). Fortunately, bad pieces can often be moved towards better squares and obstructing pieces can be moved away. In such cases the disadvantage is temporary (although it does take time). In other cases, however, a piece's lack of mobility can be of a permanent nature. This is something that may befall bishops in particular. Because of the way the white pawns are positioned, there is very little that White can do with his b2-bishop. In this case, we are dealing with a lasting, or permanent, disadvantage.

In some cases, a badly placed piece may even be lost. The next two diagrams contain familiar examples of piece entrapment. In the left part of the diagram (⇒) **1. ...c4** nets the bishop on b3. The students' games contain many cases of this form of bishop entrapment.

In the right part of the diagram we can see that a knight in the corner is an easy prey. With **1. Kg2** White attacks the knight and denies an escape via g3 at the same time. The loss of the knight is due to its position on the board.

In the diagram (♠) **1. ...Bb7** nets the rook on a8. The rook is unable to escape because it is blocked by its own pieces.

In the right part of the diagram Black can



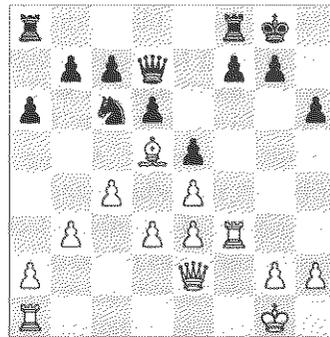
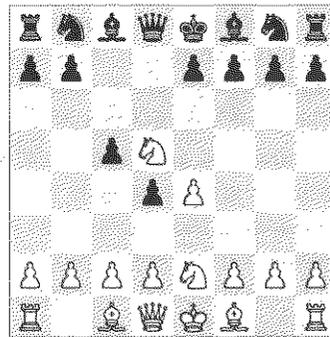
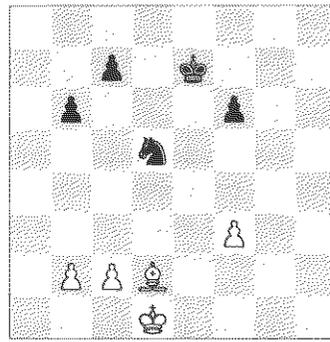
trap the queen with 1. ... Rg8. The rook attacks the queen and denies her an escape square on the g-file. Note that in this example the entrapment is caused in the most part by enemy pieces.

In general, pieces that occupy a square on the edge of the board are less mobile than more centrally placed pieces. These pieces can therefore be entrapped more easily. All the same, a centrally placed piece can also fall victim to entrapment.

In the diagram (♠) the knight on d5 has no place left to go. The squares on White's side of the board are controlled by the d2-bishop while the squares on Black's side of the board are occupied by black pawns. As a result, White can win the knight with 1. c4.

A knight can also be trapped – in the centre of the board! – as the result of careless opening play. After the opening moves 1. e4 c5 2. Ne2 d5 3. Nbc3 d4 4. Nd5 (see the diagram ⇒) the knight on d5 can get back via f4 only. Black therefore plays 4. ... g5, after which the threat of e6 is decisive. White can delay matters with 5. d3 h6 (5. ... e6 6. Bxg5 Qxg5 7. Nc7+), but now 6. ... e6 can no longer be avoided. White will lose a piece.

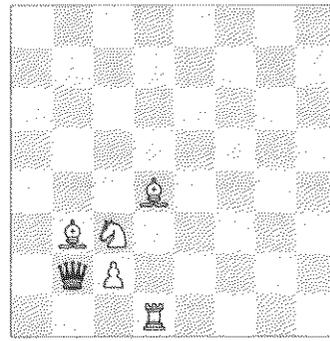
The position in the diagram (♣) is taken from a game between Daan Visscher and Erik van Nassau, as played in the Dutch under-12 national championship (Rijswijk 2000). The bishop seems to be much more active than the knight. But appearances are deceptive. White has advanced his pawns to c4 and e4, blocking a bishop retreat. Black could have cashed in by playing the surprising 1. ... Nd8. The threat of c6, trapping the bishop, cannot be countered. If



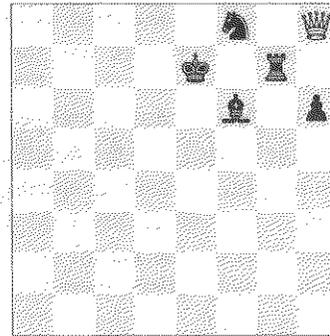
the pawn on b3 had been on b2 instead, White could have escaped with the loss of a pawn by playing 2. c5. In the game, Black continued with 1. ... b5 and lost.

In some cases, other combinations play a role in piece entrapment. An example is a discovered attack in which the pieces that form the battery are helping each other.

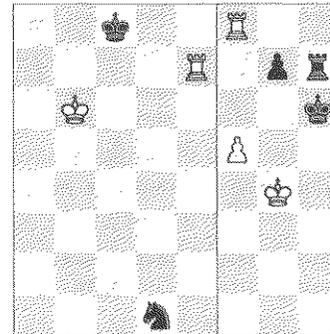
In the diagram (♠) the black queen is located within the target range of the white bishop. The knight (i.e. the front piece) must find an attacking target. The appropriate target is the square a3, cutting off the queen's retreat. After 1. Nb5 or 1. Nb1 White wins the queen.



In the diagram (♢) the rook's task is to protect the h6-pawn. After 1. ... Rg6 White will lose the queen. The black pieces must find a proper division of labour. The bishop is attacking the queen and the rook is protecting h6. Incorrect is the move 1. ... Rh7. Attacking the queen twice is not necessary. White can escape with 2. Qg8.



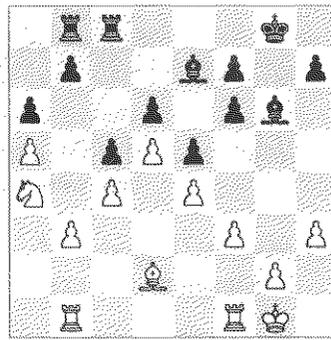
The positions in the diagram (♣) are more difficult. In the left part of the diagram White must try to trap the black knight. The knight is positioned on the edge of the board, but it does seem to be able to escape. A rook is unable to control four squares and attack the knight at the same time. Still, the badly placed black king gives White the opportunity to trap the knight. Black has no decent move after 1. Re2. The knight can move to c3, but after 2. Rc2 the pin nets White the knight. A king move to the d-file, on the other hand, gives White the possibility of a double attack.



In the right part of the diagram 1. Rg8 puts an end to Black's resistance. Regardless of Black's reply, it is mate on the next move.

In the positions that were considered so far, piece entrapment led to the loss of material. But badly placed pieces cannot always be won, of course. In many cases misplacing a piece has strategic consequences, the point being that such pieces no longer take part in the game.

In the diagram (♠) White can shut out the bishop on g6 permanently with **1. g4**. This pawn move is necessary to prevent Black from playing f5. White can now open the position on the other side of the board with b4. Since the white-squared bishop is out of play, Black is effectively a piece down on the queenside.

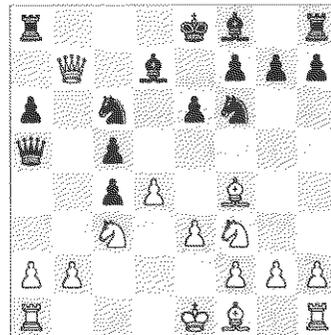


### Search strategy

The search strategy required to correctly solve the exercises is as follows:

1. Which piece has little or no mobility?
2. Attack this piece!
3. Make sure that the squares available to this piece remain under your control.
4. With a single move you can attack a piece and control squares at the same time.

In the diagram (⇒) the queen on b7 is in distress. If it were not for the bishop on f4, **1. ... Rb8** would do the trick. Observe, however, that the queen has no available squares on the b-file. Hence, **1. ... Ra7** is sufficient.



### PRACTICE

#### Workbook

- Mobility / Trapping: A* ♞

Explanation: The students must find pieces that lack mobility. Such pieces can be trapped. Some of the positions require the

students to not only attack immobile pieces, but to also control escape squares.

Mistake: The piece that should be trapped is attacked, but the move played offers new escape squares.

Help: Put the position on a board, play the suggested move, and ask what your opponent can play now.

*Mobility / Trapping: B* 

Explanation: See exercise sheet A

## ANSWERS

*Mobility / Trapping: A*

- |               |                |
|---------------|----------------|
| 1) 1. a4      | 7) 1. ... c4   |
| 2) 1. Ne3     | 8) 1. Bd2      |
| 3) 1. h4      | 9) 1. e5       |
| 4) 1. ... Rh8 | 10) 1. ... Nf6 |
| 5) 1. ... Nh4 | 11) 1. Be2     |
| 6) 1. Na4     | 12) 1. ... Nb8 |

*Mobility / Trapping: B*

- |                       |                |
|-----------------------|----------------|
| 1) 1. ... Qa5         | 7) 1. Nh4      |
| 2) 1. a4              | 8) 1. ... c4   |
| 3) 1. e5 dxe5 2. fxe5 | 9) 1. Kg3      |
| 4) 1. g4              | 10) 1. Nf4     |
| 5) Drawing            | 11) 1. Nc4     |
| 6) 1. Nc3             | 12) 1. ... Bg6 |

**GOAL OF THE LESSON**

- learning basic endgame skills
- improving pawn endgame skills

**PRIOR KNOWLEDGE**

- the square of the pawn

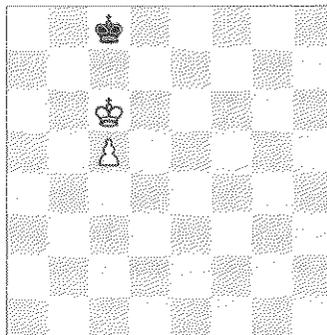
**ACQUISITION****Concepts**

key square

**Instruction**

Winning a king + pawn vs. king endgame requires promoting the pawn. The question of whether this is possible has already been discussed in the lesson on the square of the pawn. There we saw that the pawn can be assisted by the king, which, among other things, can be used to shield off the enemy king. The present lesson is concerned with pawn endgames in which the side with the king has taken up a defensive position. These endgames cannot be won as easily as the ones considered so far. When it comes to the type of endgame discussed here, two things are important:

- recognizing a winning position
  - knowing how to win a winning position
- We start by considering the diagram (♠), which contains a position that is winning for White, regardless of whether it is White's or Black's move. If Black is to move a possible variation is **1. ... Kd8 2. Kb7** (assisting the pawn and shielding off



the king). Now White has gained control of the promotion square, so that the pawn can advance to c8. If White is to move: **1. Kd6 Kd8 2. c6 Kc8 3. c7 Kb7 4. Kd7**, and the control of the promotion square ensures an easy win.

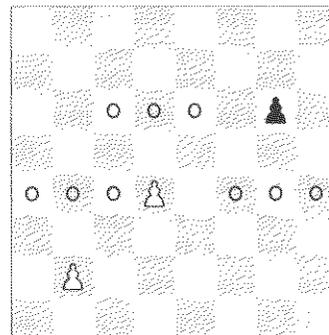
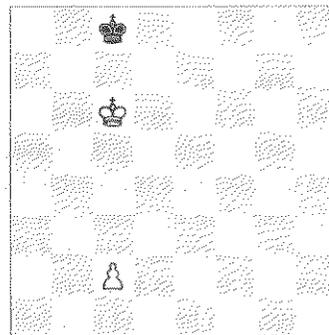
Positions in which the white king is on the 6<sup>th</sup> rank, in front of his pawn, are always winning for the pawn side (provided the black king cannot take the pawn of course). The same goes for Black, in which case the king should be positioned on the 3<sup>rd</sup> rank, again in front of the pawn. Note, however, that these positions are winning only if the pawn is not placed on the a-file or h-file.

In the diagram (⇒) White also has an easy win. White can reach the exact same position as in the previous diagram: after **1. c4 Kd8 2. c5 Kc8** White wraps up.

Now that we know that a king on the 6<sup>th</sup> rank is winning for the pawn side, the next thing we must know is how to reach this type of position. Here the concept of 'key square' becomes relevant. If the king occupies a key square, then he will also be able to occupy a position on the 6<sup>th</sup> rank in front of the pawn.

Each pawn has its own key squares. The location of these squares depends on the position of the pawn. In the diagram (⊕) the key squares have been indicated by means of the symbol 'o'. The b2-pawn has the key squares a4, b4 and c4; the d4-pawn has the key squares c6, d6 and e6. The black pawn on g6 has the key squares f4, g4 and h4. Given a particular pawn position, the pattern of key squares is fixed.

The rules outlined above cannot be applied to the rooks' pawns (i.e. the pawns on the a- and h-file). In Manual 3<sup>+</sup> a separate



lesson is devoted to rooks' pawns.

We have seen that king + pawn vs. king endgames are winning for the pawn side if the king manages to occupy a key square. It is very important that the students practice playing these positions.

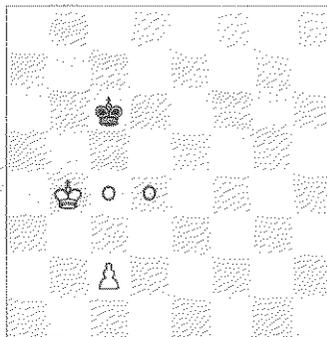
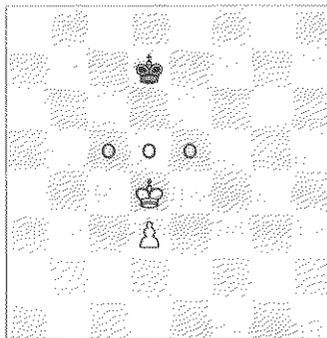
As a preparation to playing these positions we discuss the position in the diagram (♠). White plays **1. Kd5**. The king occupies a key square, which allows White to win the endgame.

A possible variation is: **1. Kd5 Ke7 2. Kc6** (the king wants to reach d6. Note that **2. d4?** is a bad move; it changes the pattern of key squares, allowing Black to draw with **2. ... Kd7 2. ... Ke6** (Black tries to control d6 for as long as possible) **3. d4 Ke7 4. d5 Kd8** (now Black is forced to relinquish his control of d6) **5. Kd6** and wins (see the first diagram for discussion of this).

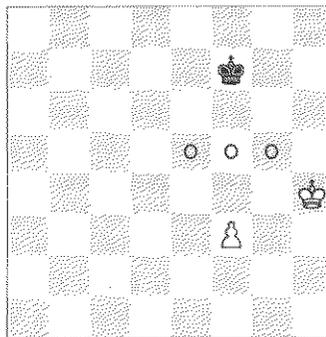
Key squares are quite literally the key to winning king + pawn vs. king endgames. After discussing the theory behind key squares, the students must now practice by finishing game positions. This can best be done by means of simultaneous display. Experience shows that there are enormous differences in the students' performances. This is because the subject matter involves spatial thinking.

The last two diagrams illustrate some possible starting positions.

In the diagram (♣) the king of the pawn side is already occupying a key square. All the same, White must exercise care when it comes to advancing his pawn. Bad are **1. c4 Kb6** and **1. c3 Kb6**; in both cases Black manages to draw. A better strategy is to force back the black king: **1. Kc4 Kb6 2. Kd5 Kc7 3. Kc5 Kd7 4. Kb6** etc.



In the diagram (♠) the winning side must first occupy a key square with his king. In this position White manages to win by playing a clever pawn move at the right time. After **1. Kg5 Kg7 2. Kf5 Kf7** White continues with **3. f4 Ke7 4. Kg6**, reaching a familiar winning position.



## PRACTICE

### Reminder

#### ◇ *Key squares*

The first two positions only.

## Workbook

#### *Pawn ending / Marking the key squares: A* ♠

Explanation: The students must mark the key squares of the pawn.

Mistake: The wrong key squares have been marked.

Help: Ask the student to consult the reminder.

#### *Pawn ending / Key squares: A* ♠

Explanation: For each position the students must first mark the key squares of the pawn (by writing them down or by marking them in the diagram), and only then indicate the right move. It is advisable to give each student his own board. This will allow the trainer to walk around and finish game positions against each of the students in turn (a game can be considered as finished after promotion of the pawn). It is impractical to ask the students to note down all the moves.

Mistake: The pawn is advanced too soon.

Help: If this is a structural rather than an incidental error, then the only solution is to go through the lesson once more. Where are the key squares?

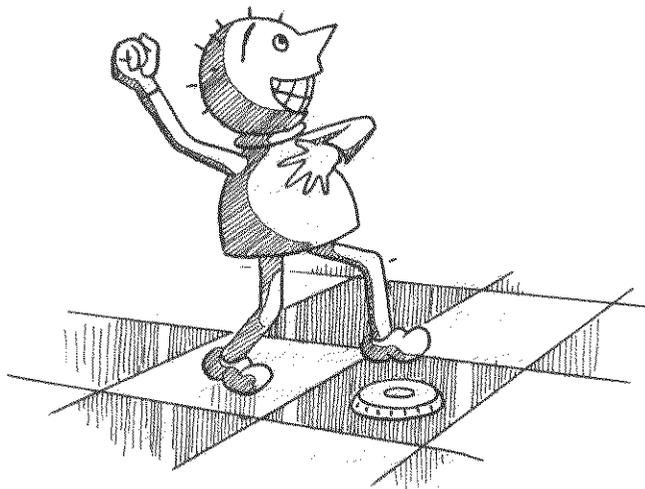
## ANSWERS

□ *Pawn ending / Marking the key squares: A*

- |               |                       |               |
|---------------|-----------------------|---------------|
| 1) a4, b4, c4 | 5) c6, d6, e6         | 9) a5, b5, c5 |
| 2) e4, f4, g4 | 6) b7, b8, c8, d8, d7 | 10) Drawing   |
| 3) e7, f7, g7 | 7) b3, c3, d3         | 11) Drawing   |
| 4) b3, c3, d3 | 8) f2, g2, h2         | 12) Drawing   |

□ *Pawn ending / Key squares: A*

- |   |   |
|---|---|
| 1) 1. Kc6 Kd8 2. Kb7  | 7) 1. Ke5 Ke7 2. Kd5 (or first 2. d4) 2. ... Kd7 3. d4            |
| 2) 1. Kg6 Kg8 2. g5 Kh8 3. Kf7                                      | 8) 1. Ke6 (1. e4 Kf8 2. e5 Ke8 3. Ke6) 1. ... Kf8 2. e4 Ke8 3. e5 |
| 3) 1. Kg5 Kh7 2. Kf6  | 9) 1. b3 (1. Kb4 Kb6 2. b3) 1. ... Kb6 2. b3                      |
| 4) 1. Kd6 Ke8 2. Kc7 (2. d5 also wins of course, but less quickly)  | 10) 1. Ke6 Kg7 2. f5 Kf8 3. Kf6                                   |
| 5) 1. Kb6! (1. b6? stalemate) 1. ... Kb8 2. Ka6 Ka8 3. b6 Kb8 4. b7 | 11) 1. g8D+ Kxg8 2. Kg6   |
| 6) 1. c5 Kc8 2. Kc6 Kb8 3. Kd7                                      | 12) 1. Kd5 Ke7 2. Kc6   |



**GOAL OF THE LESSON**

- learning about the limitations of a pinned piece

**PRIOR KNOWLEDGE**

- the pin

**ACQUISITION****Concepts**  
function**Instruction**

We have already looked at two aspects of the pin in previous lessons: the pin as a direct attacking weapon, and exploiting a pin by further attacking the pinned piece. Discussing a couple of examples from the relevant lessons will serve as a good introduction to the present lesson.

The aim of the present lesson is to show that the function of a pinned piece is weakened, or may even be lost altogether.

In the diagram (♣) we can see a pin against the king. The knight on c6 has the function of protecting the bishop on b4, which is attacked by the white knight. However, the c6-knight is pinned by the rook. White can therefore take the knight with 1. Nxb4, after which Black cannot take back. This shows that the pinned knight is not a good defender.

In the right part of the diagram Black can win a knight with 1. ... Rxc2+ 2. Kxc2 Rxb4. But Black has an even better continuation. Since the knight on g2 is pinned,



the black rook is free to take on h4. In both examples, therefore, the knights are unable to fulfil their defensive task on account of a pin against the king.

The diagram (♁) contains two examples of a pin against material. In the left part of the diagram the c8-king has been replaced by a rook. Here, too, capturing on b4 will net White a piece. What makes this position different is that Black can recapture the knight. Observe, however, that this is not advisable, since then Black will lose even more material.

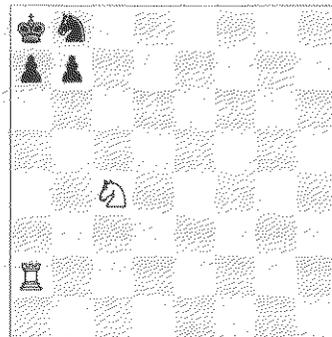
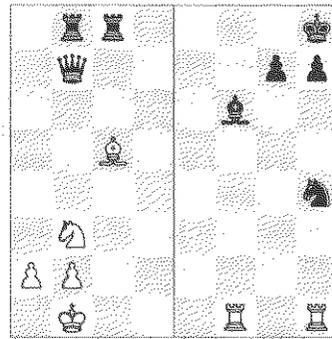
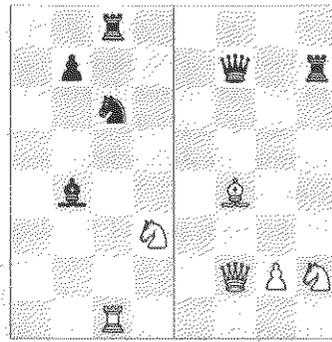
In the right part of the diagram Black can play 1. ... **Rxh2**. The f4-bishop is not a good defender because of the pin along the f-file.

The diagram (♂) contains two examples of a pin against a square. In the left part of the diagram the knight on b3 keeps the black force on the b-file in check. However, this does mean that the knight cannot at the same time defend the bishop on c5. Hence, Black can win a piece with 1. ... **Rxc5**.

In the right part of the diagram White is unable to give mate on f8 with the rook on account of the black bishop. White can, however, safely play 1. **Rxh4**. Pins against a square are almost as powerful as pins against the king. In both types of pins, the pinned piece cannot fulfil any defensive function.

Many combinations are based on the fact that pinned pieces are not good defenders. Such combinations are not only aimed at material, but also at mate.

In the diagram (♁) the pin on the a-file allows White to give mate. If the rook on a2 was not there, b6 would be protected by the a7-pawn. But with the rook present this

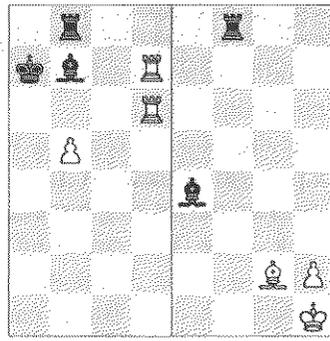


pawn is no longer a good defender: White can play **1. Nb6** mate.

In left part of the diagram (⇑) Black suffers a similar fate. The black bishop is not protecting a6. White can give mate with **1. Ra6** mate.

In the right part of the diagram the pin on the bishop on g2 means that f1 is unprotected. Black can play **1. ... Rf1** mate.

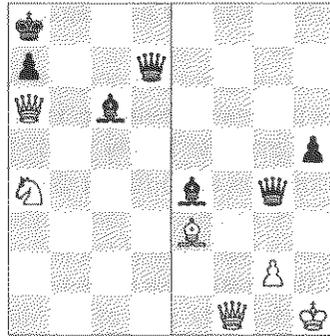
The exercise sheet *Pin / Mate thanks to a pin* that accompanies this lesson contains examples of this kind.



In the games played by the students double attacks are often possible because of a pin that is present. The diagram (⇔) contains two illustrative examples.

In the left part of the diagram White can win the queen with a knight fork on b6. This move is possible because of the pin of the a-pawn.

In the right part of the diagram White has an exposed king on h1 and an unprotected bishop on e3. The pin on the g-pawn allows Black to cash in with a double attack. With **1. ... Qh3+** Black picks up the bishop.



In each of the examples considered above the pinned piece is not a good defender. In practical play students often fail to exploit this weakness. Combinations based on pins are missed by skilled players, and certainly also by players of Step 3 level. This is not surprising. After all, it is easier to grasp the concept of material than it is to grasp the concept of function. Moves that involve 'pinning' and 'attacking a pinned piece' are not as often missed as moves that are based on the fact that 'a pinned piece is not a good defender'.

### Search strategy

The search strategy that is required for the exercises can be explained with the help of the diagram (♁).

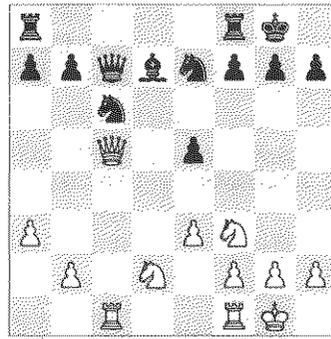
1. Which pieces are pinned? (Nc6)
2. Which defensive functions does the pinned piece have?

(The knight is protecting e5 and Ne7; it does not protect any important squares)

3. Which piece can you capture; or where can you give mate?

4. Is the back piece adequately protected?

If White plays 1. Nxe5 he will lose a piece after 1. ... Qxe5. The correct move is 1. Qxe7.



### PRACTICE

#### Reminder

◇ *A pinned piece is not a good defender*

#### Workbook

- Pin / Mate thanks to a pin: A* ♁

Explanation: This exercise sheet is easy. It offers a good illustration of the fact that a piece that is pinned against the king cannot fulfil any defensive function.

Mistake: The suggested solution does not lead to mate.

Help: Ask the student to try again. If the student does not find the correct solution, it is perhaps helpful to replace the pinned piece by another piece, in such a way that mate in one is now possible. More generally, it is advisable to go through the basic points once more with these students.

- Pin / A pinned piece is not a good defender: A* ♁

Explanation: The presence of a pin makes it possible to win material. This possibility is there because of the pin. The themes include double attack, mate in one and capturing an 'unprotected' piece.

Mistake: The correct solution is not found.  
 Help: Ask the student to explain the merits of his suggested move. If the problem lies in the function of the pinned piece, then this piece can in most cases be replaced by another piece (a knight usually does the trick).  
 Mistake: The student fails to see the pin against a square (position 12).  
 Help: Which of the opponent's pieces is in the way? (This is the knight on g6). Having spotted this, the student will now realize that the knight is in fact a pinned piece: the knight is defending against mate on h7, and so cannot move. This implies that the bishop on e7 is effectively unprotected.

*Pin / A pinned piece is not a good defender: B.* ♖ ♗

Explanation: See exercise sheet A. The themes on this sheet are slightly different. They include double attack, mate in one, capturing an 'unprotected' piece and trapping a piece.  
 Mistake: The suggested answer for position 2 is 1. ... Bxg2 or 1. ... Nxg2. Although both moves make use of the pin on Bf1, they are incorrect. In both cases White can respond by eliminating the defender (1. ... Bxg2 2. b5; 1. ... Nxg2 2. Rxf4+). The students should find this out for themselves.

*Pin / Mix: A* ♖ ♗ ♗

Explanation: This exercise sheet covers each of the three forms of the pin ('pinning', 'attacking a pinned piece' and 'a pinned piece is not a good defender'). As far as Step 3 level students are concerned, this exercise sheet is suitable for good students only, as some of the positions are quite hard (the sheet is suitable for all Step 4 level and Step 5 level students). One of the difficult aspects of this sheet is that it contains examples of the 'double' pin.

Mistake: (Too) many mistakes.  
 Help: Tell the students not to continue with this exercise; they can try again at a later stage.

## ANSWERS

*Pin / Mate thanks to the pin: A*

- |             |                |             |                 |
|-------------|----------------|-------------|-----------------|
| 1) 1. Qxd7# | 4) 1. ... Qf1# | 7) 1. Qxf5# | 10) 1. Qxh7#    |
| 2) 1. Nb6#  | 5) 1. Qxh7#    | 8) 1. Rf8#  | 11) 1. ... Re1# |
| 3) 1. Qg8#  | 6) 1. Qb6#     | 9) 1. Rxe6# | 12) 1. Nf7#     |

*Pin / A pinned piece is not a good defender: A*

- |                           |                 |             |             |
|---------------------------|-----------------|-------------|-------------|
| 1) 1. Nf6+                | 3) 1. ... Ng3#  | 7) 1. Bxf6  | 11) 1. Qd8# |
| 2) 1. c8Q (1. Bxd6+? Kd7) | 4) 1. ... Nxe2+ | 8) 1. Qf8#  | 12) 1. Rxe7 |
|                           | 5) 1. Bxd5      | 9) 1. Rxe7  |             |
|                           | 6) 1. Rxe6+     | 10) 1. Rxe4 |             |

*Pin / A pinned piece is not a good defender: B*

- |   |                                    |                       |                   |
|---|------------------------------------|-----------------------|-------------------|
| 1) 1. Nc6+  | b5)                                | 6) 1. Bxd7 (1. Qxd7?) | 10) 1. ... Qc3... |
| 2) 1. ... Ne2+ (1. ... Bxg2? 2. Rxf4+; 1. ... Nxg2 2. | 3) 1. Rxb4                         | 7) Drawing            | 11) 1. Qxd5       |
|   | 4) 1. ... Ng3                      | 8) 1. ... Bf3         | 12) 1. Ne6        |
|   | 5) 1. ... Nxb7 (1. ... g4? 2. b8Q) | 9) 1. Re6#            |                   |

*Pin / Mix: A*

- |                           |                |               |                |
|---------------------------|----------------|---------------|----------------|
| 1) 1. Qc2 (1. Qc1? Bxf2+) | 3) 1. Rd3      | 7) 1. Qg5     | 11) 1. Rb7     |
| 2) 1. Bc5                 | 4) 1. ... Bxg5 | 8) 1. ... Qe6 | 12) 1. ... Rc5 |
|                           | 5) 1. ... Nb3+ | 9) Drawing    |                |
|                           | 6) 1. b4       | 10) 1. Rg3    |                |

**GOAL OF THE LESSON**

- developing a sense of danger

**PRIOR KNOWLEDGE**

- different forms of attack

**ACQUISITION****Concepts**

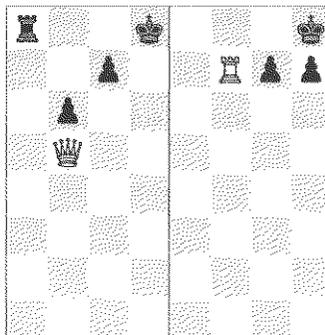
minor promotion

**Instruction**

Discovering the attacking possibilities of your opponent requires a good knowledge of the weaknesses and attacking targets in your own position. We start our overview of these by listing some tactical attacking targets:

- unprotected or insufficiently unprotected pieces
- a king that is in danger because of:
  - an attack involving check
  - a looming mate
- pieces that can no longer fulfil their task, since they run the risk of being captured or chased away
- pins of your opponent
- batteries of your opponent

The diagram (♣) contains two examples of threats. The a8-rook is not protected. As a result, White is threatening 2. Qd5+. A safe move is 1. ... **Ra5**. Protecting your pieces is almost always a good defensive strategy. In the right part of the diagram Black can cover the mate with a king move to g8 or



he can make air with **1. ... h6**. Less good is **1. ... g6**, since this restricts the king to the back rank.

In the diagram (♠) Black's threat is to eliminate the defender of Nd3 by means of **1. ... Rxb3**. White can counter this by exchanging on b1 or by playing **1. Ra3**.

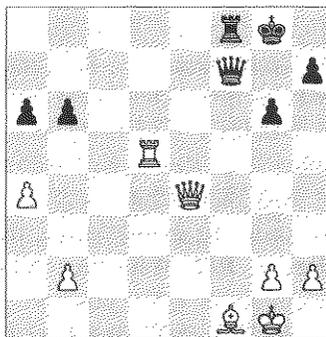
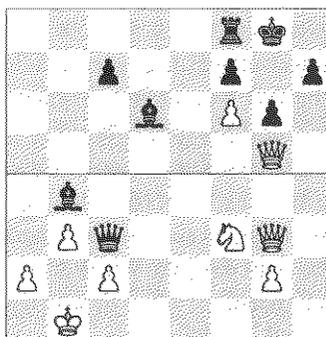
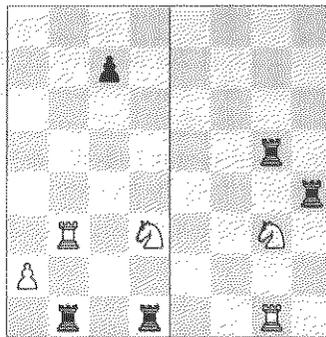
In the right part Black threatens to win a knight with **1. ... Rhg4**. White can prevent losing material with **1. Ne2**; **1. Rh1** is also possible.

At Step 3 level, students can see a mate in one coming. They will have more problems spotting a mate in two, let alone a mate in more moves. In many cases students will find out too late that a particular square is in need of protection. Thus, it is important that the students learn to recognize mating threats well in advance.

In the upper part of the diagram (⇒) the g7-square is in need of protection; White aims to play the queen to h6, from where she can go to g7, mating Black. Black must take appropriate measures to counter this threat. A laborious reaction is to play **1. ... Kh8** **2. Qh6 Rg8**. Much more efficient is **1. ... Re8** **2. Qh6 Bf8**, after which both of Black's pieces are still active.

In the lower part Black is threatening to play **1. ... Ba3**, after which mate is inevitable. This means that White must try to defend b2. The knight cannot be used for this purpose, since it is pinned. The queen can control b2 from d4 only (c1 will be covered by the bishop on the next move). A possible defence is **1. Qf2 Ba3** **2. Qd4**.

In the diagram (♣) the obvious threat is, of course, **1. ... Qxf1** mate. The right defence must also take account of a second mating threat, i.e. **1. ... Qf2+**. For this reason,



bishop moves are inadequate, as are 2. Qd3 and 2. Rd1. In addition, 1. Qe2 is met by Qxd5. The only possible move is 1. Qf3, even though this will cost a pawn.

In the diagram (♁) White, being lost, has given a last, desperate check. Black must be careful not to play 1. ... Nf8, which runs into the surprising 2. Qxf8+ (2. ... Kxf8 3. Rh8 mate). The correct move can be found only if White's possibilities are taken into account. The right defence is the pretty 1. ... Re8 2. Qxe8+ Nf8, winning for Black.

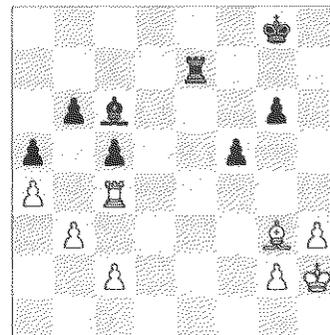
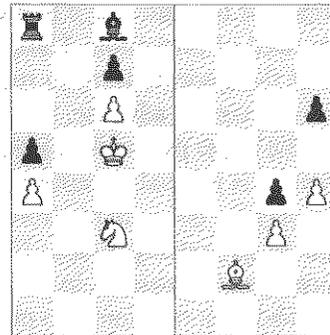
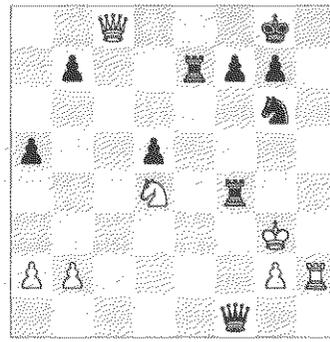
The difference is that after 2. Qxf8+ Kxf8 3. Rh8+ Black can now play 3. ... Ke7.

Sometimes there are squares in one's own position (which may be either occupied or unoccupied) that are difficult to protect. In the left part of the diagram (♁) Black will be hard-pressed to defend c7 after White's Nb5. Black must move the c8-bishop away, after which the rook can protect c7.

In the right part of the diagram the pawn on h6 is in danger. White tries to fix this pawn by means of h5. The correct move is therefore 1. ... h5.

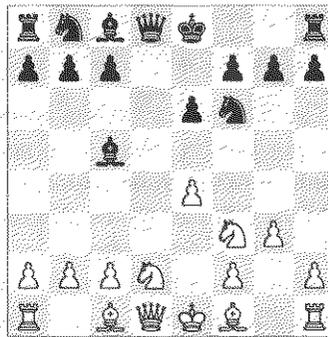
Countering the threats of your opponent requires a proper orientation of potential attacking targets. These targets must first be identified; only then is it possible to find a solution to the threat.

In the diagram (♁) White is to move. Black is threatening 1. ... Re2, attacking g2 for a second time. This threat cannot be met with 1. Bf2 (or 1. Kg1 first), as this loses a pawn after 1. ... Re2 2. Kg1 Bd5 (preventing c3) 3. Rc3 Be4. White must reposition his rook in order to avoid losing material: 1. Rf4 Re2 2. Rf2. With this, White manages to maintain an equal position. For instance: 2. ... Rxf2 3. Bxf2 Be4 4. c3 Bc2 (4. ... g5 5.

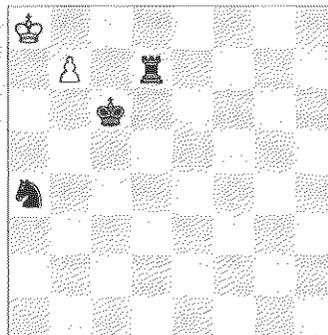


b4) 5. Bg3 Bxb3 5. Bc7.

In the opening, the f2 and f7 squares are difficult to protect. This topic was already covered in the first lesson. After 1. e4 e6 2. d3 d5 3. Nd2 Nf6 4. g3 dxe4 5. dxe4 Bc5 6. Ngf3, we arrive at the position in the diagram (♁).

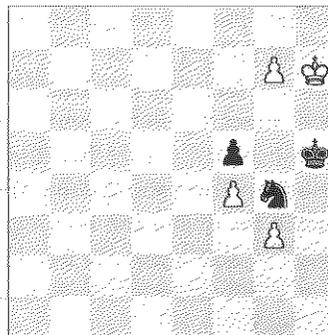


White's last move is a bad mistake. The correct continuation was the developing move 6. Bg2, the point being that 6. ... Qd4 can always be met with 7. Qe2. After the text-move, Black can take advantage of the weakness of the f2-pawn by 6. ... Ng4. Young players quickly learn to recognize the weakness of f7 (and f2) in their opponent's position. They often try to exploit this weakness by playing the queen to h5 or a knight to g5, though usually without a proper motivation. Learning to recognize the same possibilities on the part of your opponent is much more difficult.



In the eyes of the students there are many moves which are 'forced'. In addition to recapturing, this includes a promotion to a queen. Students usually choose a queen without considering any of the alternatives.

In the diagram (⇔) White is best advised not to promote to a queen. After 1. b8Q Nb6+ Black will emerge victorious. The correct move is a minor promotion to a knight. With Black being in check, he has no time to play Nb6+. As a result, the game will end in a draw on account of the fact that there is insufficient material for mate.



In the diagram (♁) promotion to a queen will also lead to a defeat: 1. g8Q Nf6+ 2. Kg7 Nxf6 3. Kxf6 Kg4, after which White will lose both of his pawns. Surprisingly enough, White can win with 1. g8N. Black is now forced to move his knight, after which White can give mate on f6. 1. Kg8

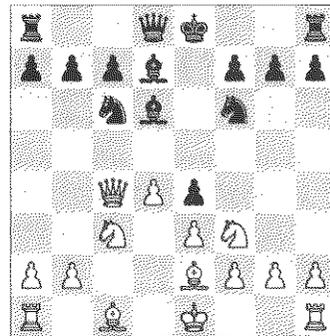
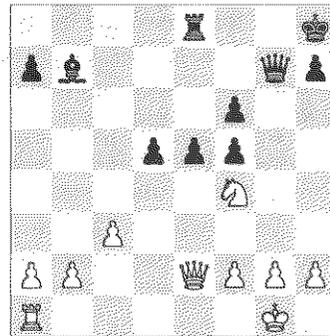
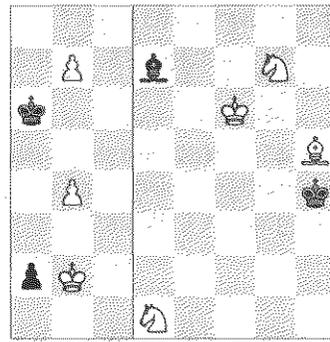
Nh6+ 2. Kh7 Ng4 amounts to a loss of time; here, again, White should play 1. g8N.

The diagram (♁) offers another example of a position in which it is necessary to take into account your opponent's possibilities. In the left part of the diagram, 1. b8Q only leads to a draw after 1. ... a1Q+ 2. Kxa1 stalemate. A minor promotion to a knight is insufficient after 1. ... Kb5; now White will lose his last pawn or the position will be drawn after 2. Nc6 Kxc6. The best move is **1. b8R** (although promotion to a bishop is also winning), after which Black still has a7 available for his king.

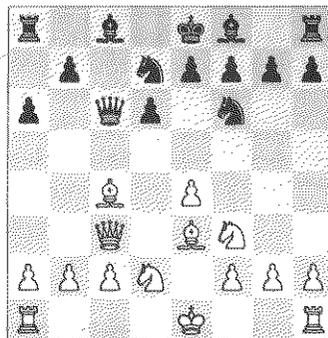
In the right part of the diagram Black is lost, but he can still make life difficult by playing 1. ... Bg4. The aim of this move is not hard to see: after 2. Bxg4 Kxg4, White is left with two knights. White's only road to victory is 2. Nf2 Bxh5 3. Nf5 mate.

Although pins are an effective weapon, it is unwise to put too much trust in them. In the diagram (⇒) Black is not threatening to take on f4. But is he threatening something else? Can Black protect or move away his rook with a gain of tempo? This question is the first step to the correct solution, which is the move 1. ... Rg8. The pin has been removed and Nf4 is in danger, but because of the pin the knight cannot move. White should play 1. Nh5.

In the diagram (♁) Black has just played e4, attacking the knight. What makes this position difficult is that this threat distracts students from recognizing the other danger: since the queen can no longer retreat to d3, Na5 is also a serious threat. The only way for White to avoid losing material is to play 1. Ng5.



Finally, the position in the diagram (†) is representative of a frequently made error. There is no threat present yet, but playing a move creates a threat. Black wants to chase away the bishop by playing **1. ... b5** and to exchange queens, thereby giving White a doubled pawn. This is a good strategic plan, but it fails tactically. After **1. ... b5** the Black queen is no longer protected, so that White can play **2. Bxf7+**, winning on the spot.



This has been a long lesson. Note, though, that it is not necessary to discuss all the examples. This will depend on the level of the answers given by the students. What is most important is that the students learn to recognize the threats of the opponent. This requires a change in perspective, since at this level most students focus on their own opportunities only.

## PRACTICE

### Workbook

#### Orientation / Identify the threat: A

**Explanation:** This exercise sheet is different from other sheets. It is not primarily concerned with your own opportunities, but with those of the opponent. The first question that is relevant is: What is the threat? A good search strategy is to focus on the vulnerable points in your own position. Can the opponent give check? Is one of my pieces attacked or unprotected? Is there a mating threat? Is there a battery that is ready to strike? Ask the students to write down the relevant threat. After this, the students can be asked to come up with an appropriate defence to the threat.

**Mistake:** The threat is not spotted.

**Help:** Put the position on the board, turn the board around, and ask the student to find the winning continuation. This involves a mixed exercise, for which the search strategy

for general characteristics is the appropriate key to solve the exercises.

Mistake: No appropriate move to counter the threat is found.

Help: Ask the student to indicate what the threat is. This will help to highlight the attacking targets. After this, ask the student to provide a move which renders the threatening move impossible, or which brings the attacking target into safety.

*Orientation / Identify the threat: B* 

Explanation: See exercise sheet A.

Mistake: No threat is spotted in position 5.

Help: The road to victory requires an in-between move. Give the hint: recapturing is not required.

## ANSWERS

*Orientation / Identify the threat: A*

- |  |   |
|--|---|
| 1) 1. ... Qb4+ (1. 0-0 or 1. Bxc6)   | king)   |
| 2) 2. Rh8+ and mate (1. ... a6 is the 'lazy' solution; 1. ... Qf2+ is the winning solution)  | 6) 1. ... Nxe4 (1. Rf6)                         |
| 3) 2. Nd6 (1. ... Be7 is best; this move also prevents 2. Nxf6+)                             | 7) 2. Bxc6 (1. ... Rxd1 among many other moves) |
| 4) 2. Rd1 (1. ... Qe8 is the only move; 1. ... Qd8 2. Rd1)                                   | 8) 1. ... Bxc3 (1. Bxg7 or 1. Qa3)              |
| 5) 2. Qe3 and 2. Rxa7+ (1. ... Rbc8! protects the bishop and creates a flight square for the | 9) 1. ... Ne5+ (1. Rf5 or 1. Rf6+)              |
|  | 10) 2. Rxe4 (1. ... Qc6 or 1. ... Qf5)          |
|  | 11) 2. Rg7+ (1. ... Ne4+)                       |
|  | 12) 2. Nc7+ (1. ... Ke7)                        |

*Orientation / Identify the threat: B*

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| 1) 1. ... Nxd5 (1. Rb1 / 1. Rd1)  | 7) 2. c5 (1. ... Bb4)                |
| 2) 2. Qe4 (1. ... Kh7)            | 8) 2. Bc3 (1. ... Qe5)               |
| 3) 2. f4 (1. ... g5 / 1. ... Kg8) | 9) 2. Rc3 (1. ... Bf7 or 1. ... Rc8) |
| 4) 2. Bd2 (1. ... Nd7) 2. a3? Bd6 | 10) Drawing                          |
| 5) 2. Bxc6 (1. ... Nf6)           | 11) Drawing                          |
| 6) 2. Qf6 (1. ... Bd6)            | 12) 2. Qf5 (1. ... Qc7; 1. ... Qe7)  |

**GOAL OF THE LESSON**

- expanding on basic endgame knowledge
- improving pawn endgame skills

**PRIOR KNOWLEDGE**

- the square of the pawn
- key squares (lesson 14)

**ACQUISITION****Concepts**

Zugzwang, passing

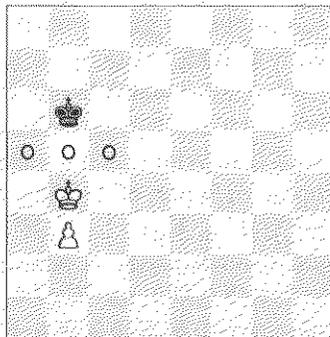
**Instruction**

In lesson 14 the concept of key square was introduced. Gaining control of a key square makes it possible to win a game. In the present lesson we will learn the technique that is required for gaining control of (and occupying) key squares. We will also look at the technique required to control key squares by means of protection.

Consider the diagram (♣). If Black is to move, then he must relinquish his control of one of the three key squares. After 1. ...

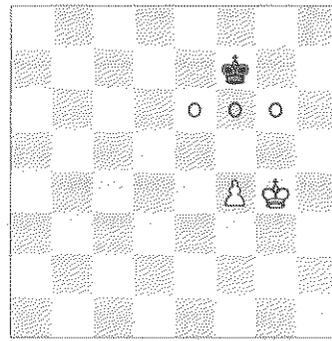
**Kc6** White can occupy a key square with 2.

**Ka5**. If, on the other hand, White is to move, he will probably play the king to either a4 or c4, after which Black can successfully defend the key squares on a6 and c6. The principle is clear: losing control of a key square must, if possible, be avoided at all cost. This means that it is in some cases disadvantageous to be the side that is to move. The term that is used for



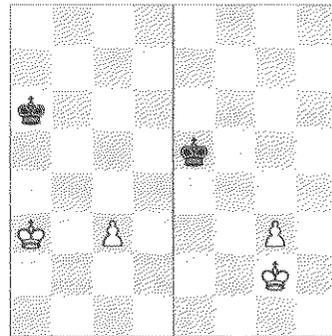
this scenario is 'Zugzwang'.

In the diagram (♠) White can occupy one of the key squares by playing the preparatory move **1. Kf5**. Black is now in Zugzwang. Black's best reply would be to pass, but this, unfortunately, is not permitted. The black king must yield, for instance by **1. ... Kg7**, after which White can occupy a key square with **2. Ke6**.



It is important that the students practice these positions thoroughly. This will give them an idea of the correct strategy.

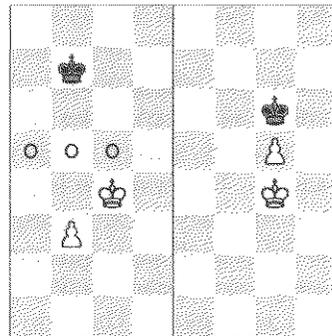
In the left part of the diagram (⇒) White can gain control of a key square by forcing Black to yield. White must continue using this strategy until he has reached one of the key squares. An illustrative variation is **1. Ka4 Kb6 2. Kb4 Kc6 3. Kc4 Kd6 4. Kb5**, winning.



In the right part of the diagram White can reach one of the key squares by correctly judging the distance between the two kings: after **1. Kh3! Kf5 2. Kh4 Kg6 3. Kg4** Black is forced to yield, and White can occupy a key square.

For the defending side, the strategy that is required for the protection of key squares is also based on the principle that yielding is disadvantageous.

In the left part of the diagram (⊕) White is threatening to gain control of a key square with **2. Kb5**. Black must therefore play **1. ... Kc6**, after which White will be unable to occupy a key square. After **2. Kb4 Kb6 3. Ka4 Ka6** White cannot make any progress.



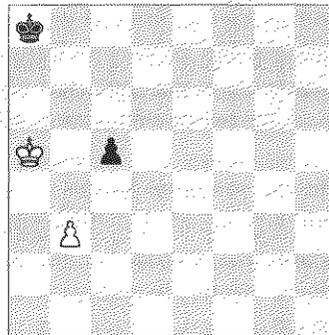
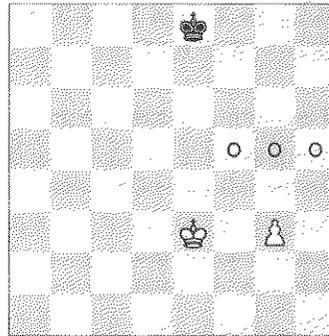
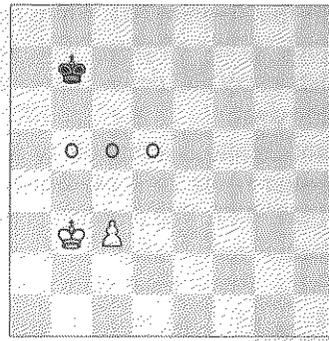
In the right part of the diagram Black's best bet is **1. ... Kg7** (1. ... Kf7 and 1. ... Kh7 are also adequate). A possible continuation is **2. Kf5 Kf7 3. g6+ Kg7 4. Kg5 Kg8!** (the only move) **5. Kf6 Kf8 6. g7+ Kg8 7. Kg6**

stalemate. If the pawn is positioned on the 6<sup>th</sup> rank, the king must move back in a straight line.

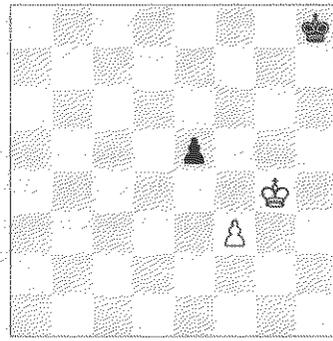
In the diagram (♁) the position is drawn, regardless of whether it is White or Black that is to move. If it is White's move, he can try **1. Kb4**. Black must meet this move with **1. ... Kb6**; if White plays **1. Kc4** the correct reply is **1. ... Kc6!**. In both cases Black prevents having to yield on the next move; this strategy will guarantee a draw. If Black is to move, then he must take into account an imminent **2. Kb4** or **2. Kc4**, which Black must be able to meet with **2. ... Kb6** and **2. ... Kc6**, respectively. This means that Black must move the king to a square that borders on both b6 and c6. The only square which meets this criterion is c7; thus, **1. ... Kc7!** is the only move that draws. Ask the students to finish this game position.

The diagram (♂) is slightly more difficult. If Black is to move, he must take into account the moves **2. Ke4** and **2. Kf4**. Black must be able to meet these with **2. ... Ke6** and **2. ... Kf6**, respectively. This suggests that Black has a choice between **1. ... Ke7** and **1. ... Kf7**. Both are sufficient to draw. Note, however, that if Black chooses the latter option, then a subsequent **2. Kf3** must be countered with **2. ... Kg7!**.

In the diagram (♁) Black has a pawn, but is nevertheless in danger of losing. White is threatening to pick up the pawn with **2. Kb5**. Black has no chance after **1. ... Kb7**. **2. Kb5 Kc7 3. Kxc5**. In this line Black will also lose after **2. ... c4 2. bxc4**. The correct approach is to sacrifice the pawn straight away: **1. ... c4 2. bxc4 Ka7 3. Kb5 Kb7 4. Kc5 Kc7**, drawing.

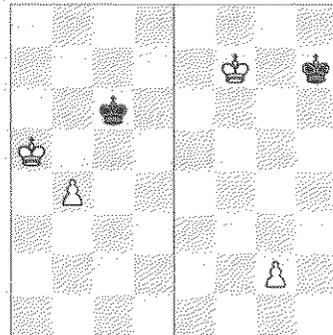


In the diagram (♁) White is threatening to pick up the e5-pawn with **1. Kf5**. It is too late to try and defend the key squares of the f3-pawn: **1. ... Kg7 2. Kf5 Kf7 3. Kxe5**, and White has control of a key square. A better try is **2. ... e4**, which draws after **3. fxe4? Kf7**. The problem is that White has a better reply: after **3. Kxe4 Kf6, 4. Kf4** wins. Black must start with the surprising **1. ... e4**. This move forces White to take with the pawn. As a consequence, the pattern of the key squares is changed: all of sudden the key squares are d6, e6 and f6; and these can be successfully defended by Black, although Black still must be careful: **1. ... e4 2. fxe4 Kg8! 3. Kg5 Kg7! 4. Kf5 Kf7 5. Ke5 Ke7**, drawing.



Occupying a key square does not always guarantee the defending side a draw.

In the left part of the diagram (♁) the Black king is occupying a key square. But this in itself means nothing! It does not matter whether the defending side is occupying a key square; the only thing that matters is that the opposing side cannot gain access to it. After **1. ... Kb7 2. Kb5** Black will lose the battle for the key squares.



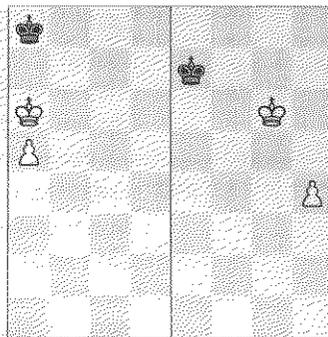
When it comes to defending key squares, a counterattack on the pawn may sometimes prove useful. In most cases, however, such attacks can be successfully dealt with. For instance, in the right part of the diagram **1. ... Kh6** can be met with **2. Kf6**.

In the previous lesson on key squares we already noted that different rules apply to the rooks' pawns (i.e. the a- and h-pawns). It is useful to repeat and illustrate this point.

In the left part of the diagram (♁). White is unable to win because he cannot force the Black king out of the corner. With the pawn on the edge of the board, White lacks sufficient room for manoeuvring.

In the right part of the diagram White can win by shielding off the black king with 1. **Kg7**. But if it is Black's move, the position is a draw, the point being that after 1. ... **Kf8 2. Kh7 Kf7** White is unable to make any progress. A defending king can always block an a-pawn or h-pawn if it can reach the corner square. The diagram also shows that the Black king can block the white h-pawn if it manages to reach f8 (the same situation applies in the case of a black a-pawn and a white king on c1, of course).

Lesson 3<sup>+</sup> of the Manual 3<sup>+</sup> is devoted to pawn endings with rooks' pawns.



## PRACTICE

### Reminder

◇ *Key squares*

### Workbook

□ *Pawn ending / Key squares: B* ♁

**Explanation:** For most positions, indicating the first move is sufficient. Some of the positions can be played to a finish (we regard a game as finished if the pawn has reached the promotion square). The trainer can walk around, finishing game positions against each of the students in turn. Each student should be able to win won positions and draw drawn positions without effort.

**Mistake:** The pawn is advanced too quickly.

**Help:** This is not a problem, provided the mistake is incidental. If the mistake persists, however, it will be necessary to go through the lesson once more. In this case it might be a

good idea to ask another student to explain the subject matter.

Mistake: The student fails to spot a defending king move 'at a distance' (positions 7, 8 and 9).

Help: Students lacking the necessary spatial knowledge will continue to make mistakes in these exercises. Use the board and put counters on the key squares. The defending side must ensure that the enemy king cannot reach a key square. All the defending side has to do is control the key squares; it is not necessary to occupy them.

*Pawn ending / Key squares: C*      ♔ ♕

Explanation: Most of the positions here also have an enemy pawn. The defending side can use this pawn to change the pattern of key squares or to force back the enemy king. The attacking side must try to conquer the pawn without losing control of the key squares.

Mistake: The pawn is sacrificed at too late a stage.

Help: Ask the student to indicate the differences between sacrificing directly and playing a king move first. Having a choice between the two strategies clearly suits the attacking side. As such, the best strategy is to sacrifice the pawn when the opponent has only one way to capture it.

*Test / Repetition: C*      ♔

Explanation: The positions will be familiar. Problems are to be expected only when the students have insufficiently mastered the subject matter.

*Test / Mix: F*      ♔ ♕

Explanation: The themes of the positions have been covered in lessons 12-15 of Step 3: 'defending against a pin', 'trapping a piece', 'key squares' and 'a pinned piece is not a good defender'. The themes need not necessarily be discussed with the students; this depends on the students' experience with doing mixed tests. A good way to start is to have an in-class discussion of some of the positions first.

*Test / Mix: G*      ♔ ♕ ♕

Explanation: The themes of the positions have been covered in Step 2 and Step 3.

## ANSWERS

### □ Pawn ending / Key squares: B

- 1) 1. ... Kc7! 2. Kd5 Kd7 ½-½
- 2) 1. ... Kd8! 2. Kc6 Kc8 ½-½
- 3) 1. Kc3! Kb5 2. Kd4
- 4) 1. e4 Kf7 2. Kd6
- 5) 1. Ke4! Kf6 2. Kf4 Kg6 3. Kg4
- 6) 1. Ke4! Kd6 2. Kd4
- 7) 1. ... Kb7! 2. Ka4 Ka6 ½-½
- 8) 1. ... Kc7; inside the square of the pawn! ½-½; 2 ...

- Kc8? 2. Kc6)
- 9) 1. ... Kd8 2. Kd5 Kd7 ½-½
- 10) 1. Kh4 Kf6 2. Kh5 Kg7 3. Kg5
- 11) 1. Kc3 (1. Ke3? Ke7 ½-½) 1. ... Ke6 2. Kc4 Kd6 3. Kd4
- 12) 1. ... Kf6 2. Ke4 Ke6 3. Kd4 Kd6 4. Kc4 Kc6 ½-½

### □ Pawn ending / Key squares: C

- 1) 1. exd4
- 2) Drawing
- 3) 1. ... Kb8 ½-½
- 4) 1. ... d3 2. cxd3 Kb6 ½-½
- 5) 1. ... c5 ½-½
- 6) 1. Kf4
- 7) 1. ... d4 2. exd4 Kf8 ½-½
- 8) 1. Kd6!

- 9) 1. g5 Ke7 2. Ke5
- 10) 1. ... f5 2. Ke5 Kf8. Another way is 1. ... Ke8 2. f5 Kd7! or 2. Ke6 f5 ½-½
- 11) 1. ... h5 2. Kg5 h4 3. Kxh4 Kh6 ½-½
- 12) 1. ... Kc6 ½-½

### □ Test / Repetition: C

- 1) 1. Rxe6#
- 2) 1. ... Qf6
- 3) 1. ... c4
- 4) 1. Bxd5
- 5) 1. Kg5
- 6) 1. ... Rd7

- 7) 1. Nf6+
- 8) 1. ... Qa8
- 9) 1. Kb6
- 10) 1. ... Nb8
- 11) 1. Ne2
- 12) 1. Bd2

### □ Test / Mix: F

- 1) 1. ... Nb6 (defending against a pin)
- 2) 1. ... Kf3 2. Ke1 Kg2 (key squares)
- 3) 1. Bg5 (trapping a piece)
- 4) 1. Qd4 (double attack with the queen)

- 5) 1. ... Ng4 and if 2. Bxd8 then Nf2# (defending against a pin)
- 6) 1. Kh2 (pin)
- 8) 1. b8D+ Kxb8 2. Kb6 but not 2. b6 Kc8 3. b7+ Kb8, drawing (key squares)

- 9) 1. ... g5 followed by 2. ... Kg6 and the bishop goes (trapping a piece)
- 10) 1. Ra1 (defending against a pin; the threat is 2. Rxa7+ Kxa7 3. Ra2#, and so Black

- has no time to take on e4)
- 11) 1. Ne7+ Kh8 2. Ng6+ (a pinned piece is not a good defender)
- 12) 1. Bd5 (trapping a piece)

□ *Test / Mix: G*

- 1) 1. Rh2+ Bxh2 2. Qh4# (luring away + mate)
- 2) 1. ... Kd3 2. Kb2 c4 3. Kc1 Kc3 (square of the pawn, assisting and key squares)
- 3) 1. Ng5+; not 1. Nf6+ Nxf6, when Re8 is protected (discovered attack)
- 4) 1. ... g4 (trapping a piece)
- 5) Drawing
- 6) 1. Rxh6+ Bxh6 2. Rh7# (mate through access)

- 7) 1. Rxh7+ (mate through access)
- 8) 1. ... Rh1+ (luring away + mate)
- 9) 1. Qe4+ of 1. Qc6+ of 1. Dg2+ (draw by perpetual check)
- 10) 1. Bf4 (X-ray attack)
- 11) 1. Nc8+ Ka8 2. Nb6+ (draw by perpetual check)
- 12) 1. ... Kc4 (square of the pawn, shielding off)

Jan Timman and Nigel Short



# List of concepts

alternative	A move which, besides the move played, comes into consideration.
blunder	A very bad move. The term is relative. At a lower level, a blunder allows mate or loss of a piece. At a higher level, a serious positional error is also considered to be a blunder.
centralising	Playing the pieces to the middle of the board so that they gain mobility.
centre	The middle of the chess board (the squares d4, d5, e4 and e5).
combination	A forced series of moves leading to mate, loss of material or a draw.
compensation	An advantage which compensates for a disadvantage. For instance, a large lead in development may compensate for the loss of a pawn.
connect	Two rooks of the same colour are connected if they are positioned on the same file or rank without any pieces intervening.
cutting off	Specific term for shielding off the king using a rook or queen.
developing	Bringing out the pieces during the opening phase.
duo	Two pawns of the same colour that are positioned next to each other on the same rank.
en prise	A French expression. A piece (other than the king) which is under attack is 'en prise'. It is exposed to be captured (pronounced en-preez).
endgame	The final phase of a game, which arises after the middlegame has ended. The separation between middlegame and endgame is to some extent arbitrary. An endgame typically arises after most of the pieces have been exchanged; another characteristic of endgames is that the king can start to play an active role.
exchange	As a noun it is the difference between a rook and a bishop or a knight. The player who captures a protected rook with his bishop or knight, wins the

	exchange, i.e. he has made a profitable exchange (or 'is the exchange up'). It makes a difference of two points.
exchange	As a verb, a synonymous for 'trade'.
flight square	A term that is mostly used to indicate a square where the king may escape to. Less often used for other pieces.
forced move	The only move which does not straight away lead to a loss. There is no reasonable alternative.
fork	A double attack with a knight (knight fork) or with a pawn (pawn fork).
gambit	A sacrifice during the opening phase, usually in the form of a pawn.
getting a queen	Popular expression for pushing a pawn to the other side of the board. Strictly speaking, this is an inaccurate phrase because pieces other than the queen could also be selected.
hanging	Insufficiently protected. A piece that is dangling or hanging, is being attacked and the immediate threat is that it will be lost.
hole	A flight square for the king (mostly in a castled position). To make 'air' is to advance one of the pawns in front of the castled king.
j'adoube	French for 'I adjust', to be uttered immediately before readjusting a chess piece. This prevents a player from having to play with the piece touched.
kingside	The part of the board that consists of the e-, f-, g- and h-files.
line change	A change in the line of a pawn; this usually involves the knight's pawn being lured to the edge of the board (see lesson 3+).
line piece	The queen, rook or bishop
line	A file, rank or diagonal
major pieces	Queens or rooks.
middlegame	The phase of the game between the opening and the endgame.
minor pieces	Bishops and knights.
minor promotion	The promotion of a pawn to a rook, bishop or knight.
mobile pawn centre	Central pawns that have not been fixed.

opening	The initial phase of a game during which both sides develop their pieces.
passive	A term that refers to the position of a piece which lacks activity.
pawn structure	The way in which pawns of the same colour are grouped.
Petrov defence	The name of an opening.
piece	Strictly speaking, this term refers to king, queens, rooks, bishops or knights. In this manual, the expression 'pieces' is also used to refer to pieces and pawns collectively. Which of the two meanings is intended will be clear from the context.
queenside	The part of the board that consists of the a-, b-, c- and d-files.
quiet move	A (usually very strong) move that does not involve a check or a capture.
refute	Showing that a certain move (or series of moves) is not correct.
resigning	Giving up a game before being mated. Resigning does not happen very frequently at Step 3 level.
sacrifice	Giving up material voluntarily in order to gain an other advantage or to avoid a greater disadvantage.
shielding off	Making sure that an enemy piece (usually the king) cannot gain access to a particular area of the board.
simultaneous display	A match in which one player plays against more than one player at the same time.
strategy	A long-term plan.
tactics	A move or series of moves to force gain of material, mate or a draw.
tactics	Everyday usage: a short-term procedure for carrying out a particular plan or for achieving a particular goal (e.g. 'the wrong tactics').
tempo	Indication for a move (Italian for time).
trap	A move which, while perhaps not objectively the best, entices the opponent to play an obvious but wrong move.

# Ordering

The following books are available in the Step Method series:

Manuals for chess trainers: **Step 1, Step 2, Step 3**, Step 4, Step 5  
Workbooks: **Step 1, Step 2, Step 3, Step 4**, Step 5, Step 6  
Extra workbooks: **Step 2 extra, Step 3 extra, Step 4 extra,**  
Step 5 extra  
Plus workbook: Step 3+

English versions are in bold  
Updated information can be found on our website at:  
**www.stappenmethode.nl**

## Prices

Manual	€ 9,50
Workbook (except for Step 6)	€ 4,95
Workbook Step 6	€ 9,00

Attractive is an order of more copies of the workbooks (price € 4,95).  
This order could consist of several different Steps.  
When ordering 10 copies, the price is € 4,50 per copy.  
When ordering 50 copies, the price is € 4,10 per copy.

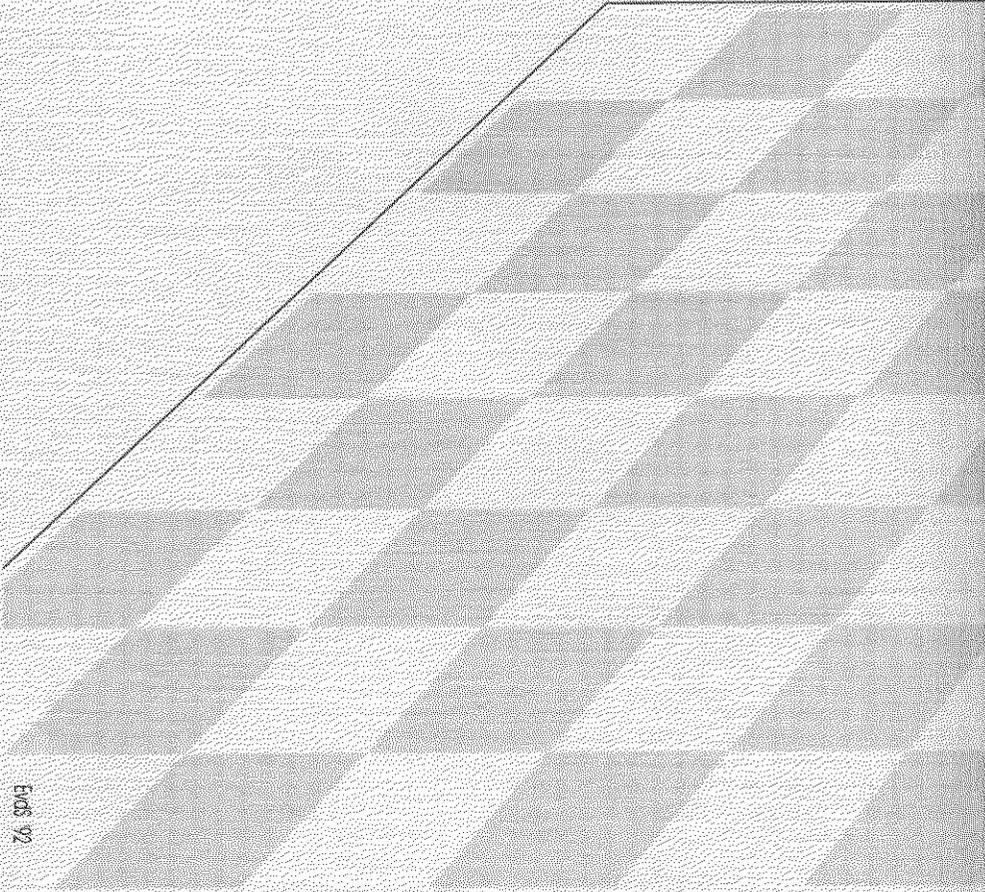
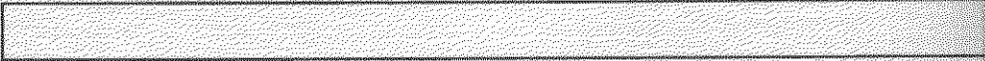
Prices are all exclusive of mailing charges or applicable local sales tax.

All books can be ordered through the internet:  
**www.stappenmethode.nl**  
**www.schachuhr.com**

## Information

C: van Wijgerden  
Lotte Stam-Beesestraat 78  
3066 HB Rotterdam  
The Netherlands  
Tel: 31 (0)10 4564122  
Fax: 31 (0)10 4564184  
E-mail: [info@stappenmethode.nl](mailto:info@stappenmethode.nl)





EVGS 92

