## Rob Brunia

Cor van Wijgerden

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# Learning chess 

Manual for chess trainers

Step 4

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## Preface

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.

The difficulty level of the material in the fourth Step is higher than in Step three. That is why a good command and application of the topics from the third Step are absolutely necessary.

At present not all books of the chess course have been translated into English. Updated information can be found at our website, at: www.stappenmethode.nl

For more information, please contact info@stappenmethode.nl
Enjoy your chess lessons!

Rotterdam, January 2005
Cor van Wijgerden

## The fourth Step

It is advisable to follow the lessons in Step 4 only if the previous Steps have been successfully completed. This means not only that the students have passed the relevant exams, but also that they have managed to apply the relevant knowledge to their own games. If the students lack the skills required for Step 4, presenting them with new information is likely to be counterproductive.
As regards the trainer, we assume that he or she is familiar with the didactic approach as outlined in the previous manuals.

## Subject material

The level of difficulty of the material in Step 4 is significantly higher than that in the third Step. This is mainly due to the increase in the amount of moves required to solve the assignments. For most exercises the solution is $21 / 2$ moves deep (i.e. 5 ply).
As they do, tactics will continue to play an important role in the students' games. In this Step we focus on the last two forms of eliminating the defender, i.e. interfering and blocking. Students will like the second form in particular.
In Step 4, double attacks will be seen to require a preparatory move, since otherwise a double attack is ineffective. We will consider all types of preparatory moves: luring, eliminating the defender, chasing, aiming and clearing.
We will introduce the concept of the preparatory move in the lesson that deals with the placement of the front and the back piece. Other aspects of the pin will not be discussed until Step 5 .
Other tactical topics that will be covered include the $7^{\text {th }}$ rank and the magnet. In addition, we will start to focus on some positional aspects, since at Step 4 level these begin to play a (modest) role in the students' games. Endgames are especially suitable for introducing positional aspects, given that positional play is less concrete than tactical play. The lesson on material advantage and endgame strategy focuses on a number of strategic issues. The lesson on weak pawns will make the students a bit more aware of how to play with pawns. The same goes for the lesson on the opening. In
general, it is a good idea to discuss positional factors in relation to the students' own games (see also the concept of 'mini plan' as introduced in Step 3).
Attacks on the king involve a mixture of tactics and strategy. In this Step we focus first and foremost on how to finish such attacks.
In chess it is important to plan one's actions. Planning plays an important role in the 'Queen versus pawn' lesson. This lesson further underscores the importance of piece cooperation and the relative nature of the value of pieces.
It goes without saying that the specific choice of the topics addressed is a matter of personal taste, based on one's knowledge of and one's experience with the way in which children develop their chess skills.

## Chess games

This subject has been dealt with extensively in previous Steps, especially in the manual of Step 3 (under Training games'). Unfortunately, much of the training that children receive at clubs is limited to instruction and exercises. It is essential that the children play positions against each other. This serves a number of purposes:

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

It is important that the positions offer a clear illustration of the topic at hand, so as to guarantee that the children develop specific skills (as noted under 1) above). In this respect the playing strength of the trainer is clearly relevant. When the children are getting acquainted with a new theme (as noted under 2) above) the trainer can check the knowledge that is already present, and so provide new information that suits the specific needs of the children. As regards under 3), it is important that the training sessions involve a good balance of theory and practice. Periods during which the children should be quiet and pay attention should be complemented with periods during which the children can play chess. This set-up will allow the children to absorb the theory once more during practical play.
The form in which a position is played to a finish is also important. The
position should not be so one-sided as to make the children bored and lose their motivation. To prevent this, the children should play each position twice, once with Black and once with White. When playing, it is a good idea to ask the students to note down their moves. In this way the games can be discussed on the demonstration board afterwards. With this format none of the children will feel left out. Note, too, that each of the game positions must illustrate a certain point: the children must not have the feeling that the exercise in question did not serve any purpose.
On a final note, it often happens that a game has to be stopped or interrupted through lack of time. It is important to realize that young players like to finish their games. The trainer runs the risk of being seen as a spoil-sport. Children of all ages like to win, no matter what the goal of the exercise is.

## Thinking ahead

The skill of thinking ahead is practised independently through discussions of a position (see also lesson 5). The individual skills of both trainers and students is different and this aspect of the training varies with it. The ease with which a trainer can handle a position will inspire the students. For this reason, the trainer must have reasonably good chess skills.
If the trainer's skills are insufficient, then this can be partly compensated for by means of intensive preparation. The varying speed of development of the students calls for separate measures. Discipline during the training and the opportunity to do individual work both contribute to a successful training session. This means that when doing the exercises:

- everyone should remain silent.
- the moves have to be performed slowly.
- if someone suggests a different move, then the whole variation has to be repeated.
- the trainer decides whose turn it is.

If these principles are maintained from the beginning it will provide structure to the training. As regards individual differences between students, there are several possibilities:

- when thinking ahead for a number of moves, the weaker students may execute the first move(s) on their board.
- adjusting the way in which the questions are asked, so that a weaker student has to give one possible move only, while a stronger student has
to look for the best move.
- setting up a position at the end of the variation allows the trainer to differentiate between students.
- dividing the group into smaller groups, based on the number of moves that students should think ahead.
- answering different questions about the position in which thinking ahead is required.
This list is, of course, not exhaustive. The best method will depend on the group, the situation and the trainer's inventiveness.

When setting up a 'thinking ahead' position, it is advisable to adhere to the following rules:

- the starting position must not be visible on any other board (e.g. the demonstration board or a neighbour's board).
- a piece put on the board, may not be moved.
- there is a limited thinking time (approximately 30 seconds to a minute).
- everyone starts on an empty board.

This will allow the trainer to verify whether the final position is correct.

## Help

The help that is offered to the students in Step 4 strongly resembles that of Step 3. Here, too, the trainer asks the student to formulate the problem and point out the error (See Manual Step 3 for further information).
Each lesson has a 'Help' section (which can be found in the Workbook section) that contains some additional pointers, including some hints for the occasional more difficult exercise. The forms of help outlined above are not repeated in each of the lessons.
The material in Step 4 relates to the material covered in previous Steps. As such, the trainer should be able to recognize the nature of the mistakes made by the students. If the nature of a mistake suggests that a student has insufficiently mastered an earlier topic, then this earlier topic should be revised. This is important, because it is pointless to introduce a new topic if an earlier topic has not been sufficiently mastered.
Apart from spotting the correct type of combination, the students must also learn to find the right preparatory move. The trainer must then be able to see whether the mistake lies in the type of combination or in the type of preparatory move.

During Step 4, individual differences will arise in the students' integration of knowledge and skills. Some students require assistance in order to keep making progress. This assistance must be regarded first and foremost as individual support.
The mistakes made by the students may indicate that a change is required in the set-up of the lessons, the instruction, or the speed with which new material is presented. More generally, these mistakes demonstrate that old material should be repeated from time to time.
For the trainer, both the nature of the students' mistakes and their problems are a source of feedback. He can use this feedback to develop a tailor-made approach for the group in question. Note that a high number of questions reflects uncertainty on the part of a group. This warrants a reaction on the part of the trainer:

- The speed with which new material is introduced must be reduced.
- The material that is presented is too difficult.

Adapting the speed and/or the degree of difficulty gives the students back their confidence. It will also help the students to tackle the relatively more difficult topics.
The more the students progress, the more indirect the trainer's assistance becomes. And the more they progress, the more ambitious they become and the more willing they are to tackle new topics.
Given this, the trainer should bear in mind that introducing new material at an increased speed is likely to give the students superficial knowledge only. This may in turn lead to a loss of acquired knowledge and a stagnation of the students' development. If this problem is recognized, and these pitfalls are avoided, then this will lead to a lasting and successful increase of the students' playing strength.

## Applying the knowledge

The children have acquired a lot of knowledge in the first four Steps. By looking at the children's games the trainer can see whether this knowledge is applied to their games. It is only natural that there is a difference between the children's level of knowledge and level of skill (i.e. playing level). The trick is to keep this gap as small as possible. Failure to watch out for this will result in a loss of motivation on the part of the students, because they will then not see their efforts rewarded in terms of an increase in playing
strength. Being the best during the lessons does not make up for losing every single game. Chess training includes both training and playing. The trainer should therefore strive for a balanced approach.
By discussing a game we establish a link between the chess training and the students' games. The student begins by explaining what he thought of his game. Then the trainer points out some of the aspects to which extra attention must be paid. For the student this means that he must learn to apply, or to better apply, material that he has already mastered. For instance, the trainer might point out that in his game the student missed a double attack with the queen.
Discussing students' games is especially useful when it comes to positional aspects. Such aspects are easier to consider in relation to a game than in a lesson.
In addition to the students' games from competitions, the trainer can also use games from a simultaneous training format or games that the students have played against each other during a training session. No matter which games or game positions are used, feedback is always useful.
It is a pity that in the majority of youth tournaments the amount of thinking time is limited. Even regional youth championships are often decided by rapid games. This means that students do not usually note down their moves, and thus that no feedback can be given. A player who evaluates a position thoroughly could easily exceed the time limit. As a result, there is the risk of an inverse relation between knowledge and result. Students benefit from playing tournament games with ample thinking time.

## The transition to the seniors

Not many children will reach Step 4 level. Many of them drop out because there are not enough sufficiently strong trainers or because they have gone through the previous Steps too quickly. The students' motivation will quickly vanish when they notice that their playing strength is not increasing.
The drawback of training small groups makes it impossible to organize a good competition. It is boring to have to play the same opponent time and time over. In many clubs this is solved by letting the students play with the seniors. The problem of moving children to the senior division is essentially the same as that of allowing children to go to bed late, or to force them to adapt socially to their seniors (consider I1-13 year-olds). The
children's chess development will stagnate because they will subconsciously adapt their playing style to that of adults. Their sharp attacking games make way for careful play, so they will not lose too quickly.
Our aim is to increase the chess skills of young people, then we should be more careful when it comes to the transition from junior to senior player. Acquiring practical skills should not be restricted to the few chosen ones who are allowed to appear at represented toumaments. The idea that young players should play with senior players might hold ground when they are 15 or older. However, for 12 -year-old (or even younger) players this is not a good idea. In this case another setup must be found.
In the past many young players have dropped out because of stagnation. This loss is, of course, unnecessary.
For youth clubs in the same region, one possibility would be to organise a joint competition for the higher Steps. This makes it possible for young people of the same playing strength to play against each other. The risk that a young player will go on to join a 'competing' club should then just be accepted. At least he will continue to play chess.

## Analysing a position

As to the quality of a move in a particular position, a number of factors are relevant:

1) the students' knowledge
2) the students' skill of evaluating different possibilities
3) the students' skill of visualising and thinking ahead

Points 1 and 3 will receive direct attention. Point 2 also requires attention, given that it is possible to teach students a systematic approach for analysing positions. Evaluating the possible moves in a particular position involves a number of different skills:

- eliminating
- comparing
- the depth of the search
- (daring) to draw a conclusion

Visualising and thinking ahead will be hardly necessary when the students are allowed to examine the position with their hands on the pieces. Eliminating involves leaving obvious incorrect moves from further
consideration. Comparing involves weighing one possibility against another. This will create many problems, since it is not clear how deep the students should look and which conclusions they should draw. Here the students' level of knowledge becomes relevant. Armed with more knowledge, students can make a more insightful decision. There are two reasons why students fail to come up with a move in due time: either the search depth is too great or they are afraid to draw a conclusion.

## Certificate

After having gone through the lessons of Step 4, the students 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. Shortterm 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

The manual contains many split diagrams. These must be read and set up on the board as separate diagrams. The left part of a 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. Leaving the position on the board is not a good idea, since this often leads to misunderstandings.

The following symbols, which refer to diagrams, are of crucial importance: $\uparrow$ refers to the diagram on the top of the page.
$\Rightarrow$ refers to the diagram in the middle of the page.
$\Omega$ 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. Qxc7! or 1. ... Re2?
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 is the name of the reminder, the square is the name of the exercise sheet. They can be found in the workbook.
$\bigcirc$ Pin: Placing the back piece
$\square$ Endgame / Passed pawn: A 틀

The degree of difficulty is indicated by means of the number of rooks. The sheets marked ' ${ }^{2}$ ' can be done by everyone after the lesson. The sheets marked " ${ }^{2}$ ' 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.

## Goal of the lesson

- using the opening as a weapon


## Prior knowledge

- the 3 golden rules (see $2^{\text {nd }}$ step)
- completing the opening (see $3^{\text {rd }}$ step)


## ACQUISITION

## Instruction

We begin this lesson by brushing up some opening knowledge so as to find out what the students still know about the opening. A good start is to ask the students what they know about the opening.
This lesson deals with the advantage of having a lead in development. To illustrate this, one side will follow the 3 golden rules to the letter while the other side does not. The position of the diagram ( $\Leftrightarrow$ ) arises after 1. e4 e5 2. Nf3 Nc6 3. Bc4 h6 4. Nc3 a6. While White has brought out three pieces, Black has brought out only one.
White, then, is ahead in development. The white pieces are active. They control the centre and exert an influence on squares on the opponent's side of the board. In order to exploit this advantage, White's other pieces will have to find attacking targets.
These pieces must be given sufficient space to manoeuvre and thus should be activated. One solution would be to open the position with 5. d4, since after 5. ... exd4 6. Nxd4 Nxd4 7. Qxd4 (diagram ®) White's pieces occupy good positions.


White only needs a further two moves to complete his development, where as Black needs no fewer than five. Furthermore, White has an iron grip on the centre, especially on square d 5 , which he controls 4 times. As a result, Black has no better than to play the modest developing move d6.
A possible continuation is 7. ... d6 8. Be3 Nf6 9. 0-0-0 Be7 (diagram 厄). Now that White has finished his development, it is time to increase the activity of his pieces. White has two attractive possibilities.

Plan 1: open the position with 10. e5.
This move presents Black with a problem on account of the weak position of his king. Moving away loses a pawn immediately: 10. ... Ng4 11. exd6 Bf6 12. Qe4+. Chasing the queen away also does not help: 10. ... c5 11. Qf4 g5 12. Qg3 and the pawn on d6 is lost. This leaves 10. ... dxe5 11. Qxe5 Bd7 (diagram $\Rightarrow$ ), after which White has two attractive choices: 12. Rhel 0-0 13. Bxh6 is strong, as is 12 . Nd5 Tc8 (12. ... Nxd5 13. Qxd5 Be6 14. Qxb7) 13. Nxf6+ gxf6 14. Qh5 Th7 15. Rhel.

Plan 2: playing for an attack on the king. From the diagram ( $\uparrow$ ) White can continue with 10.f3 0-0 11. g4, opening lines on the kingside. This is a promising plan, since Black has played the weakening h7h6, which gives White a target for his attack and allows him to open lines. Show the students that White would be unable to open lines if the black pawn would be on h7. Now Black must be careful. He is in danger after 11. ... Be6 12. h4 Qd7 13. g5 while after 13. ... hxg5 14. hxg5 Nh7 15. e5 dxe5 16. Qh4 (diagram $\mathfrak{b}$ ) he is lost.


White's lead in development has enabled him to:

- take control of the centre
- convert a temporal advantage into an attack on the king
- open lines
- organise a kingside attack

An important principle in opening play is that if you have an opening advantage, then you must open up the game. One way in which this can be done is by exchanging pawns in the centre, thus clearing diagonals and lines.
Sometimes it is also possible to open up a position by means of a sacrifice. An example: 1. e4 e5 2. Nf3 Nc6 3. Nc3 g6 4. d4 (opening the diagonal of the cl -bishop and attacking e5) 4. ... exd4 5. Nd5 (not a move that a grandmaster would play, but suitable for Step 4 level) 5. ... Bg7 6. Bg5 (see diagram $\Rightarrow$ ).
Time to take stock. Ask the children to find a move for Black, using their own boards.
6. ... Nf6 runs into 7. e5, winning a piece. White also nets a piece after 6. ... Bf6 7. Nxf6+ Nxf6 8. e5. While 6. ... f6 cannot be directly refuted, this move hampers Black's development. After 7. Bh4 White exercises strong pressure on f 6 . With the $\mathrm{a} 2 / \mathrm{g} 8$ available for the fl -bishop, Black will find it hard to castle.
The variations that arise after 6. ... Nge7 are pretty. Not bad is 7 . Nf $6+$, after which Black loses either the right to castle or the control of the black squares (after 7. ... Bxf6 8. Bxf6). However, even better is the powerful 7. Nxd4, which wins a piece. The threat is 8 . Nxc6 (eliminating the defender). 7. ... Nxd4 is met by 8 . Bxe7 while 7 ... Bxd4 (see diagram §) runs into the
 Bh6 mate.
Openings in which a pawn is sacrificed are called gambits (from the Italian word gambetta 'lift a leg'). The purpose of a gambit is to gain time in the opening.
To conclude this chapter we discuss one example of a gambit, the King's gambit. In the line that we consider, Black brings out his queen too early and plays too many pawn moves.

1. e4 e5 2. f4 exf4 3. Nf3 d6 4. Bc4 Be6 5. Bxe6 fxe6 6. d4 (diagram $\mathbb{0}$ ) 6. ... Qf6.
Black wants to maintain his pawn on f 4 , but here his queen obstructs the g8-knight and is vulnerable. White's advance of the e5-pawn will now be with a gain of tempo.
2. $\mathbf{N c} 3 \mathrm{Ne7} \mathrm{8}. \mathrm{Qe2} \mathrm{c6} \mathrm{(see} \mathrm{diagram} \Rightarrow$ )

It is better to develop the b8-knight.
9. e5 dxe5

This move loses instantly. Preferable is 9 . ... Qh6, though White is very comfortable after 10 . Ne4.

## 10. Ne4

Black might as well give up the game. The
 queen has nowhere to go to ( 10 .... Qg6 11 . Nxe5 or 10. ... Qh6 11. Nd6+ and 12. Nf7).

It is a good idea to start introducing the topics of this lesson (i.e. increasing one's activity, gain of tempo, increasing your opponent's vulnerability) to the discussion of the children's games.

## Search strategy

The sheets that accompany this lesson are mixed sheets with exercises from previous Steps. These exercises will continue to present problems if the correct search strategy is not followed:

- first consider the characteristics of the position
- then search for possible moves
- finally, check the move(s) found


## Practice

The ideal practice for this lesson is a simultaneous display, in which extra attention is paid to this lesson's subject matter. Students who have finished their game could go on to do an exercise sheet. Go over the correct search strategy using a position from an exercise sheet.

## Workbook

$\square$ Test $/$ Mix $\left(2^{\text {nd }}+3^{\text {rd }}\right.$ step $): A \quad \Xi$
Explanation: The themes of the assignments are given together with the answers. Ask the students to indicate some of the themes involved. This will help them to find the answers.
Mistake: The correct answer is not found.
Help: When a student fails to see the answer through recognition of the type of position, the search strategy should be used. Ask the student to first indicate the characteristics of the position (targets!) and then ask for a solution strategy. This will help most students to find the answer. If this fails, then more direct questions are in order. These will depend on the theme of the exercise.
$\square$ Test / Mix ( $2^{\text {nd }}+3^{\text {rd }}$ step $): B \quad$ Ë
Explanation: See exercise sheet A.
Mistake: Position 4 is not correctly solved.
Help: $\quad$ What does the bishop on c 3 do? He is attacking g 7 and he is also pinning the pawn, so that h6 is not protected. How can White attack this pawn? The answer is clear: by chasing away the rook from the f 4 square.
Mistake: Position 9 is not correctly solved.
Help: This position is difficult because the attention of the
students will be geared towards the attack on d5. One option is to alter the position by placing a white pawn on e4. 1. Rc6+ is then easy to see. We take away the pawn again, point out (but do not play!) 1. Rc6+, and ask what happens if Black captures the rook on d 5 . If this does not help, then execute the rook move and, if necessary, also Black's reply. This will reduce the problem to a Step 1 exercise.

## Answers

Test / Mix ( $2^{\text {nd }}+3^{\text {rd }}$ step $): A$

1) 2. Qb4 threatens mate and material gain (double attack: queen)
1) 2. ... Qd2+ 2. Qxd2 Rg6\# (luring away + mate); 1....
Rg6+? 2. Qxg6 hxg6 3. Kxg6+ and wins.
1) 2. Ng6 (trapping thanks to pinning)
1) 2. ... Rel+ 2. Rxel Qxd4+ (luring away + material); 2. Kf2 Re2+
1) 2. Bxf6 Qxf6 2. Qh7\# (capturing + mate)
$\square$ Test / Mix $\left(2^{\text {nd }}+3^{\text {rd }}\right.$ step $): B$
1) 2. Qxh7+ Rxh7 2. Ng6\# (capturing + mate)
1) Drawing
2) 3. Nd6+ Qxd6 2. Ba6\# (discovered attack)
1) 2. g3 Rxf3 2. Qxh6+ Qh7 2. Bxg7+ (attack on a pinned piece)
1) 2. ... Nf3+2. Qxf3 Qel + (discovered attack)
1) 2. Bd6 Bxd6 2. Qh8\# (discovered attack)
1) 2. Rh5+ gxh5 2. Qf6\# (luring away+ mate)
1) $1 . \ldots \mathrm{Bg} 6$ (pin)
2) 3. Rf3+exf3 2. Qxg5 (discovered attack)
1) 2. Nc6+ Ka8 2. Nxe7; 1. ... Rxc6 2. dxc6 (double attack: knight)
1) 2. b4 (trapping)
1) 2. ... Ra6+ 2. Kxa6 (stalemate)
1) 2. 0-0-0+ and 2. Nxb5 (defending against a pin)
1) $1 . \ldots$ Ba4 (trapping thanks to a pin)
2) 3. ... Nxf3+ 2. Nxf3 R8g2\# (capturing + mate)
1) 2. Rc6+ Kf7 (1. ... Kxd5 2. Bg2\#) 2. Rxe5 (chasing away + material)
1) 2. Ne5+ Ke8 2. Rxc8\# (double check)
1) 2. ... Rb8 (trapping)
1) 2. ... Rc3+ 2. Kxc3
(stalemate); 2. Kb2? Kxb4

## Goal of the lesson

- learning a new attacking technique


## Prior knowledge

- eliminating the defender (capturing, chasing away, luring away)


## ACQUISITION

## Instruction

In addition to capturing, chasing away and luring away, interfering is the $4^{\text {th }}$ way of eliminating the defender. It is the most surprising of the four, since, another piece besides the attacker and the defender, is involved: the interfering piece.
In the diagram ( $\Rightarrow$ ) the bishop is protected by the rook on h5. The rook cannot be captured, and chasing it away is pointless: 1. ... g6 is met by 2 . Rd5 or 2. Rh7+. With 1. ... g5+ the pawn, with tempo, interferes with the rook. The b 5 -bishop is no longer protected and after White has gone out of check, Black is free to take it.

In the left part of the diagram ( ${ }^{(1)}$ White's queen is attacking rook bl , which is protected by the queen on b7. White can interfere with 1. Bb6+, eliminating the queen's protection of the rook. Black's best chance is to give up the exchange with 1 . ... Rxb6.

On the right the rook on e6 is no longer protected after $1 . . . . \mathbf{N g 4 + 2 . f x g 4 .}$
These examples are of the type: interfering + material.


The diagram ( $(\mathbb{)}$ ) contains a position in which the goal is mate, and the means is interfering. White cannot give mate as long as Black's queen is protecting b7. With 1 . Bc6 White closes off the queen's diagonal; 1. ... bxc6 is followed by 2 . Qb7 mate. It is important that the bishop is also eyeing b7, so that after 1. ... Qxa5 2. Qxb7 Black is also mated.
In the right part of the diagram Black can remove the protection of h2 by 1 . ... Rh5+ 2. Bxh5 Qh2 mate.

In the diagram ( $\Leftrightarrow$ ) the white queen is protecting the important squares dl and e . Interfering with 1. ... Ndl is not very useful since White makes air for his king with 2. h3. To win, Black must attack the queen as well: 1. ... Rd1+ 2. Bxd1 Re1 mate. An interfering move can also be used to disrupt the connection between two enemy pieces.

In the left part of the diagram (a) White plays 1. b5, after which the rook on a4 is lost. The queen must give up the protection of the rook.
On the right the interfering move 1. ... Ng4 puts a stop to the queen's protection of e2. Since the knight on g4 is also attacking the bishop on f 2 , White will lose a piece.

The examples considered so far involve a combination of an interfering move and an attack on an important piece (including check). In each case, the interfering piece itself plays an active role.
In practice, this type of interference is the most common. In the following two examples, the interfering piece plays a passive role instead.


In the upper part of the diagram ( $\mathbb{\bullet}$ ) the rooks are protecting each other, rendering the king's 'double attack' innocuous. After the interfering 1. Nd7, however, the double attack is all of a sudden effective and Black is powerless against the loss of at least an exchange.
In the lower part of the diagram, too, Black cannot escape the loss of material. Here a simple pawn move (1.e4 or 1. d4) will cost a rook. This, then, is another example of a double attack that is made effective by means of interference.

The diagram ( $\Leftrightarrow$ ) contains two positions. In each position, White sets up a combination with the help of an interfering move.
On the left, White wins with 1. c4+. Rather than find a target, the front piece interferes with the protection of the e4-rook. White picks up the knight on a4 on the next move. On the right, the interfering 1. Ng8 eliminates the defending queen and traps the rook on h8. Black will lose his rook.

In the diagram ( ${ }^{(3)}$ the rook on c8 is an important defender. It protects the queen and prevents mate on the back rank. White can lure away the rook with 1. Qxc7, but after 1. .. Rxc7 the e8-square is still protected by the bishop on h5. White must therefore start with the powerful 1. Re8+! After 1. ... Bxe8 the bishop interferes with the rook's defensive task, and so White can give mate with 2. Qf8\#. Black can choose a slower death and accept the loss of material with 1. ... Rxe8, allowing 2. Qxc7. This, example, then, involves a combination of eliminating the defender by luring away and interfering.


In the diagram ( $\uparrow$ ) the rook on $f 7$ is the main defender. White can play 1 . Nf5, but this move is not menacing enough; Black can bring his bishop into safety. Correct is the interfering move 1. Nf3. Once again the bishop is in danger and at the same time White is threatening a knight fork on e5. Black has to settle for a draw.
If we put the black king on g8 then 1. Nf5 is the right move.


## Search strategy

The search strategy for interfering moves is straightforward. Which pieces are attacked? Is there a mate somewhere? The answer will lead to an important defender.
In the diagram $(\Rightarrow)$ there are three defenders: the queen, the king and the rook. Black can try $1 . \ldots$ Ne3+ to chase away the king, but this yields nothing after 2. Rxe3 Qxe3 3. Qxh4+ or 3. d8Q. The queen turns out to be an essential defender, preventing mate on g2. Once this has been realized, the solution is obvious: Black can eliminate the defending queen with $\mathbf{1} . \ldots \mathbf{N g} 3+$.


## Practice

## Reminder

$\diamond$ Eliminating the defender: Interfering

## Workbook

Eliminating the defence / Interfering: $A$

## 道

Explanation: In the exercises the students should look for important defenders. These can be found by looking for pieces that are attacked or by looking for a possible mate. By means of interfering the defender can be eliminated. Here, as in previous Steps, it is a good idea to ask the students to
circle the defender, as this forces a direct approach.
Mistake: The correct solution is not found.
Help: Check whether the student, with the help of a new theme, understands the purpose of the exercise, e.g. by asking him which moves he has already tried. Let the student talk as much as possible.
Mistake: The suggested solution to position 8 is $1 . \mathrm{Ne} 2$.
Help: Ask the student to indicate the purpose of the knight move (1. ... Qxe2 2. Qf8+ or 1. ... Nxe2 2. Qxe8\#). Which other possibilities does Black have? Ask the students to provide these themselves, or, if necessary, give the answer: after 1 . ... Qxfl+ 2. Qxfl Nxe2 the win is not quite there yet. The students should find this out for themselves; their main idea was correct, however. At this point, the correct 1 . Ne4 will not longer be a problem.

## Eliminating the defence / Interfering: B <br> 쁠

Explanation: See exercise sheet A.
Mistake: Position 11 is not solved.
Help: The difficulty of this position lies in the fact that the bishop must be played to a square that is attacked three times and defended not once. It is therefore hard to give help without giving hints. Supporting questions are: "Why is 1. Qb8+ insufficient?" (Besides protecting the queen, the c6-rook has another important function) "Where could the rook, with the aid of another piece, give mate?"
Mistake: Position 12.
Help: The attention is diverted by the attack on the white queen. If we disregard this attack and ask where White can give mate, then the solution is near. The queen on h3 covers the square c 8 , and although the interfering move 1 . g 4 puts the queen one more time en prise, it is nevertheless the right move.

## ANSWERS

Eliminating the defender / Interfering: A

1) 2. Nf5+ followed by 2 . Rxh3.
1) 2. Nc6+ bxc6 2. Qxc5
1) $1 . \mathrm{Bb} 8$ and the rook on a 8 is trapped.
2) $1 . \ldots$ Nf4 (threatens $2 . .$. Ne2+) 2. exf4 Qxd6
3) 4. ... Nf3+2. exf3 Qxdl+
1) $1 . \ldots \mathrm{Be} 2$ and White must give up an exchange.
2) 3. ... Bb5 2. axb5 Qxe2\#
1) 2. Ne 4 threatening 2. Qxe8 and 2. Rxel. 1. ... Qxe4 is met by 2. Qf $8+$, mating. Less good is l. Ne2, since Black
can play on after l. ... Qxfl+ 2. Qxfl Nxe2.
1) 2. Rg6 fxg6 2. Qxg7\#
1) $1 . \ldots \mathrm{c} 4+2 . \mathrm{Khl}$ Qxb5
2) 3. Bc8 threatening 2. Bxb7 and 2. Re8\#. Not good is 1 . Rc8+ Rxc8 2. Bxc8 Rbl.
1) I. ... Rcl + 2. Bxcl 2. Qbl\#; 2. Rxcl Qxd5

Eliminating the defender / Interfering: $B$

1) 2. ... Bb3 2. axb3 Nc2\#
1) $1 . \ldots \mathrm{Bcl}+2 . \mathrm{Kxcl} \mathrm{Qxgl}$
2) $1 . \ldots \mathrm{RcI}+2$. Nxcl QdI\# or 2. $\mathrm{Rxcl} \mathrm{Qxb7}$
3) 4. $\mathrm{d} 5 \mathrm{cxd} 52 . \mathrm{Rgl}+$; 1. Rgl+ is met by $1 . \ldots \mathrm{Rg} 5$.
1) Drawing
2) Drawing
3) 4. Rc6 dxc6 2. Nxf6+; bad is
1. Nc6? Nxe4
8) 9. e6 fxe6 (1. ... Bxe6 2.

Nxe6) 2. Qxg4 (2. ... e5 3.
Nf5 or 3. Ne6)
9) 1. ... Nf3+ 2. Kfl Rxf6; 2.

Rxf3 Rxh6
10) 1. Rd8+ Bxd8 2. Qe8\# or 1 .
... Rxd8 2. Qxb7
11) 1. Bd6 Qxb3 2. Rf8\#; 1....

Rxd6 2. Qb8+; 1. ... Nxd6 2.
Qxe6+
12) 1. g4 Qxf3 2. Rc8+ and mate

## Inf ormation for the trainer

Interfering is often confused with interposing. Note, however, that there is a difference: interfering eliminates the defender, while interposing eliminates the attacker. In the left part of the diagram ( $\Omega$ ) White plays 1. Bb3, interposing the bishop, i.e. one of his own pieces, between the attacker and the threatened piece.
Interfering involves placing one's own piece between the defender and the threatened piece. On the right Black plays 1. ... Nh4+. Interfering thus involves a fourth piece, in this case the king on g2.


Luring

## GOAL OF THE LESSON

- learming tactical skills
- increasing the level of tactical skills


## PRIOR KNOWLEDGE

- all types of double attack covered so far


## ACQUISITION

## Instruction

The tactical topics of Step 4 should be tackled only if the topics of previous Steps have been mastered sufficiently. The combinations considered so far have not been deeper than one and a half move. In this Step we will consider the kind of moves that are required before a combination can itself be executed. Such moves are called preparatory moves.
In this Step we will look at five different types of preparatory moves. First of all we will discuss the concept of luring in combination with the double attack.
Luring is effective when the defending side still has a defence against a double attack. In the left part of the diagram ( $₫$ ) the fork 1. Nc5 does not work on account of $1 . .$. Qxa3. White first has to lure another piece to the a6-square with a capturing move so as to get the double attack to work: 1. Qxa6+ Kxa6 2. Nc5+ winning the rook.
On the right, the double attack 1. Bf5 does not work on account of $1 . \ldots$ Re3+ or $1 . \ldots$ Rxh3+. The solution is straightforward. White first exchanges rooks on h7 and then

wins the rook on e4: 1. Rxh7+ Kxh7 2. Bf5+.
In these examples the double attack works only in combination with a preceding preparatory move.
An attack on an identical piece is usually ineffective. In such cases, luring can be the solution. The diagram ( $\uparrow$ ) contains two positions in which the piece that has to deal out the double attack would, without a preparatory move, be captured. On the left 1. Nb5 would be premature, but after 1. Bxd6 Kxd6 2. Nb5+ picks up a piece.
On the right, Black has to prepare g5 by first capturing on h4. After 1. ... Nxh4 2. Rxh4 g5 Black wins a piece.
In both cases, a piece is lured to a fatal square by means of an exchange.
When a certain move order does not work, luring sometimes does the trick.
In the left part of the diagram ( $\lrcorner$ ), attacking the pinned knight with 1. ... Nc4 does not give Black anything, since White has everything under control after 2. Bc3. Again, Black must resort to a preparatory luring move: 1. ... Bxb2+ 2. Kxb2 Nc4+. Reversing the order of moves is often worth a try.
On the right, 1. Qh5+ does not win a piece because of the defence 1. ... Nf7. By exchanging on h6 first this problem can be solved: 1. Bxh6 Bxh6 2. Qh5+.
In addition to exchanging, luring can also be done by means of a sacrifice (which may or may not involve capturing). In the diagram ( $\downarrow$ ) we see two simple examples. On the left, White plays 1. Ra8+ Kxa8 2. Nb6+, winning material.
On the right, Black uncorks the surprising 1. ... $\mathbf{g 6}$ + White loses his queen, no matter

how he captures on g6: 2. Qxg6 Nf4+ or 2. Kxg6 Nh4+.
The word 'luring' suggests that there is a choice. This is, however, not always the case. In the two positions in the diagram ( $\uparrow$ ) the losing side does not have a choice. Yet, we refer to these cases as examples of luring. On the left, White wins a piece with 1. Qa8+ Kxa8 (only move) 2. Nxb6+.

On the right, Black wins the knight with 1.
... f2+ 2. Kxf2 Qh4+ (not 2. ... Qf6+ 3. Nf3).
Double attacks frequently involve pins. In the upper part of the diagram ( $\Rightarrow$ ) the black bishop is pinned. White can exploit this with the help of a preparatory move: 1. Rd8 Rxd8 2. Bxf6+, winning material. Black can limit the damage to the loss of an exchange with 1. ... Kg7 2. Rxf8 Bxe5.
In the lower part of the diagram the pin comes one move later: 1. ... Rxf1+ 2. Kxf1 $\mathrm{Ne} 3+$. Black wins the queen, since the now pinned knight on g 2 is no longer defending the e3-square.
This concludes our discussion of luring for the moment. The remainder of the lesson on the different forms of the double attack can be discussed at a later stage.
Summing up, we have seen that luring forces a target (the king or another piece) to a particular square by means of an exchange or a sacrifice,, after which a double attack becomes possible.
We now discuss some examples of luring that involve a discovered attack or a discovered check. In the diagram ( ${ }^{\circledR}$ ) we see a battery of rook and knight that is ready to strike. However, as things stand, there is as yet no forcing discovered attack; after 1. Nc5 bxc5 2. Bxe7+ White has not won any

material. The trick is to first lure the king to e7. After 1. Bxe7+ Kxe7 (it is better to move the king away) 2. Nc5+ the battery does work, and White wins the queen with the help of a discovered check.
In the diagram ( $\uparrow$ ) the sacrifice 1. Bb7+ lures the black king to a fatal square. After 1. ... Kxb7 2. c6+ White wins the queen.

The next two examples involve luring of 'material'. In the left part of the diagram $(\Rightarrow)$ we see an as yet ineffective battery of a queen on c6 and a pawn on b5. 1. Ra4 lures the black queen to a4. White can then wrap up with 1. ... Qxa4 2. b6+. White has to start with a rook sacrifice, because after 1. b6+ Qxb6 2. Ra4+ Black escapes with 2. ... Na .
On the right, Black can win a pawn with 1 . Bg5+. However, he can go after bigger prey with the luring move 1. ... Rxe3+. After 2. Qxe3, Black wins the queen with either 2. ... Bg5+ (or 2. ... Bf2+).
A preparatory move that involves luring picks out a target, which is subsequently eliminated with the help of a double attack. Luring moves can target both the king and other pieces. Luring can form part of all types of double attack. If there is enough time (and concentration!), we can conclude this lesson by looking at an endgame study of Rinck. This study is characterized by a series of preparatory moves that involve luring by means of X-ray checks.
In the diagram ( ${ }^{(8)}$ White wins after 1. Ra8 Qxa2 2. Rxa4 Qg8 3. Ra8 Qh7 4. Bg6 Qxg6 5. Ra6+.
Magnificent. The queen is lured from one square to the next, until she has no place left to go. It is a good idea to ask the students to indicate the squares to which the

queen can and cannot go after each move. Note that throughout the rook and the bishop are indirectly protected on account of the X-ray checks on $\mathrm{f} 3, \mathrm{e} 8, \mathrm{f} 3$ and a6.

## Practice

## Reminder

$\diamond$ Double attack: Luring

## Workbook

## $\square$ Double attack: Luring: A <br> E

Explanation: The search strategy for double attacks with the knight is straightforward. All pieces within the knight's range are natural targets. One of the pieces is already within range; a second piece must be lured there. In each of the positions the enemy king has an important role to play.
Mistake: The correct solution is not found.
Help: This is not a good sign! The student must focus on the knight. What are the possibilities? Which pieces can the knight attack, and which pieces can the knight not attack, at least not for the time being. Lure a piece to the correct square.
Mistake: The pins in positions 9,11 and 12 cause problems.
Help: An obvious, but undesirable, solution is to simplify the positions by removing or replacing pieces. Establish whether the student has the basic skills required to exploit pins. If not, revision of the exercises that deal with the theme 'a pinned piece is not a good defender' is required.
$\square$ Double attack: Luring: B

## E

Explanation: The search strategy for double attacks of the queen should focus at unprotected pieces.
Mistake: The positions in which the target is mate are not found (i.e. positions $6,7,8$ and 12).
Help: The answer to the question "Where could you give mate with the queen?" usually leads to the correct answer. In most cases, only one mate is possible.
Mistake: The order of moves is wrong (positions 3, 5 and 8 ).

Help: Put the suggested solution on the board and ask the student to look for a defence. After this another try is in order.

## $\square$ Double attack: Luring: C

Explanation: Each of the positions contain a battery. Unfortunately, the battery is ineffective, since the head piece does not yet have a suitable target. A discovered attack or discovered check must be prepared with the help of a luring move.
Mistake: The answer is wrong.
Help: Point out the battery. "Do you see an attacking target for the front piece?"
Mistake: A defence is missed (e.g. 1. Nxd6 Qe3+ in position 3 or 1. ... Rxfl+ 2. Kxfl Bb5 + 3. Rxb5 in position 9).
Help: Play the suggested move and then ask what the opponent can play now.

## Double attack: Luring: D <br> EEE

Explanation: This exercise sheet contains other types of double attacks (with pawns, bishops and rooks), X-ray checks and X-ray attacks. These are more difficult since the search strategy is more extensive. In the case of pawn forks two pieces occupy the same file with one square between them. To make an X-ray check or X-ray attack possible, two enemy pieces have to be lured onto the same line. For double attacks of rook and bishop it is important that the enemy pieces end up on the same file, rank or diagonal. It is also possible to do this exercise sheet at a later point during the training.
Mistake: The suggested solution is incorrect.
Help: Set up the position, play the wrong move and ask the student to comment on his suggestion. Direct the student to the correct answer with the help of questions.

## Answers

Double attack: Luring: A
I) 1. ... Rd2+ 2. Qxd2 Nf3+
4) Drawing
2) 1. Qxf6+ Kxf6 2. Ne4+
5) Drawing
3) 1. Qxc6 Qxc6 2. Nxe7+
6) I. Bh6+ Kxh6 2. Nf7+; 1....

Kh8 2. Nf7\#
7) 1. Qh8 $+\mathrm{Kxh} 82 . \mathrm{Nxg} 6+$ and 3. Nxe7
8) $1 . \mathrm{Bxf} 7+\mathrm{Kxf} 7$ (better $1 \ldots$ Kd8) 2. Ne5+
9) 1. ... Qxg3+ 2. $\mathrm{Kxg} 3 \mathrm{Ne} 4+$ and 3. ... Nxd2

Double attack: Luring: B

1) I. ... Rxg2+ 2. Kxg2 Qe4+ and 3. ... Qxbl
2) 3. d 5 Bxd 5 2. Qd4
1) 2. Rxd6 Rxd6 2. Qe5
1) 2. ... $\mathrm{Rxfl}+2 . \mathrm{Kxfl} \mathrm{Qdl}+3$.

Kg2 Qxg4+
3) 1. $\mathrm{Bxf} 7+\mathrm{Kxf} 7$ 2. $\mathrm{Qd} 5+$; 1 . Qd5? Qe7
4) $1 . \ldots \mathrm{Rxg} 2+2 . \mathrm{Kxg} 2 \mathrm{Qg} 5+$
5) 1. Nd7 Rxd7 2. Qh3+; 1. Qh3+?

Kg7 2. Nd7 Qd6 3. Nxb8 Rh8
10) 1 . ... Bg 5 2. Qxg 5 (the queen is trapped) 2. ... Nh3+
11) 1. ... Rcl 2. Qxcl Ne2+
12) 1. Qxf8+ Kxf8 2. Ne6+ and 3. Nxd8; 1. Ne6? Qxe7 or 1. Bxg7 Nxg7 2. Qxg7+ and 3. Ne6+ only wins an exchange.
8) 1. ... Rxd4 2. Rxd4 Qe5
9) 1. Rxb7 Rxb7 2. Qa8+; 1. Rxe7 Qxg2\#
10) 1. ... Rxa5 2. Rxa5 Qel+
11) 1. Bxa6 Rxa6 2. Qd3
12) 1. b4 Bxb4 2. Qd4

Double attack: Luring: C

1) 2. Rf8+ Kxf8 2. Bxg7+
1) 2. Bb7+ Kxb7 2. c6+
1) 2. Qxh7+ Kxh7 2. Nxd6+; 1 . Nxd6? Qe3+
1) 2. ... $\mathrm{Qxg} 2+2 . \mathrm{Kxg} 2 \mathrm{~d} 4+; 1 . \ldots$ d4 2. Qd2 or 2. Qc4+
1) $1 . \ldots \mathrm{Rxfl}+2 . \mathrm{Kxfl} \mathrm{Bh} 3+(2 \ldots$ $\mathrm{Bd} 3+3 . \mathrm{Nxd} 3)$
2) 3. ... Nxd4 2. Qxd4? $\mathrm{Ng} 4+$
$\square$
$\square$ Double attack: Luring: $D$
1) 2. Nxe5 Rxe5 2. f4 (double attack: pawn)
1) 2. Rb 8 Rxb 8 2. Bxe5+ (double attack: bishop)
1) 2. $\mathrm{Rg} 8+\mathrm{Qxg} 8$ 2. $\mathrm{Rg} 2+$ (X-ray check)
1) I. Rxd3 Rxd3 2. Be4 (double attack: 2 pieces)
2) Drawing
3) 4. Rd7+ Kxd7 (1. ... Ke6 2.

Qd5\#) 2. Nxf6+
8) 1. Rd4 Qxd4 2. e6+
9) 1. ... Rxfl+2. Kxfl Bxg2+! (2. ... Bb5+ 3. $\mathrm{Rxb5}$ )
10) 1. Rxd7 Qxd7 2. Nh6+

1I) 1. ... Qd3+ 2. Kxd3 Bxc6+
12) 1. Bxc5 Qxc5 2. axb4
6) 1. $\mathrm{Qc} 4+\mathrm{Qxc} 4$ 2. g8 $\mathrm{Q}+$ (X-ray check)
7) 1. ... Nxc2 2. Qxc2 Bxd3+ (double attack: bishop)
8) 1. ... Qxfl+2. Kxfl Rxf5+ (double attack: rook)
9) 1. Be7 Qxe7 2. f6 (double attack: 2 pieces)
10) 1. Qxd7 Qxd7 2. Bxe6+ (double
attack: bishop)
11) 1. ... Rxc4 2. Qxc4 Bd5 (X-ray attack)
12) 1. Bc4+Kf8 2. Rxe8+; I. Rxe8? Rxa6+ (double attack: bishop)


Korchnoi

Blocking

## Goal of the lesson

- learning a new attacking weapon


## Prior knowledge

- different forms of eliminating the defender


## ACQUISITION

## Instruction

The four forms of eliminating the defender (i.e. capturing, chasing away, luring and interfering) discussed so far are all means to achieve a goal, such as winning material or giving mate.
In blocking, the goal of mate is particularly relevant. Sometimes blocking is also useful when cashing in on passed pawns (see lesson 7).
The diagram ( $\Rightarrow$ ) contains a straightforward example. Black does not appear to have enough pieces to give mate. After a check on c 3 the king flees to bl and after a check on cl White puts the bishop on bl. However, once the bishop is on bl the white king cannot go there anymore. Thus, Black plays 1. ... Qc1+ 2. Bbl Qc3\#. The blsquare is blocked by the bishop.
In the diagram ( $₫$ ) the black king has only one square available, after I. Rh8+, i.e. f7. After 1. Be6+ Black does not have much of a choice. He has to block the flight square, allowing White to give mate with 2. Rh8\#. Both examples involve the same scenario: first a check, then the defender gets out of check by interposing a piece. Next, the

attacker gives mate since the king's flight square is now blocking the interposed piece.
In the diagram ( $(\mathbb{)}$ ) we see another kind of blocking. The first thing we notice is that the piece that must give mate, the queen, is also guarding the flight square on $\mathrm{f7}$. That is why after 1 . Qh7+ the black king simply moves to f 7 . White must resort to a pawn sacrifice to block the escape route: 1. 17+ Qxi7 2. Qh7\#.
In the diagram ( $\Leftrightarrow$ ) $1 . \ldots \mathrm{Qg} 4+2 . \mathrm{Kfl}$ does not give Black anything (more then a repetition of moves). However, blockading the fl-square allows a pretty mate: 1. ... f1Q+ 2. Qxf1 Qg4\#.
Here, too, both examples involve the same scenario: first the attacker gives check using a sacrifice, then the defender gets out of the check by accepting the sacrifice, and then the attacker gives mate because the flight square of the king is blocked.
A special kind of blocking is the smothered mate. In a smothered mate a knight gives mate with all the squared surrounding the king being occupied by the king's own pieces. From the initial position, a smothered mate arises after 1. e4 c6 2. d4 d5 3. Nc3 dxe4 4. Nxe4 Nd7 5. Qe2 Ngf6?? 6. Nd6\#. The e-pawn is pinned, and so Black is mated. This mate is possible only because of a horrible blunder on the part of the opponent.
In some cases, blocking can be used to force a smothered mate. The basic position is shown in the diagram ( $\left(\begin{array}{l}\text { ). It is fun to }\end{array}\right.$ have the children look for the solution. The mate is easy to spot only if this type of position has been encountered before. The right approach is $\mathbf{1 .}$ N $\mathbf{7 7}+\mathbf{K g 8} \mathbf{2}$. Nh6 +

(double check) 2. ... Kh8 (or 2. ... Kf8 3. Qf7 mate) 3. Qg8+ Rxg84. Nf7\#.
Crucially, the f 7 -square is not protected by a black piece.
The upper part of the diagram ( $\uparrow$ ) contains the same mating position, but here an extra finesse is required: 1. $\mathbf{N} \mathbf{f 7}+\mathbf{K g 8}$ and the rest is familiar. If Black plays 1. ... Rxf7 then 2. Qxc8+ wraps up.
In the bottom part of the diagram White is in trouble after 1. ... Qd4+ 2. Kh1 Nf2+. The rook cannot take the knight because it must protect its colleague on al. The story after 3. Kg 1 has been told before: 3. ... Nh3+4. Kh1 Qg1+ 5. Rxg1 Nf2\#.
There is a quicker version of the smothered mate. In the diagram ( $\Leftrightarrow$ ) the white bishop on $\mathbf{c} 4$ lends a helping hand: 1. Qg8+ Rxg8
2. Nf7\# leads to a direct mate. Now 1. Nf7+ Rxf7 only nets an exchange. Note that here the rook on c8 is protected.
In the lower part of the diagram there is no smothered mate, although the parallels are clear. Black cashes in with 1. ... Qa2+ 2. Nxa2 Nb3\#. 1. ... Nb3+ 2. Ka2 is nothing but a loss of time; there is nothing better than to start over again with $2 . \ldots \mathrm{Ncl}+$.
Blocking can also go hand in hand with other combinations. The first example that we consider involves a combination of blocking and eliminating the defender. In the left part of the diagram ( $\left.{ }^{( }\right)$White can win with 1. Re8+. Black can choose the combination that will finish him off: 1. ... Qxc8 2. Qa7\# (blocking) or 1. ... Kxc8 2. Qa8\# (moving away + mate).

On the right, Black lures the queen away from the defence of g3 with 1. ... Rfl+ After 2. Qxf1 Rxfl+ 3. Rxf1 Qxg3\# it is mate. Another example of moving away +

mate.
Another combination is that of blocking and double attack.
In the upper part of the diagram (仑) White plays the strong 1. b5+. Black can take the pawn in two ways. If Black captures with the king we have an example of 'luring' as discussed in the previous lesson. After 1. ... Kxb5 2. Nd4+ loses the queen. The other capture leads to a mate that involves blocking: 1. ... Qxb5+ 2. Qb8\# .
In the lower part of the diagram we see a similar motif. Black can ignore the hanging rook and win with 1. ... f2+. After 2. Qxf2 (2. Kfl Bd3+) 2. ... Rhl\# the queen blocks f2; after 2. Kxh2 Black decides matters with a minor promotion: 2. ... f1N+. In the diagram $(\Rightarrow)$ the battery on the second rank stands out. An obvious try is $1 . \mathrm{Bdl}+$, winning the queen. However, it turns out that the position is more difficult than would appear at first sight, since after 1. ... Kh6 2. Rxg2 it is stalemate. White must therefore find another target for the front piece. With the surprising discovered attack 1. Bg6+ White wins with the help of the blockade: 1. ... Qxg6 (otherwise White simply plays 2. Rxg2) 2. Rh2\#.
We will conclude this lesson by discussing two pretty examples in which the attacking side can give mate only after sacrificing material. Both are admittedly difficult, but they never fail to be appreciated.
In the diagram ( $\Omega$ ) the students must first look for themselves. After a while they will come to the solution 1. Rf4+ Bxf4 2. e4+. An understandable mistake; in the initial position the g4-square is under control, but after the rook sacrifice it is no longer the case. White has to block two squares in

front of the black king. This can be achieved with 1. g4+ Nxg4 2. Rf4+ Bxf4 3. e4\#.
In the diagram (仓) 1. Rxg5+ Rxg5 2. Nf4+ does not lead to mate, since the g4-square becomes available to the black king. For the win White must sacrifice no fewer than 11 points: 1. Rh4+ gxh4 2. g4+ Bxg4 3. Rg5+ Txg5 4. Nf4\#.

## Search strategy

In the exercises (which are much easier than the two previous examples) the students have to look for mate. The flight squares of the king can be taken away by means of blocking.
In the diagram ( $\Delta$ ) the g7-bishop prevents the queen from giving mate on e5. Moving the bishop to c 3 does not work, since then White (after 2. Qe5+) loses control of h6. With the blocking 1. Bh6+ White can give a forced mate: 1. ... Rxh6 2. Qe5\#.

## Practice



## Reminder

$\diamond$ Eliminating the defence / Blocking

## Workbook

Eliminating the defender / Blocking: A

## E

Explanation: The side that is to move can win in the attack by blocking the enemy king's flight squares. The exercise is correct when material has been gained or mate has been given.
Mistake: The king can still escape.
Help: Usually the students have omitted the blocking move. Ask the students to look at the position from the opponent's perspective. Which flight square does the king still have?

How can this flight square be taken away?
Mistake: "This assignment is impossible. I don't see a mate."
Help: In the positions 7, 11 and 12 the solution does not lead to a forced mate. Point out that there is a forced material gain, however.
Mistake: $\quad$ The positions 7 and 12 cannot be solved.
Help: The first move is a "quiet" move (i.e. not a capturing move or check).

## Eliminating the defence / Blocking: B

## E E

Explanation: See exercises sheet A.
Mistake: Position 6 is not found.
Help: The first move is a "quiet" move (i.e. not a capturing move or check). Position 6 involves a combination of luring and blocking. The rook on $\mathrm{f8}$ must be made to disappear ( 1 . Nf7+ Rxf7 obviously leads to nothing). How? It can only be achieved with 1. Bg8.
Mistake: The suggested solution in position 10 is 1 . ... Rh5 or $1 . \ldots$ Qxh2+.
Help: The students should find out for themselves why the answer is wrong. (2. Qg7\# and 2. Kxh2 Rh5+ 3. Kg 3 , respectively). Why is the queen sacrifice ineffective? Because the king can escape. Using this lesson's subject matter, it seems a good idea to block the g3-square. The students will refrain from playing this on account of 2. Rxg3, but in that case 2. ... Rel+3. Rgl Qg2\# follows.

## ANSWERS

Eliminating the defence / Blocking: A

1) 2. e7+ Rxe7 2. Qh8\#
Qdl Rxb2
1) I. $\mathrm{Qxd5}+\mathrm{Qf} 72$ 2. Rh8\#
2) 3. $\mathrm{Qb} 8+\mathrm{Rxb} 82 . \mathrm{Nc} 7 \#$
1) 2. $\mathrm{Qg} 7+\mathrm{Nxg} 7$ 2. Nh6\#
1) 2. ... RdI + 2. Qxdl Qf2\#; 2.

Kxdl Qxfl\#
9) 1. Rh3+ Bxh3 2. g3\#
10) 1. ... Rfl+2. $\mathrm{Qxfl} \mathrm{Qe} 3 \# ; 2$. Kxfl Qel\#
5) 1. d6+ Rxd6 2. Bh4\#
6) 1. $\mathrm{Qg} 8+\mathrm{Rxg} 8$ 2. Nf7\#, 1. Nf7+ Rxf7 does not win.
7) 1. ... Rg2 2. Qxg2 Qh5\#; 2.
11) 1. ... e5+ 2. dxe5 Qd2\#; 2. Kxe5 Qxg3+
12) 1. $\operatorname{Re} 7 \mathrm{Rxe} 7$ 2. Qh7+; 1. ...g6
2. $\mathrm{Rxd7}$
$\square$ Eliminating the defence / Blocking: B

1) 2. ... $\mathrm{Rgl}+2$. Bxgl Qe2\#
1) 2. Qe7+ Rxe7 2. Nf6\#; 1 . Nc7+? Qxc7
1) 2. Rh8+ Nxh8 2. Bh7\#
1) 2. $\mathrm{Ne} 7+\mathrm{Nxe} 7$ 2. $\mathrm{Rxf} 8+\mathrm{Kxf} 8$ 3. Rd8\#
g4\#
1) 2. $\mathrm{Qh} 7+\mathrm{Nxh} 7$ 2. $\mathrm{Ng} 6+\mathrm{Kg} 8$ 3. Bd5\#
1) 2. ... g3 2. fxg3 Qxh2+ 3 . Kxh2 Rh5\#; 2. Rxg3 Rel+ 3. Rgl Qg2\#
1) 2. $\mathrm{Rf} 8+\mathrm{Rxf8} 2 . \mathrm{Ng} 7 \#$
1) 2. Bg8 Rxg8 2. Nf7\#
1) 2. ... Bxf3+ 2. Bxf3 Be5; 1 . ... Be5? 2. f4
1) 2. $R f 8+Q x f 8$ 2. $R x f 8+R x f 8$
3. Qxg6\#
12) 13. ... Rf2+2. Rxf2 Qh5 +3 . Kgl QhI


## Goal of the lesson

- practising visualisation skills


## Prior knowledge

- thinking ahead (as introduced in Step 3)


## ACQUISITION

## Instruction

This lesson is entirely devoted to the skill of visualisation, which is an essential part of thinking ahead. We will consider and evaluate a position with the help of a number of different continuations, with some clever moves along the way. The setup of this training session is as follows:
Each student sets up the position in the diagram ( $\mathfrak{b}$ ) on his own board. After this, no one is allowed to touch the pieces, except when told so by the trainer.
We begin by asking which starting move the students have in mind. It is important to involve everyone in this. So, we ask each of the students individually which move they would play, even though it is likely that the same move will be suggested more than once. The suggested moves include 1. h3, 1. Qe2, 1. Qd2, 1. Re1, 1. Qd3, 1. Bf2, and 1. Nd5. 1. h3 is clearly ill-conceived, since it runs into 1. ... Ne3. Do not say this but ask the students what he expects Black to play next. The student should ideally provide the correct counter move himself. The other moves suggest that the threat of 1. ... Ne3 has been spotted. These moves,

while not bad, are a bit too defensive.
We save the best move, 1. Nd5, until last, and ask the students what they expect Black's next move to be.
A popular choice is $\mathbf{1 .}$... Qc5+, when we arrive at the diagram ( $\uparrow$ ). Without touching the pieces, the students now have to come up with a move for White. Here many will go for 2. Bf2 or 2. Kh1. We then ask the students to find a reply to $\mathbf{2}$. Kh1, e.g. 2. ... Br8. What is crucial is that the students acknowledge that the bishop is in danger. After 2. Bf2 the students should see that the queen is under attack, and that 2. ... Nxf2 is now possible. After every move we stop and take stock, asking questions such as:

- What is White's / Black's plan?
- Are any of the pieces in danger?
- Do you see another good move?

These questions direct the students' thinking and guide them in the direction of the salient aspects of the position.
On the $3^{\text {rd }}$ move, after 1. Nd5 Qc5+ 2. Bf2 Nxf2 (see diagram $\Rightarrow$ ), the students will now find 3. Rxf2 and 3. Nxe7+. After 3. Rxf2 we check whether the bishop on e7 is taken into consideration. Chances are that this is the case, given that this threat was already pointed out earlier. 3. Nxe7+ has to be followed by Kf8, which we check to be sure. In the main variation the students will now put forward moves like 4. Rxf2 and 4. Ng6+. After capturing with the rook, Black captures on e7 with his king. We end by asking the students to evaluate the resulting position (material is still even).
Interesting is 4. Ng6+ fxg6 5. Rxf2 (diagram §). Any other move will run into a smothered mate, as shown in the previous

lesson.
It is important to pause at each move so as to allow the students to take stock. It is also important to avoid making the lesson too long or complex, since this will put too much strain on the students' visualisation skills.
Throughout, we must realize that the goal of this lesson is for the students to visualise and discover possibilities, without directly looking for the best move. This means that the students are practising their memory, and so the following points are important:

- Concentration is required, and so silence is in order (sit down yourself if necessary).
- Discipline. Name the moves clearly and slowly, listen to each other, follow each other's thoughts and build on these if and where needed.
- Repeat the moves to prevent confusion and to guarantee that everyone is working on the same position.
- Give moves only, no comments. Keep the variations as sparse as possible to avoid burdening the students' memory with irrelevant information.
- Make sure that there is sufficient time; at the end, make sure to evaluate the entire sequence of moves played.
It is clear that this kind of exercise draws heavily on the trainer's chess skills. Note that it is possible to differentiate by having the students look further and further ahead. If a student cannot follow a particular line, then he can execute some moves on his board, thus familiarizing himself with the position once more. It is also possible to vary the number of moves.
The present lesson is not accompanied by a
separate practice sheet. This is therefore a good opportunity to practise and repeat some exercises from previous lessons. It is always a good idea to discuss an example together with the correct solution strategy. Ask the students to approach the position by taking a general perspective, rather than by looking for the right move straightaway. Useful questions include:
- Can I give check (mate)?

- Which pieces are unprotected?
- Which pieces are on the same line (file, rank or diagonal)?
- Which pieces are important defenders?

The important thing is what the students do with this information. For instance, unprotected pieces invite double attacks, while important defenders can be eliminated.
The following diagram ( $\mathbb{\cup}$ ) can be used as an example. Black, who is a piece behind, is to move.
The battery on the g -file is the secret of Black's success, but is not directly decisive. The solution is 1. ... Ne5 2. Nh4 Nf3 + . The reason why search strategies are of the utmost importance is that this type of position contains many seductions (e.g. 1. ... Nf4? 2. Qxf6).

## Practice

## Workbook

Test / Mix: C
Explanation: The themes of lessons 2, 3 and 4 (interfering, luring and blocking) return in these exercises. This information makes it easier to find the correct answer.
Mistake: The correct solution is not found.
Help: The students should correct their own mistakes, if at all
possible. This can be done by asking general questions such as "Which targets do you see?" and "Do you see an important defender?" If this fails, it is possible to reveal the theme of the exercise.
Mistake: The suggested answer is wrong.
Help: Look up the pointers in the relevant lesson. The themes of the exercises are given under the heading ANSWERS below.
$\square$ Test / Mix: $D \quad$ Ë
Explanation: This exercise sheet contains the same themes as the Asheet.

## ANSWERS

## Test / Mix: C

1) 2. Rd7+ Nxd7 2. Qg7\#; 1. ...

Qxd7 2. Nf6+ (interfering and double attack: luring)
2) 1. Nf6 Bxf6 2. Qe4; 1. ... gxf4 2. Rxh7\# (blocking)
3) 1. ... b4 2. Bxb4 Qb7+; 1. ... Qb7+? 2. Qf3 (double attack: luring)
4) 1. ... Qxc3+ 2. Kxc3 Nxe4+ (double attack: luring)
5) 1. ... Rxd 42 . Qxd4 $\mathrm{Ng} 4+$ (discovered attack: luring)
6) 1. ... Rh4+ 2. Nxh4 g4\#
7) 1. Rxb2 Rxb2 2. Qc3 (double
attack: luring)
8) 1. Rle6 Bxe6 2. Qxh6; 1. ... Qxe6 2. Rxe6 Bxe6 3. Qxh6 f6 4. Qg6+ (interfering)
9) 1. ... Ra2+ 2.Bxa2 Nc2\# (blocking)
10) 1. ... Bxc2+ 2. Kxc2 b3+ (discovered attack: luring)
11) 1. Nd5 exd5 2. Rxe7; 1. ... Rxd7 2. Nxe7+ or 1. ... Qxd7 2. Nxf6+ (interfering)
12) 1. Bc7 Rxc7 2. Qe5 (double attack: luring)

Test / Mix: D

1) 2. ... Rd2 and 2. ... Nxf3+ (double attack: luring)
1) 2. Rh8+ Bxh8 2. Qxf7\#; 1.... Kxh8 2. Nxf7+ (luring away + mate or double attack: luring)
1) 2. Rxd4 Rxd4 2. Qe3 (double attack: luring)
1) $1 . \mathrm{Qg} 7+\mathrm{Kxg} 7$ 2. Rxg6\# (discovered check: luring)
2) 3. Rxf6+Kxf6 2. Qf2+ (double attack: luring)
1) 2. Qxd6 Kxd6 2. Bf4+ (discovered attack: luring)
1) 2. Qh7+ Nxh7 2. Ng6\# (blocking)
1) I. e7 Nxe7 2. Qc7 (double attack: luring)
2) 3. Qa4+ Ra5 2. Qc6+ Bb6 3. Qc8\# (blocking)
1) 2. Qd5+ Qxd5 2. Nxe7+ (double attack: luring)
1) 2. ... Ne3 2. Nxd6 Qxd3+; 2. Qxe3 Qxd3+; 1. ... Nc3+? 2. Kc2 (interfering)
1) 2. Qxh7+ Kxh7 2. Nf5+ Kg8 3. Rxg7\# (discovered check: luring)


## 6 Placing the front and back piece

## GoAl OF THE LESSON

- improving tactical skills


## Prior knowledge

- all forms of the pin


## ACQUISITION

## Instruction

This course distinguishes three pin-related themes, i.e. 'the pin', 'attack on a pinned piece' and 'a pinned piece is not a good defender'. The exercise sheets of Step 2 and 3 provide enough material to test the students' knowledge and, if need be, to refresh their memory. Mirroring and changing the colour provides a completely new position.

## Placing the front piece

For pins, preparatory moves often involve placing the front or the back piece. It is therefore important to spot opportunities for (re)placing front and back pieces. The way in which we cover this topic is similar to how we covered the preparatory move in relation to double attacks.
In the diagram ( $\downarrow$ ) Black's bishop and his king are placed on the same diagonal, but White cannot exploit this straight away. However, by exchanging on c6 White can place a knight as front piece. After 1. Nxc6 Nxc6 2. Bd5 nets a piece.
On the right, Black lures the bishop to the g-file with the help of a sacrifice, where it ends up as the front piece of a pin: 1. ... g5

2. Bxg5 Rg8. We call the form of pin considered so far

- Placing the front piece + pin

The diagram ( $\uparrow$ ) already contains a pin. The bishop on b6 is pinned, but it is also adequately defended. Attacking the bishop with 1 . a5 is met by 1 . ... Bxc5. The problem is that the front and pinning piece are attacking each other. For this reason White must place another front piece with 1. Rxb6+ Rxb6, after which 2. a5 wins material.
The example on the right is more difficult. Black first places the front piece by giving check. 1. ... Qe4+ 2. Qg2 (2. Rg2 Rel+). Next, Black attacks the pinned queen once more with 2. ... Rd2. White cannot capture on e 4 on account of the mate on h 2 .

- Placing the front piece + attack on a pinned piece.

In the diagram $(\Leftrightarrow)$ White seems to have everything under control. The only way in which Black can exploit the pinned bishop is by replacing it with another front piece by means of a sacrifice. What is more, he can deal out a surprising blow with 1 . ... Qxb2+ 2. Qxb2 Rxcl\#. The queen on $\mathbf{b} 2$ is now pinned and so has lost her protective function.
In the diagram ( 3 ) there is no pin yet. The bishop on $f 7$ has to protect the knight on h5. With 1. g6 White closes off the diagonal of the bishop. If the bishop moves, White plays 2. Bxh5. No matter how Black captures on g6, he will end up in a pin on the g-file: 1. ... fxg6 (Bxg6) 2. Bxh5

- Placing the front piece + a pinned piece is not a good defender.



## Placing the back piece

Another type of preparatory move is a luring move which gives the back piece the opportunity to exploit the pin.
The left part of the diagram ( $\uparrow$ ) offers a straightforward example. White first plays 1. Rxb8+ so as to pin the bishop after 1. ... Kxb8 2. Rbl.
On the right, White plays $\mathbf{1 .}$ g8Q+. After 1. ... Kxg8, 2. Bd5 wins the house. Note that White cannot do without preparatory luring here, since the direct 1 . Bd5 is met by 1. ... Rh6+ or 1. ... Re2+.

- Placing the back piece + pin

In the left part of the diagram ( $\neg$ ) 1. ... c5 does not yield anything because the bishop on d 5 is hanging.
However, after the exchange 1. ... Bxb3 2. Qxb3 Black has managed to put in place a back piece. He can exploit the resulting pin with 2. ... c5.

On the right, the knight on f 5 is only partially pinned, since it can still move to e7 or h4. This means that attacking it with 1. g4 is as yet ineffective. White can win material by first exchanging on g6: 1. Nxg6 Kxg6 2. g4, winning a piece.

- Placing the back piece + attack on a pinned piece.

In the diagram ( ${ }^{\circledR}$ ) the bishop on d 6 is pinned. Still, 1. Qxc5 Bxc5+ does not give White anything. After 1. Bxd7+, however, the king is lured to d 7 , and now that the king is the back piece, the pin can be exploited. The bishop no longer protects the queen, which White is therefore free to take with 2. Qxc5.


In the diagram ( $\uparrow$ ) White appears to be fine. But all that glitters is not gold: Black, with the help of a pretty rook sacrifice, has a mate in three: 1. ... Rh1+ 2. Kxh 1 (the back piece has been placed) 2. ... Qxh3+ 3. Kg1 Qxg2\#.

- Placing the back piece + a pinned piece is not a good defender.


## Search strategy



The search strategy for the exercise sheets focuses first and foremeost on the existing pin. The correct move makes the front or the back piece vulnerable, by means of an exchange or a sacrifice. Defending pieces can suddenly lose their protective function because they end up as front or back piece. The positions in which there is as yet no pin present are more difficult. An example is shown in the diagram ( $\Leftrightarrow$ ). White is two pawns behind, and so 1 . Rxa5 is definitely not sufficient. A strong move is $\mathbf{1 . ~ R c 7 + . ~}$ The king cannot go to the back rank on account of the pin on c 8 (i.e. 1. ... Kg8 2. Rc8). Black can do little more than placing
 the rook on d7. This rook has become the front piece, and all White has to do is to attack it one more time with 2. Qb5.

## Practice

## Reminder

$\bigcirc$ Pin / Placing the front and back piece

## Workbook

Pin / Placing the back piece: A
g
Explanation: The back piece has to be lured to the correct square by means of an exchange or a sacrifice. The students should spot existing pins first; as a consequence, these exercises
are relatively straightforward. In those positions in which there is no pin present yet, one has to be put in place, again by means of an exchange or a sacrifice. In the exercises with the theme 'pin' the students should focus on unprotected and (relatively) valuable pieces. In the exercises with the theme 'a pinned piece is not a good defender' the students should focus on protected pieces. All in all, this is a fairly difficult exercise sheet.
If necessary, the trainer can give away the arrangement of the exercise sheet:

- $4 x$ placing the back piece + pin
- $4 x$ placing the back piece + attack on a pinned piece
- $4 x$ placing the back piece + a pinned piece is not a good defender.
Mistake: $\quad$ The order of moves is wrong (positions $2,3,5,6,10,12$ )
Help: The right solution is not far off. Ask the students to find out the cause of their mistakes themselves. How can this defence be prevented? This can be done by reversing the move order! Below, the wrong moves are given together with the answers.
Mistake: Position 8 is not solved correctly.
Help: There is no pin yet, and therefore nothing concrete to go on. Still, there is not a lot White can do on account of his hanging queen. Giving check is the only option. Asking the right questions should help the students find the right move.


## E

Explanation: The front piece has to be lured to the correct square with an exchange or a sacrifice. The students should first look for pins that are already present. In those positions the pin cannot yet be exploited. A smart exchange does the trick. The positions without a pin are rather more difficult. Study them intently and be imaginative. If the positions prove to be too much to handle, then the trainer can give away the arrangement of the exercise sheet:

- $4 x$ placing the front piece + pin
- $4 x$ placing the front piece + attack on a pinned piece
- $4 x$ placing the front piece + a pinned piece is not a good def ender.

Mistake: The existing pin is incorrectly exploited.
Help: $\quad \ln$ position 21 . Rael is rather tempting, but it runs into the sobering 1. ... Qg2\#. The same goes for position 8, where 1. Qc8 is met by 1. .. Qh2\#. Tell the students that they should check their answers.
Mistake: Position 5 is not solved correctly.
Help: The students have come as far as 1. Qf6+ Qg7, but the subsequent attack on the pinned queen with $2 . \operatorname{Re} 7$ is too difficult. Point out that the first move is correct.
$\square$ Pin / Placing front or back piece: A
Explanation: This sheet contains a mix of different themes.
Mistake: $\quad$ See the A- and B-sheets.

## Answers

## $\square$ Pin / Placing the back piece: $A$

1) 2. h6 + Kxh6 (1. ... Kg8 2. Qf6)
2. Qhl (2. Rxd4 Kg7)
7) 8. Nxc6 Qxc6 2. c4; 1. c4? Nde7
1) 2. $\mathrm{e} 8 \mathrm{Q}+\mathrm{Kxe8} 2 . \mathrm{Ba} 4$; 1. Ba4?
1) 2. ... Qf5 2. Bd3 d5
Rbl+
1) 2. Bh7+ Kxh7 2. Qxe6
1) 2. Rh8+ Kxh8 2. Bc3; 1. ...
Qxh8 2. Qg6\#; 1. Bc3? Qxg3+
2. fxg3 Bxh5 (often missed)
10) 11. Bxc5 Qxc5 2. Qxd3; I. Qxd3 cxd3 2. Bxc5, and 3. Bxc8 is nothing special.
1) 2. g4+ Kxg4 2. Be6
1) 2. Nxc6 Qxc6 2. Qxc4
1) 2. ... Nxd3 2. Qxd3 e5; 1....
1) 2. Bxf7+! Kxf7 2. Qxe4; 1. e5? 2. Bxc5
1) 2. Qxc6+ Rxc6 2. Nf4 Qxe4? Nxe4 2. Bxf7+ Kh8 (2. Rxf7 Nd6)

## Pin / Placing the front piece: $A$

I) 1. Bxe5+ Nxe5 2. Qg 3
2) 1. $\mathrm{Rxf} 4+\mathrm{Qxf} 4$ 2. Rfl
3) 1. Rxd6 Qxd6 2. Bg3
4) 1. e5 Qxe5 2. Rel
5) 1. Qf6+ Qg7 2. Re7! Qxf6 3. Rxh7\#
6) 1. Rxe5 Rxe5 2. Rel
7) 1. Nxc5 Nxc5 2. Na4
8) 1. Rxc7+ Rxc7 2. Qc8
9) 1. ... $\mathrm{Rxg} 2+2 . \mathrm{Rxg} 2 \mathrm{Qxd} 2$
10) 1. ... $\mathrm{Qxf} 3+$ ( 1. ... Ng4 2. hxg4) 2. $\mathrm{Qxf3} \mathrm{Rxe} 2+$
11) 1. Qxh7+ Qxh7 2. Nf7\#; 1. Ng6+? Rxg6 2. Qxg6 Rel\#
12) 1. e6 Bxe6 2. Qxg4
$\square$ Pin / Placing front or back piece: A

1) 2. Bxd7+ Kxd7 2. Rh7
1) 2. ... Rxd4 2. Rxd4 c5
1) $1 . \ldots$ Ral+ Kxal 2. Qxd2
2) Drawing
3) $1 . \ldots \mathrm{Rxf} 2+2$ Kxf2 Bb6
4) 5. Qxd5+ Qxd5 2. Bg2; 1 .

Bg 2 Bb 7
4) 1. Qxc7 Rxc7 2. Bf4
11) 1. Rxb8 Kxb8 2. d4
5) 1. ... Qxg2+ 2. Qxg2 Rxfl+
12) 1. $\mathrm{Qa} 3+\mathrm{Re} 7$ 2. Ng 8 !
6) 1 . ... Rxc4+ 2. Bxc4 Qxe2
7) l. ... Rxc3 2. Qxc3 Bf6


## Goal of the lesson

- learming to use passed pawns
- leaming to defend against passed pawns


## Prior knowledge

- all forms of eliminating the defender
- all forms of defence


## ACQUISITION

## Instruction

A pawn which can be advanced to the other side without encountering any of the opponent's pawns is called a passed pawn. The closer a passed pawn is to its promotion square, the more dangerous it is.
In the top left-hand part of the diagram ( $\Delta$ ) the c5-pawn is not a passed pawn, since the pawn on b7 controls the c6-square.
In the top right-hand part, the g5-pawn is a passed pawn. On the bottom left-hand part, Black can create a passed pawn by 1. ... b3 or 1. ... c3. In the bottom right-hand part Black cannot create a passed pawn, since White controls square g3 twice.
A passed pawn is a dangerous foe which must be stopped as early as possible. There are two ways to stop a passed pawn:

- blocking: occupying the square directly in front of the pawn.
- controlling: covering the square that the pawn can advance to. The pawn can still advance, but this, of course, is not wise. The diagram ( $\Omega$ ) contains examples of both strategies.


There are a number of strategies available to exploit a passed pawn. First, pieces can be used to help control the square directly in front of the passed pawn. The side with the passed pawn can also try to eliminate defenders with the help of combinations. For instance, the enemy piece that prevents pawn promotion can be eliminated through capturing, chasing away, blocking or interfering. This is therefore a suitable moment to refresh the students' knowledge of these types of combinations, which can be aimed specifically at passed pawns.
On the left part of the diagram ( $\uparrow$ ) White plays 1. Rxb6 with the aim of promotion after 1. ... cxb6 2. a8Q.
In the rook endgame on the right, White eliminates the black defender by means of an exchange: 1. Rd4+ Kf5 2. Rd5+.
The diagram ( $\Leftrightarrow$ ) contains four examples that involve chasing and luring away. In the top left-hand part, White's pawn is held under control by the king; $1 . a 7$ is met by 1 . ... Kb7. With 1. Bd5+ White lures the king away or denies him access to the passed pawn. Regardless of whether Black takes the bishop or plays 1. ... Kc7, White pushes his pawn to a7 on the next move. In the top right-hand comer White wins material with 1. Bf7. If Black takes the bishop, the pawn promotes; if Black does not take the bishop 2. g8Q nets White a piece. In the bottom left-hand part Black lures the bishop on b2 away with 1. ... Ba3.
In the bottom right-hand part, White can no longer stop the f-pawn after 1. ... Rh1+ 2. Kxh1 gxf 2.
In the next diagram ( $₫$ ) we consider two examples of interfering. On the left, the bpawn marches on after 1. Rb6, since 1. ...

axb6 seals off the b-file.
On the right, the h-pawn is still held off by the bishop (1. ... h2 2. Be4). But this is no longer the case after 1. ... f3. White's 2. exf3 closes off the long diagonal, after which the pawn is free to walk on.
In the left part of the diagram ( $\mathbb{v}$ ) the white queen is covering al and bl , and the knight bl. With the interfering 1. ... Rb1 Black shuts off the queen. 2. Nxbl is met by 2. ... alQ.
On the right, the influence of the e5-bishop is eliminated in a similar fashion. After 1. Nf6 the h-pawn is unstoppable.
Promotion through blocking is the most beautiful method. In the diagram ( $\Rightarrow$ ) White's h-pawn still has a long way to go. Black seems to have enough time to play d6 and ward off the pawn with his bishop. Black is in time after 1. h5 d6 $2 . \mathrm{Ke} 4 \mathrm{Kg} 3$ 3. h6 Kg4 and 4. ... Bf5 + . White can win by blocking the d-pawn: 1. Bd6+ cxd6 (1. ... Kg2 2. h5 Bb7 3. h6 c5+ 4. Ke3) 2. h5 and the pawn walks through unhindered.
The next diagram ( $\sqrt{ }$ ) is for enthusiasts only. After 1. h7 alQ+ 2. Qxal Rxal+ Black can trade his rook against the last white pawn, after which White cannot win any more: $3 . \mathrm{Kb} 7 \mathrm{Rbl}+4$. $\mathrm{Kc} 7 \mathrm{Rcl}+5$. Kd7 Rdl+ 6. Ke7 Rel+ 7. Kfl Rfl+ 8. $\mathrm{Kg} 7 \mathrm{Rg} \mid+9$. Kh6 Rg2. White must gain time and prevent promotion of the black pawn first, even at the cost of a queen! With the beautiful 1. Qal! Rxal the apawn is blocked. The win after 2. h7 is easy.
Finally, a promotion through a combination of luring and blocking. This example is rather difficult, but with proper explanation it can be made clear.


In the diagram ( $(\mathbb{)}$ ) White must promote his h-pawn, otherwise he will have insufficient material to win. The direct 1 . h6 runs into 1. ... e4, after which Black's king will reach the pawn. Hence, White must lure away the bishop from the long diagonal: 1. Ba7! Ba1 (1. ... Bxa7 2. h7) 2. Kb1 (otherwise 2. ... e4) 2. ... Bc3 3. Kc2 Bal 4. Bd4! (splendid move!) 4. ... Bxd4 (4. ... exd4 5. Kd3) 5. Kd3 (threatens 6. h7) 5. ... Bal 6. Ke4 and the d-pawn is permanently blocked.
In students' games, the passed pawns of the opponent frequently advance unhindered. The second part of this lesson (which can be treated as a separate lesson) deals with ways of defending against passed pawns. Pawn promotion implies a material gain; promotion to a queen gives a player no fewer than eight points! The opponent must therefore aim to prevent promotion, even if this means the investment of material.
In the diagram ( $\leftrightarrows$ ) the knight must try to catch the a-pawn. The rook's pawn is the knight's Angstgegner. White can catch the pawn with 1. Nd3 a2 2. Nc1+. Note that White cannot make any progress with 1. ... Kc3 2. Ncl Kc2 3. Na2.
Bishops can generally deal with one passed pawn, but two passed pawns may be too much to handle. On the right, Black cannot stop the pawn anymore after 1. Be5? h4 2. Bf6 h3 3. Be5 d4. The right move is 1. Bf2.

In some cases there is life after promotion, since the newly gained queen may be in jeopardy. In the diagram ( ${ }^{(\Omega)}$ Black cannot prevent c 8 Q . What he can do, however, is win the queen with 1. ... Ne5 2.c8Q Ng6+ 3. Kg8 Ne7+. Note that 2. Kg8 Nc6 does not give White anything.


In the diagram ( $(\stackrel{\rightharpoonup}{ })$ the promotion cannot be stopped, but the new queen can be won by 1. Nd2 c1Q 2. Rxb1+. After 1. ... Nxd2 2. Re1 and 3. Rxc2 Black does not retain sufficient material to win the game.
Even when the passed pawn can no longer be stopped and the new queen cannot be won there may still be hope.
In the left part of the diagram ( $\lrcorner$ ) the black b-pawn is unstoppable. But he can reach a draw by stalemate. White draws immediately after 1. Ka3 b1Q or 1. ... b1R. White also gains half a point after $\mathbf{1}$. ... Nb1+ 2. Kb4 or 1. ... b1B 2. Kb4 Bd3 3. a4, when the last pawn will disappear from the board.
On the right, White succeeds with 1. Rg4 h1Q (after 1.... hIR White captures the bishop) 2. Rh4+ Qxh4. It is stalemate.

## Search strategy

We first consider the search strategy that deals with exploiting passed pawns. The students will have few problems finding passed pawns. This leaves the question why pawn promotion is as yet impossible. That is, which defender must be eliminated, and how?
In the diagram ( $(\square)$ the passed pawn is in danger, since Black threatens 1. ... Kxf6, while 1. f7 is met by 1. ... Bd5+. White can lure the king away by playing 1. Bd4+ Kxd4 but then 2. 77 will still run into 2. ... Bd5+. White has no time for 2. Ba4 Bd5+ 3. Bb 3 on account of 3. ... Ke5 4. f7 Bxf7. White must sacrifice his other bishop and get out of the check on d5: 2. Bc4 Kxc4 3. $\mathbf{7} 7$ with promotion.
In order to eliminate a passed pawn of the opponent an entirely different approach is

called for. This can be done by capturing the pawn, conquering the new queen or by stalemate. In the diagram ( $\widehat{v}$ ) the pawn cannot be stopped. The king guards bl and the pawn on e4 guards $f 3$.
White has no time for Rd6-dl or $\mathrm{Bg} 6 x e 4$. White can gain time by sacrificing a rook: 1. Rbl Kxb1 2. Bg6 h1Q (otherwise 3. Bxe4) 3. Bxe4+ and the new queen is lost by means of a double attack. The a-pawn will then decide matters.

## Practice

## Playing format

## Bishop OR KNIGHT AGAINST PAWNS

Stopping a pawn is an acquired art. Which of these pieces is better equipped to deal with pawns? The side with the pawn wins if the pawn reaches the other side of the board. After a few games the children will have found the right answer. The simultaneous display format is ideal for this game. The children can choose which side they want to play. The trainer can make the occasional mistake to test the children's skills.
In both positions in the diagram (ß) the pawn side wins with optimal play. This is also the case if, on the right, the knight side is to move first. It is not much fun playing the knight side. With reasonably correct play the pawns win without much effort.
The side with the bishop is harder to beat. On the left, the pawn side can only win with 1. 24.
The bishop can be used more effectively when the pawns occupy more central positions. But even when the pawns are

positioned on $\mathbf{b 2}$, c2 and d2 they prove to be unstoppable.
When the pawns are positioned closer to the centre still, as in the diagram ( $\neg$ ), the road to victory is even smaller.
White to play, wins. If the bishop side is to play, 1. ... Bd7! is winning.


## Workbook

## $\square$ Endgame / Passed pawn: A <br> E

Explanation: The aim is to exploit the passed pawn. The side with the passed pawn must win material, even if this means losing the passed pawn in the process. Some students think that the passed pawn must promote no matter what. This is not true; an exercise has been solved correctly when promotion of the passed pawn cannot be stopped anymore or when the side with the passed pawn has won material.
Mistake: The passed pawn does not lead to a material gain.
Help: $\quad$ Ask the students to indicate why the suggested answer is incorrect, and then ask them to look at the position again.
Mistake: The suggested answer for position 4 is 1. Rd6.
Help: 1. Rd6 wins material and is thus correct. Unfortunately, the move is insufficient for the win. Play out the position! (The students can also play against each other). The best course for Black is $1 \ldots \mathrm{~g} 5$ and then $\mathrm{Kg} 8-\mathrm{g} 7-\mathrm{ff}$.

Endgame / Passed pawn: B
Explanation: See exercise sheet A.
Mistake: The passed pawn is played without due preparation (positions 1, 2, 10, 11 and 12 ).
Help: Execute the suggested move on the board and then ask the student to refute his own suggestion. The passed pawn can still be stopped. The defender must first be eliminated.
$\square$ Endgame / Defending against a passed pawn: A
Explanation: The passed pawn of the opponent either has to be stopped or the new queen must be won. The passed pawn or new
queen has to be eliminated at all cost, since allowing promotion would give the opponent eight extra points. An exercise has been solved correctly if the passed pawn no longer creates a danger.
Mistake: The passed pawn promotes anyway.
Help: Why is the answer wrong? Ask the student to look at the position once more.
Mistake: The piece stopping the passed pawn is positioned on the wrong square (position 2: 1. ... Bg5 2. c7; position 3: 1. Be4 f5+).
Help: $\quad$ The students have to find the right move themselves. If required, they should spend more time on the positions.

## ANSWERS

End game / Passed pawn: A

1) 2. ... Bcl 2. Kh5 Bxf4; 2.... glQ? 3. Nh3+
1) $1 . \ldots \mathrm{Bb} 2$
2) $1 . \ldots \mathrm{e} 4+2$. Bxe4 Nxe4
3) 4. $\mathrm{Rxd} 8+\mathrm{Nxd8} 2 . \mathrm{e} 7$; 1. Rd6 g5
2. Rxc6 Kg7 is not sufficient.
5) 6. Rd7 Rxd7 2. exd7
1) 2. ... Bel+2. Ke2 blQ 3. Rb5+

Bb4; 2. Kxel blQ+
7) 1. ... Qxf3 2. gxf3 e2
8) 1. Bh6 +Kxh 7 2. Bxf8; 1 .

Bf $6+? \mathrm{Kxh} 7$
9) 1. Ne4; 1. Nf5? Re8
10) 1. Bc4+ Kh8 2. Bf7 or 2. Bb5
11) 1. Rxf8+ Kxf8 2. d7+
12) 1. ... Ra3 2. Rxa3 Bxd6+
$\square$ End game / Passed pawn: B

1) 2. Qc8+ Nxc8 2.d7 Kf7 2. Rc8 Ra5+
1) 2. Rh5 Rxh5 2. fxe7
1) Drawing
2) 3. Qe6+ Qxe6 2. dxe6
1) 2. ... Qxc5 2. Nxc5 a7
1) $1 . \mathrm{Rc} 7 \mathrm{~d} 42 . \mathrm{Rc} 8$
2) 3. Rd8 Rxd8 2. Bf6+
1) 2. Nb7+ Nxb7 2. a6 Kc7 3. a7
1) Drawing
2) 3. Be5+ Bxe5 (1. ... Kxe5 2. g7) $2 . a 7$
1) 2. Rc8+ Rxc8 2. d7+; 1. d7+
1) 2. $\mathrm{Rg} 7+\mathrm{Kh} 8$ 2. $\mathrm{Rh} 7+\mathrm{Kg} 83$. Rh8+ Kxh84.g7+

## Endgame / Defending against a passed pawn: A

1) 2. Bb3 (1. Bb5? Kc2) 1....
1) $1 . \ldots \mathrm{b} 3+2 . \mathrm{Kxb} 3 \mathrm{Ba} 51 / 2-1 / 2$
$\mathrm{Kcl}(1 . \ldots \mathrm{Kal} 2 . \mathrm{Bc} 2) 2$.
2) 3. $\mathrm{Bd} 5+\mathrm{Kg} 72 \cdot \mathrm{Ba} 21 / 2-1 / 2$
Ba2 1/2-1/2
1) $1 . \mathrm{Bc} 4+\mathrm{Kxc} 42 . \mathrm{Kxe} 2 \mathrm{Kc} 3$
3. Kdl Kd 3 stalemate
5) 6. Nd4 clQ 2. Nf3\#; 1....

Kg5 2. Nxc2 1-0
6) l. Bbl ( $1 . \mathrm{Bd} 3+$ ? $\mathrm{Kc} 3!)$ 1. ...

Kb3 (1. ... Kc3 2. Ba2) 2.
Kd3 Kb2 3. Ba2 1/2-1/2
7) 1. ... Nhl+ Kg2 2. Ke3 Kxhl 3. Kf2 stalemate
8) 1. ... Ke5 2. a7 Be6 3. a8Q Bd5+ $1 / 2-1 / 2$
9) 1. Bd 7 Kxc 7 2. $\mathrm{Bxh} 31 / 2-1 / 2$
10) 1. Kf2 dlQ 2. Rxel 1-0
11) 1. Kd7a2 2. Ke7 alQ 3. Bf6+1/2-1/2
12) 1. Ne 4 g 2 2. $\mathrm{Nd} 2+1 / 2-1 / 2$


Goal of the lesson

- extending the level of tactical skills


## PRIOR KNOWLEDGE

- all previous forms of eliminating the defence
- attack


## ACQUISITION

## Instruction

In our discussion of preparatory luring moves in lesson 3, we already noted that students require a good basic knowledge to tackle the tactics considered in Step 4. This lesson continues where lesson 3 left off. In it, we discuss the type of preparatory move which eliminates a defending piece. In this context eliminating the defender is not an independent combination (as in Step 3), but rather helps to set up a double attack. The simplest form of eliminating the defender is by means of capturing. In the left part of the diagram (ß) White has a double attack which is as yet ineffective. Before he can fork king and rook, he must first capture the defender of the b 6 -square. White first eliminates the defender with 1. Bxc5 and then, after Black has recaptured with 1. ... bxc5, executes the double attack with 2. Nb6+.
On the right we see a similar scenario. Although the rook on f 5 is protected, it falls victim to a double attack. Black can eliminate the defender and then wins the rook with 1. ... Bxg3 2. fxg3 Qh7+. The preparatory move is needed, since the direct


1. ... Qh7+ can be met by 2. Rh5.

The diagram ( $(\checkmark)$ contains another example. Here, too, the black bishop is defending b6. White sacrifices the exchange and picks up a whole rook on the next move: 1. Rxc5 bxc5 2. Nb6+ Kb7 3. Nxa4. On the right, White loses the queen after 1. ... Rxg2+ 2. Kh1 (2. Rxg2 Nf3+) 2. ... Rh2+ (luring!) 3. Kxh2 Nf3+.
Note that there is a difference between the first two diagrams. In the first diagram the preparatory move involves an exchange; in the second diagram it involves a sacrifice. This is not a proper sacrifice, however, since the material is won back with interest on the next move.
In the left part of the diagram ( $\Rightarrow$ ) White chases the rook from c 5 by 1 . d4. After 1 .... Re6 White wins a bishop with 2. Qa5+. Here the defender is eliminated by chasing it away.
The right part of the diagram contains an example in which Black has to lure away a defending piece. Ask the students which of the two knight forks is correct. The winning fork is $\mathbf{1 .}$... $\mathbf{N h} \mathbf{3}+\mathbf{2 . g x h 3} \mathbf{N f} \mathbf{3}+$. The other fork does not give Black anything: 1. ... Nf3+ 2. gxf3 Nh3+ 3. Bxh3.
Another type of preparatory move involves interfering. In the diagram ( $(\Omega)$ White does not achieve anything with 1 . Qd6+, since the two black rooks are protected. White can 'unconnect' the rooks with 1. Nb5. This surprising move sets up a double attack on either c7 or d6, depending on Black's reply. On the right, Black wins material by means of an interfering move. After 1 . ... g4 White must give up a knight or a bishop to avoid a devastating knight fork on f 3 .
A preparatory move can also be used to set

up an $X$-ray check.
In the left part of the diagram ( $\widehat{v}$ ) it turms out that Black loses the exchange after I. ... $\mathrm{Ra} 2+2$. $\mathrm{Ba} 3 \mathrm{Nb} 6+3 . \mathrm{Kb} 3$. But if Black first eliminates a defender with 1. ... Nb6+ 2. Bxb6 Ra2+, he wins an exchange.
On the right, it looks as though White can win a rook with 1 . Rhg4+. However, after 1. ... Kh6 the black rooks are protected and White has nothing. White must first play the preparatory move 1. Kh2, chasing away the rook on gl. After 1. ... Ra1, 2. Rhg4+ wins a rook.
In some cases a preparatory move may even involve blocking. Blocking usually occurs in combination with 'chasing' (see lesson 12). In the diagram ( $\Leftrightarrow$ ) the X-ray check 1 . Rd8+ can be met by 1 .... Ke4. White must therefore deny Black this option. This can be done with the blocking move 1. e4+. White wins a rook after Rxe4 (or 1. ... Kd6 2. Rd8+) 2. Rd8+.

In the diagram ( $₫$ ) White cannot X-ray the knight and bishop directly, since $1 . \mathrm{Rg} 2$ runs into 1. ... Ne3+. I. Rel+ Kc2 2. Rgl also does not work, since Black still has a check on e3. The solution is to move away the king with a gain of tempo. After 1. Kb3 Black must do something against mate on el. After 1. ... Kc1, 2. Rg2 wins a piece.

## Search strategy

The search strategy that is required for this type of preparatory move is straightforward. The positions contain a double attack which is as yet ineffective on account of the presence of a defending piece. This defender must be eliminated.
In the diagram ( $(\mathbb{)}$ ) White can no longer

protect his pawn on e4 if Black eliminates a defending piece. With 1 . ... Bb 4 he attacks a defender with tempo. White must defend the knight, and loses a piece after 2. Bd2 Bxc3 3. Bxc3 dxe4.

## Practice

## Reminder


$\diamond$ Double attack / Eliminating the defence

## Workbook

$\square$ Double attack / Eliminating the defence: A

## 플

Explanation: A double attack with the knight is not yet possible. The double attack can be set up by means of the familiar types of preparatory moves which eliminate the defender (i.e. capturing, chasing away, luring away and interfering; the workbook does not contain any examples of blocking).
Mistake: The suggested solution is incorrect.
Help: "Which pieces are within the target range of the knight?" and "Which of these is preventing the knight fork?"
Mistake: Position 5 is not solved correctly.
Help: The knight fork is possible on account of the pin on the cfile. This is difficult to spot, since there are two pieces on the c -file in the initial position.
$\square$ Double attack / Eliminating the defence: $B \quad$ \#
Explanation: A double attack with the queen is not possible yet. This is due to one of the following reasons:

- One of the attacking targets is still protected.
- One of the opponent's pieces is in the way.
- The square from which the double attack is executed is still controlled by the opponent.
In each case the solution is straightforward: eliminate the defender.
Mistake: The suggested solution is incorrect.
Help: Guide students in the right direction with questions such as "Which target do you see?", "Can you spot a second
target?" Or "Where would the queen like to give check?"


## ANSWERS

Double attack / Eliminating the defence: $A$

1) 2. Bxc6+ Bxc6 2. Ne5+ (capturing)
1) 2. Qxe5 Rxe5 2. Nf6+ (capturing)
1) 2. a5 Nc8 2. Nd5 (chasing away)
1) 2. Qxe8+ Rxe8 2. Nc6+ (capturing)
1) 2. ...d4 2. Ne4 Nb3+ (chasing away)
1) 2. ... Qxf 3 2. $\mathrm{gxf} 3 \mathrm{Ne} 2+$ (capturing)
1) 2. Bxc7 winning a pawn (luring away)
1) 2. .. Bxb2 (capturing)
1) 2. Rxf7+ Rxf7 2. Ne6+ (capturing)
1) 2. Bxb7 Bxb7? 2. Ne6+ (luring away)
1) 2. ... Nhxf3+ 2. Bxf3 Nxh3+ (luring away)
1) 2. ... g4 2. Nf4 Nf3+ (interfering)

Double attack / Eliminating the defence: $B$

1) 2. d5 Ne5 2. Qa4+ (chasing away)
1) 2. Bxc6 dxc6 2. Qa3+ (capturing)
1) 2. Nxf5 exf5 2. Qxd5+ (luring away)
1) 2. f4 Re7 2. Qb2+; 1. Qb2? Qb6+ (chasing away)
1) $1 . \mathrm{Ng} 5$ fxg5 2. Qh5+; 1. ...g6
2. Qh4+ (interfering)
6) 7. Bxf6 Qxf6 2. Qd5+ (capturing)
1) 2. Nxg6+ hxg6 2. Qh4+
(luring away)
1) 2. ... Ne3 2. fxe3 Qxe3+ (luring)
1) 2. Re7 Qxe7 2. Qxd5+ (luring away)
1) 2. ... Bxg2 2. Qxg2 Qa5 (luring away)
1) 2. Nd4 exd4 2. Qb3+ (interfering)
1) 2. ... a6 (or first 1.... Qg6+ and 2. ... a6) 2. Qb3 Qg6+ (chasing away)

The magnet

Goal of the lesson

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


## Prior knowledge

- mating patterns


## ACQUISITION

## Instruction

Up to this point we have covered a number of different types of combinations that are aimed at a direct attack on the king. These comprise the different forms of eliminating the defender and the mate in two exercises. In this lesson we will discuss the final form of a combination aimed at the enemy king. Sometimes, even though you have sufficient material, the enemy king can still escape a mating attack.
In the diagram ( $\Leftrightarrow$ ) Black meets the obvious 1. Qh7+ by 1. ... Kf8, after which the king can escape via e7. White must try to keep the enemy king on the kingside. This can be achieved with 1. Rh8+, which forces the king to h8. After 1. ... Kxh8 2. Qh7 Black is mated. This type of combination is called a magnet, a term that speaks for itself.
In the left part of the diagram ( $(\mathfrak{)}$, 1. Qa4 is met by 1. ... cxb6. Instead 1. Ra8+ is called for: 1. ... Kxa8 2. Qa4+ Kb8 3. Qa7\#.
On the right, the students have to imagine that White has a forced mate somewhere on the board. This can best be done by putting the position on a demonstration board. What


Black must do is work with a gain of tempo, which is the essence of the magnet. Black can do this by 1. ... Rh1+ 2. Kxh1 Qel+ 3. Kh2 Qxf2+ 4. Kh1 Qg2\#.
A gain of tempo is of the utmost importance. The piece that has to deliver the mate must be put in position with the help of a check.
We can stress the importance of the tempo using the upper part of the diagram ( $\uparrow$ ). The standard attack 1. Qd8+ Kh7 2. Qf8 is too slow. Black has enough time to defend or even organize his own attack. After 1. Qf8+ Kxf8 2. Rd8\#, however, White wins.
In the lower part of the diagram Black is faced with a mating threat, and so he has no time for I. ... Nc3. Rather, the knight has to move with tempo (i.e. with check) to c3: 1. ... Ra2+ 2. Kxa2 Nc3+ 3. Ka1 Rb1 mate. In the left part of the diagram ( $\Delta$ ) Black can home in on the castled king with 1. ... Ra2+ (but not 1.... Qa5, when the king escapes to cl) 2. Kxa2 Qa5+ 3. Kb2 Qa3\#. If White does not take on a2 he will be mated on c2. On the right, we see an example of how the king can be lured in front of his protective cover of pawns. After 1. g6+ Kxg6 (or 1. ... Kg 8 2. Qf7+) 2. Qf5 Black is mated.
The magnet combination is often combined with other combinatorial motifs. In the left part of the diagram ( $₫$ ) the magnet goes hand in hand with a pin. White forces the king to a8 with the help of a rook sacrifice, thereby pinning the b-pawn: 1. Ra8+ Kxa8 2. Qxa6+ Kb8 3. Qxb7 mate.

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


The diagram ( $\uparrow$ ) contains two rather more difficult examples. On the left, Black is threatening 1. ... Ral + 2. Kb4 Ra4. White has no time to get a new queen, but he does have a solution to his predicament: 1. Bb6+ Kxb6 (after 1. ... Ka8 White queens) 2. c8N+! Ka5 3. b4 mate.
On the right, we can see an example of a characteristic attacking position. After the direct 1. Qh4 Black defends with 1. ... Re8, when 2. Qh7+ Kf8 does not give White anything. Another problem for White is the bishop on g7, which prevents 3. Qxf7\#. With 1. Rh8+ White kills two birds with one stone. 1. ... Kxh8 obviously runs into 2. Qh4+ and 3. Qh7\# while 1. ... Bxh8 is met by 2. Qh4 Re8 3. Qh7+ Kf8 4. Qxf7\# or 4. Qxh8\#.
At Step 4 level, students will appreciate the beauty of the magnet in the diagram ( $\Rightarrow$ ), in particular if they have searched in vain for a solution. White's only road to victory is $\mathbf{1 .}$ Qa4+ Kxa4 2. Ral+ (this move had to be with a gain of tempo) 2. ... Kb5 3. Bd7\#.

## Search strategy

The magnet combination itself is not that difficult. All it takes is a basic knowledge of mating patterns. Having found a suitable mating pattern, the students should go on to find a sacrifice; this makes it possible for an attacking piece to give check with a gain of tempo.
In the diagram ( $\downarrow$ ) White's problem is that the el-rook cannot take part in the action. Otherwise, 1. Qg8+ or 1. Qh5+ would win easily. The only mating pattern that White can aim for involves the queen on e8. This can be achieved with the help of a magnet:

## 1. Rf8+ Kxf8 2. Qh8+ Kf7 3. Qe8+.



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

## Practice

## Workbook

Mate / Magnet: A

## E

Explanation: The magnet sacrifice gives the attacker time to bring out his most important attacking pieces with tempo. With the help of a sacrifice, the enemy king is drawn into a mating net (mate in two, three or four moves).
Mistake: The king can escape.
Help: $\quad$ This means that there was probably no magnet sacrifice. Looking at the position once more is usually sufficient.
$\square$ Mate / Magnet: B Ee
Explanation: See exercise sheet A .
Mistake: The suggested solution to position 1 is 1 . Rcl+ Kd6 2. Qd8\#.
Help: Look at the queen on b5 and the king on fl . White is in check! Try again.

## ANSWERS

Mate / Magnet: A

1) 2. $\mathrm{Re} 8+\mathrm{Kxe} 82 . \mathrm{Qe} 7 \#$
1) 2. Rh8+Kxh82. Qh7\#
1) 2. Qh6 + Kxh6 2. Rhl\#; 1. ... Kg 8 2. Rc8+ and mate
1) 2. ... Ra3+ 2. Kxa3 Qa6 and mate
1) Drawing
2) Drawing
3) 4. $\mathrm{a} 4+\mathrm{Kxa} 4$ 2. Qb3+
1) 2. Qf8+ Kxf8 2. Rxf7+ Ke8 3. Rf8+ Kd7 4. R2f7\#
1) 2. Rh8 + Kxh8 2. Qe8+Kh7 3. Qg8\#
1) I. Rh8+ Qxh8 2. Qf7\#
2) 1 . ... Rh2+ 2. Kxh2 Qf4+ 3. Kh1 Qf3+ 4. Kh2 Qg2\#
3) 4. Qf6+ Kxf6 2. Be5\#; 1. ... Kg 8 2. Be5 with mate.

Mate / Magnet: B

1) 2. Rc4+ Kxc4 2. Qc3\#
1) 2. Rb8+Kxb8 2. Rh8\#
1) 2. Rxh7+Kxh7 2. Qf7+ Kh6 3. Qxg6\#; 2. ... Kh8 3. Nxg6\#
1) $1 . \ldots \mathrm{Qhl}+2 . \mathrm{Kxhl} \mathrm{Bf} 3+3$. Kgl Rdl\#
2) 3. Qf8+Kxf8 2. Rd8\#
1) 2. ... Bd3+ 2. Kxd3 Qdl\#
1) 2. ... $\mathrm{Qg} \mathrm{l}+$ 2. Kxgl Rgxg2+ 3. Khl Rxh2+ 4. Kgl Rbg2\#; 2. Rxgl Nf2\#
1) 2. ... Rhl+2. Kxhl Qh3+ 3. Kgl Nf3\#
1) $1 . \ldots \mathrm{Rgl}+2 . \mathrm{Kxgl} \mathrm{Qxh} 2+3$. Kf1 Qhl\#
2) 3. ... Ra3+2. Kxa3 $\mathrm{Qal}+3$. Kb3 a4\#
1) 1.... Bxh3 2. Kxh3 Qf4 and mate on g3.
2) 3. Rh7+ Kxh7 2. Qh2 +


## Goal of the lesson

- leaming (some) basic positional skills


## PRIOR KNOWLEDGE

- attacking targets
- piece activity


## ACQUISITION

## Instruction

For children positional aspects are much more difficult to comprehend than tactical ones. This should come as no surprise, since combinations and other tactical motifs have a direct result, whereas positional aspects do not. For this reason, we will restrict our attention to positional aspects that involve 'visual' factors.
Weak pawns are easy to spot. A pawn is weak when:

- it cannot be protected by another pawn.
- it is an easy target for attack.

In the diagram ( $\downarrow$ ) the pawn on $f 6$ is weak on both counts. The pawns on f7 and h7 are also weak but less so, because they cannot be easily attacked. We might therefore say that f 7 and h 7 are half-weak. The pawn on d 3 is very weak (on both counts) and the pawn on h 3 is half-weak, because the latter cannot be attacked so easily.

While these characteristics can be read off the position, it is always important to take into account the remaining pieces.


In the diagram ( $\mathbb{\cup}$ ) the white pawn on h 2 is weak. We can eliminate this weakness by advancing it to h 4 , but then the pawn on g 3 will become weak, and all we have done is replacing one problem with another. Black has a weak pawn on c7. By playing this pawn to c5, both b6 and d6 will become weak. In other words, advancing the c-pawn doubles Black's problems. Most of the time pawns such as those on h 3 and c 7 are best left standing, since advancing them creates other, more serious problems.
Weak pawns are weak only to the extent that the weaknesses can be exploited. The crucial question is whether the opponent can attack them. If the opponent lacks the right pieces for this, the weakness is not much of a problem. If there are as many attackers as defenders, weaknesses can pose a problem. A piece that has to defend a weak pawn loses its mobility and is vulnerable, given that it is tied to a particular spot.
In pawn endings, weak pawns, and especiatly doubled pawns, are particularly vulnerable. In pawn endings the only defender is the king, and his task involves much more than defending alone.
It is instructive to play the position in the diagram $(\Leftrightarrow)$ to a finish. The students can play against each other or simultaneous against the trainer. With correct play Black wins, although he requires a healthy dose of endgame technique for this. The first move can be taken as an indicator of the student's strength. It is an advantage to move first. The pawn structure on the queenside is the same in the following diagram ( ( ), but the overall position is of a quite different nature. Here White's piece activity more than compensates for the weak pawns on the c-

file. The bishop on a3 prevents Black from castling. As a result, Black cannot bring his king to safety and he is prevented from bringing out his rook.
An extensive discussion is instructive. One variation is 1. 0-0-0 Bxc3 2. Rd3 Ba5 3. Rhd1 f6 4. Rd7 b5 5. Re7+ K18 6. Rdd7. The diagram ( $\uparrow$ ) offers another illustration of the need to take into account more than the pawn structure alone. It turns out that White's pawns are not weak at all: 1. Nf3
Be6 2. Kd4 Bd7 3. Ne5 Be8 4. Nd3 Bd7 5. Nc5 Bc8 6. b3 Be6 7. Nxa6 Bg8 8. Nc5 Bi7 9. Nd3 Be8 10. Nf4 Bf7 11. g3 and White wins.
It is important to emphasise that doubled pawns are not always weak. At Step 4 level children tend to jump at the opportunity to give their opponent a doubled pawn, even when this means giving up an active piece.

There is a direct link between weak pawns and strong squares. Using the diagram ( $\lrcorner$ ) we outline the characteristics of a strong square:

- a strong square cannot be controlled by the opponent's pawns.
- a strong square is available to one of your own pieces.
- a strong square is protected by one of your own pawns.
- a strong square is located in or around the part of the board where the main action takes place (this is usually the centre of the board).
In the diagram the squares b 5 and d 5 are strong squares for White; f 5 is not a strong square, since Black can control it by playing g6. Black has strong squares on d 4 and f 4 . The c5 square is not strong because White's
b-pawn can still exert an influence on it. An important factor, of course, is that the knight can leap to a strong square via e2 and c3; the same goes for the black knight, which can reach a strong square via e6. The squares f5 and f 6 are a different story. Ideally, the g 7 pawn must cover both squares, but in reality it can cover only one. This means that one of the two squares will always be strong for White. It is up to Black to decide which square this will be. A strong square, once under control, must be protected very well. In the diagram ( $\Delta$ ) White's knight is placed on the strong square d 5 , but it is attacked by the bishop. If White leaves the knight where it is Black would exchange it, after which the square will be occupied by a pawn and will no longer be strong. A further drawback of this exchange is that it promotes the pawn on d6 from weak to half-weak, since this pawn is now no longer vulnerable. White has two ways to avoid the exchange. One is to move away the knight, and move it back when Black no longer controls d 5 . The other is to support the knight by another knight, so that after an exchange a new knight will appear on the strong square.
A good understanding of weak pawns and strong squares does not come easily. It is important to focus on these two aspects when discussing children's games.


## Search strategy

We outline the right approach to solving the exercise sheet 'Pawn structure' with the help of the diagram ( $\mathfrak{\Omega}$ ). The first point to note is that the Black's king is better placed than its white colleague, although this advantage is only temporary (the white king is better off on gl ). In addition,


Black's pieces are also more active than White's (e.g. the bishop). Both sides have a doubled pawn. Black can remove this weakness by 1. ... Qf5+. After 2. Qxf5 gxf5 he has improved both his pawn structure and the activity of his bishop, which now ties the white rook to the protection of the c3-pawn.

## Practice

## Workbook

## Strategy / Pawn structure: $A$ 를

Explanation: The students must indicate the move which:

- improves their own pawn structure
- worsens the opponent's pawn structure
- leads to an important increase of piece activity (even when this is at the cost of a weakened pawn structure)
- prevents the opponent to improve his pawn structure.

Point out that the gain will be modest (as compared to the exercises that they are accustomed to).
Mistake: The suggested solution is wrong.
Help: Using direct questions we can ascertain whether the goal is to inflict damage on the opponent or to improve one's own position. If this fails, then a step-by-step approach is in order, with the kind of questions depending on the exercise: "Can you burden your opponent with a doubled pawn?" or "Can you loosen the opponent's pawns?"
Help: Play the position to a finish. All positions are suitable.
Test / Mix: E

## E

Explanation: The themes of the exercises have been taken from previous lessons (placing the front piece and back piece, exploiting a passed pawn, double attack, eliminating the defender, magnet). Remind the students of the topics concerned.
Mistake: The suggested answer is wrong.
Help: $\quad$ Tum to the relevant section in the workbook and direct the student's attention to a similar exercise. "How did you solve this exercise?"

Mistake: (Too) many mistakes.
Help: What is the cause of these mistakes? If the mistakes are caused by a lack of knowledge, then it is advisable to go over the material once more.

## Test / Mix: F

Explanation: The themes of the exercises have been taken from both this and previous Steps.

## ANSWERS

## Strategy / Pawn structure: A

1) 2. ... c5 2. bxc5 Bxc5

The black bishop has become more active; in addition, White's pawn structure has been weakened.
2) 1. Nd5+ and 2. Nxf6

The black pawn structure has been weakened; the pawn on $f 7$ is particularly weak. Black can try to play f 5 and f 6 , but then f 5 will become a target for the white bishop.
3) Drawing
4) 1. ... g5 2. fxg6? Bxg4

The pin against the white f-pawn gives Black the opportunity to remove his backward pawn. The rook is no longer tied to the protection of the h-pawn.
5) 1. Bxc6+ bxc6 2. Qxf3

Before taking back on f3, White first weakens the opponent's pawn structure.
6) Drawing
7) 1. f5 Bxc4 2. bxc4

White accepts a doubled pawn. Black cannot protect his weak pawn anymore. Black has nothing to worry about after 1. Bxe6 fxe6.
8) 1. e5 Bc7 2. Bxg6

White does not take on d 5 because after 1. exd5 exd5 leaves him with a weak and extremely vulnerable pawn on e3. For this reason, White prefers to advance his e-pawn with tempo, thereby giving Black a weak doubled g-pawn.
9) 1. Rc1 c5 2. Rc4

It goes without saying that White does not exchange on d5. The weak pawn on c6 must remain on the board. The rook is the best piece to attack the weak c - and a-pawns.
10) 1. ... h4 2. Bxe5 dxe5

Black gets a strong pawn duo in the centre.
11) 1. h5 Bf5 2. h6

Advancing the h-pawn worsens the black pawn structure after $2 . \ldots$ gxh6 3. Bxf6 or 2. ... Bf8, when it is up to White to determine when to take on g 7 .

## 12) 1. Re2

It would be foolish to exchange the weak pawn on e5 for the pawn on f2. White can still take the pawn on the next move.

Test / Mix: E

1) 2. Bc 3 Bxc 3 2. c7; 1. c7? Вxc7
2. Bxc 7 Kg 5 (exploiting a passed pawn)
2) 3. ... $\operatorname{Rxd} 4$ 2. Rxd 4 Qg 5 or $1 . \ldots$ Qg5 (double attack: eliminating the defender)
1) 2. Nxd 5 , winning a pawn (placing the front piece)
1) $1 . \ldots \mathrm{Qh} 2+2 . \mathrm{Kxh} 2 \mathrm{Nf} 3+3$. Khl Rgl\# (magnet)
2) 3. d6 Bxd6 2. Rb6 (placing the front piece)
1) 2. Rh8+ Kxh8 2. Qxh6+ Kg8 3.

Test / Mix: F

1) 2. ... Bxe3 2. fxe3 Nc2 (double attack: luring)
1) 2. f4 Bd6 2. Qxe6+ (attacking a pinned piece)
1) 2. Qa8 Rxa8 2. Nxe7+ (double attack: eliminating the defender)
1) 2. Qf8+ Kxf8 2. Rh8\#; 1.... Rxf8 2. Ne7\# (luring away + mate/ blocking)
1) 2. ... Be7 2. Qxg5 Bxg5+; 2. Rdhl Qxf4 3. Rxf4 Bg5

Qxg7\# (placing the back piece)
7) 1. Nd8 or 1. Bd8 (interfering)
8) 1. Ke 3 Ng 5 2. Bf6+; 1. ... Nd6
2. Bc5 (exploiting a passed pawn)
9) 1. ... $\mathrm{Qxf} 3+2 . \mathrm{Kxf} 3 \mathrm{Nh} 4+3$. Kf4 g5\# (mate)
10) 1. ... Rxcl 2. Rxcl Qh6 (double attack: luring)
11) 1. Nc6! Rxe3 2. Qxc2; 1. ... Rxc6 2. Rxe7 (interfering)
12) 1. ... Qxe2 2. Rxe2 f6 (placing the back piece)
(double attack)
6) 1. ... Be2 2. f3 Nxg3; 2. Qxe2 hxg6 (defending against a pin)
7) 1. Bc 4 Rg 7 2. Rh8+ (double attack: eliminating)
8/9) Drawing
10) 1. Rh7+ Rxh7 2. Qxg5+ Kxg5 3. d8Q+ (passed pawn)
11) 1. ... Bf6+ 2. Bc3 Qd2
(placing the front piece)
12) 1. $\mathrm{Qg} 8+\mathrm{Kxg} 8$ 2. Ng 6 (mate)

## Material advantage

Goal of the lesson

- learning endgame tactics
- learning to convert a material advantage in the endgame.


## Prior knowledge

- key squares


## ACQUISITION

## Instruction

In this lesson we consider what it takes to win an endgame with a pawn up, taking rook endgames as our point of departure. A number of general rules will be formulated. These are to some extent also applicable to other types of endgames.
In the diagram ( $\lrcorner$ ) White is two pawns up. Both sides have a king and a rook. White must try to keep the king and the rook away from his pawns, and bring his own pieces into play at the same time. In this position the black king is unable to take part, since the white rook ties it to the other side of the board. In such cases, we say that the rook is 'cutting off' the king. To win, White's king first has to be directed towards his pawns. It is essential that this is done before the pawns are advanced. Black can defend with his rook only. We play: 1. Kd2 Re7 (Black tries to keep the king away) 2. Re3 (White does not have to cut off the king anymore, since the pawn ending is easily won) 2. ... Rf7 3. Ke2 (the king moves towards the pawns) 3. ... Kd7 4. Kf3 (diagram ${ }^{\mathfrak{3}}$ ). Now that the white pieces have been brought into

position, the pawns are ready to advance. It is instructive to play this position to a finish using a simultaneous display format. The children play with the white pieces and must try to win. Most of them will succeed. They are allowed to take back a move when blundering.
The most important endgame goals are:

1) pawn advances must be supported by it's own pieces.
2) defenders must be eliminated (by cutting them off or by exchanging them).
In the case at hand, the endgame is won by cutting off the enemy king and by offering an exchange of rooks.

It is a good idea to discuss some additional examples on the demonstration board. In each of these the students must try to find the best move.

In the diagram ( $\curvearrowleft$ ) White's best option is to play 1. Rd2, cutting off the enemy king. The general rule regarding this is as follows: the further away (i.e. the more files) the king is cut off, the better.
In the diagram ( $\sqrt{ }$ ) the white pawns are far removed from their own pieces. White must first bring his king towards the pawns. This can only be achieved by chasing away the enemy rook with 1. Re3. After 1. ... Rd7 White 'steals' another file by playing 2. Ke2 and 3. Rd3. Assisting the king in this way is appropriately called 'building a bridge'.
Building a bridge is successful only when, in the event of a rook exchange, the ensuing pawn ending is won. In the present example, where White is two pawns up, White can safely transpose to a pawn ending. In other case, the side that is building a bridge can

even offer a pawn in the process.
In the diagram ( $\uparrow$ ) White can opt for the 'safe' approach with $\mathbf{1 .}$ Kd2, in which case he must still work hard to bring home the point. However, armed with the knowledge of key squares (as outlined in Step 3), White can also transpose to a pawn ending with 1. Rc5+. This move loses a pawn, but after the exchange of rooks a familiar position has arisen: 1. ... Rxc5 2. bxc5 Kc6 3. Kd3 Kxc5 (3. ... Kd5!? 4. c6!) 4. Kc3 and Black cannot prevent the white king from reaching one of the key squares (i.e. b4, c4 or d4).
The side with the pawn up must be careful to transpose to a pawn ending, since this is not always sufficient to win. In the left part of the diagram ( $\Leftrightarrow$ ) Black can draw with 1 . ... Rxb4+, since White is unable to win the pawn ending that arises after 2. Kxb4 Kxc6. Put the position on a demonstration board and ask one of the students to hold the draw, just to make sure.
On the right, the quickest road to victory is 1. Re7+! After 1. ... Rxe7 2. f6+ Kf7 3. fxe7 Kxe7 4. Kh5! Kf7 5. Kh6 Kg8 6. Kg6 the pawn can no longer be stopped.
Winning a position of the kind as shown in the diagram ( $(\mathbb{B})$ is more difficult. Black still has a pawn, and so White will have to create a passed pawn to win. However, the general rules introduced above still hold: bring your own pieces into play first, and restrict your opponent's pieces as much as possible.
A possible course of the game is: 1. Rd2 (cutting off the king) 1. ... Re8 2. Re2 (offering an exchange and building a bridge for the king) 2. ... Rd8+ 3. Kel Rd7 4. Kf2 Kd8.
Now the time is ripe to create a passed pawn: 5. h4 Rf7 6. Kf3 (not 6. h5? Rf5) 6.

10. h6. White cleverly exchanges the rook's pawn. This allows him to retain connected pawns without having a pawn on the edge of the board.
The diagram ( $\uparrow$ ) contains a position which the students, as White, can play to a finish. White has to tread carefully, since Black's pieces have not been cut off and so can take part in the defence.
For those students who show good endgame technique the position can be made more difficult by moving all pieces one file to the right. The ending with the pawns on the gand h -file is harder, since the edge of the board is in the way. A further complication is that once the pawns reach the $6^{\text {th }}$ and $7^{\text {th }}$ rank, White has to watch out for stalemate. It is a good idea to also play these positions to a finish, once again using a simultaneous format. It is not advisable to ask the students to play these positions against each other. In such positions young, inexperienced players usually do not to choose the best defence.

Students who finish their games quickly can go on to do the exercise sheet on passed pawns in rook endgames. These exercises test the general nules outlined above.

## Practice

## Workbook

Rook endgame / Passed pawn: A

## 플

Explanation: The side that is to move can use his passed pawn to obtain a material gain. This does not necessarily involve a pawn promotion; the exercise has also been solved correctly when the opponent is forced to give up material. The main
weapon is that of eliminating the defender, primarily by means of luring away and interfering. In many positions a useful ploy is to build a bridge by placing a rook between an attacking piece and the passed pawn. Another use for the rook is to take control of the promotion square.
Mistake: The correct solution is not found.
Help: "Why is the passed pawn unable to advance? Eliminate the defender or mobilise your own pieces" (depending on the exercise concerned).
Mistake: The suggested answer to assignment 10 is 1 . Rc5+.
Help: The student is content with luring away the rook, which was also the correct strategy in position 2 . Make sure that the student discovers the mistake himself. Finding the right move will then no longer be a problem.

## ANSWERS

Rook ending / Passed pawn: A

1) 2. Ra6 Rxa6 2. bxa6 and 3. $\mathrm{a} 8 \mathrm{Q}+$
1) I. Rd6+Rxd6 2.b8Q
2) 3. Rh3+ Kg8 2. Rg3 Rxg3 3. d7; 1. Rf8+? Kh7 2. Rd8 Rg5 3. Kd2 Kg7
1) 2. ... Rg4+ 2. Kc5 Rh4 with promotion.
1) 2. Re3 Kxe3 2. e7 Rdl +3 . $\mathrm{Kc} 2 \mathrm{Rd} 2+4$. Kcl with promotion
1) 2. Rd4 Kxd4 2. d7 with promotion.
1) $1 . \ldots \mathrm{Rdl}+2 . \mathrm{Kxdl}$ exf2 with
promotion.
2) $1 . \mathrm{h} 6+\mathrm{Kg} 82 . \mathrm{h} 7+\mathrm{Kg} 73$.

Rxf8
9) 1. ... Rb2+ 2. $\mathrm{Ke} 3 \mathrm{Rb} 3+3$. Rxb3 alQ or $2 . \mathrm{Kdl} \mathrm{Rbl+}$
10) 1. Kb4 Ral 2. Rc5+ and 3. Ra5; I. Rc5+?? Rxc5 with check!
11) 1. exd6 Rxel+2. Kf2 Re8 3. dxc7 and 4. d 7
12) 1. ... Rcl! followed by 2.... d 2 because $2 . \mathrm{Ke} 3$ is met by 2. ... Rel + .

## Goal of the lesson

- extending the level of tactical skills


## Prior knowledge

- preparatory moves
- double attack


## ACQUISITION

## Instruction

We begin this lesson by repeating the types of preparatory moves that involve luring and eliminating the defence. These were introduced in the preceding lessons 3 and 8. The present lesson introduces two new types of preparatory moves: chasing and aiming.
We use the term 'chasing' when a king or another piece is forced to a square on which it is subsequently subject to a double attack.
In the left part of the diagram ( $(\Omega)$ White does not yet have a double attack available. However, the rook on a 3 is unprotected and White can give a check. With 1. Qc8+ the king is chased to a7, thereby permitting the double attack 2. Qc5+. White wins a rook. On the right, White can win the queen with an X-ray check. For this the black king has to be chased to the long diagonal or the h file first. White wins with 1. Qe4+ Kg5 (1. ... Kf6 2. Qd4+) 2. Qf4+! (2. Qg4+? Kh6 3. Qh4 +Kg 7 ) 2. ... Kh5 3. Qh2+
Chasing is also possible with other pieces, of course.


In the upper part of the diagram ( $\uparrow$ ) White plays 1. Nb6+. After the forced 1. ... Kb8 2. Nd7+ brings in the loot.
We can chase other pieces than the king. In the lower part of the diagram Black first chases the rook to h 2 with $1 . \ldots \mathrm{Ng} 3$, and then picks it up with 2. ... Nf1+.
In the left part of the diagram ( $\curvearrowleft$ ) the knight fork is still a long way away. The contours of the fork emerge after 1.b3+ Ka5 2. b4+. The king must step into the knight's range, given that the altemative is 2. ... Ka4 3. Nc3 mate. After both 2. ... Kb5 and 2. ... Ka6 the knight check on c 7 decides.
On the right, Black is in dire straits after 1. Nf5+. The f-file is a no-go area on account of the discovered check 2 . Nh6 ${ }^{+}$, while 1. ... Kg6 is met by 2. Ne7+. Going to the hfile takes one move longer: $\mathbf{1}$.... Kh7 (1.... Kh8 2. Rh3\#) 2. Rh3+ Kg6 3. Ne7+.
In the diagram ( $\Omega$ ) White is a lot of material behind, but his rampant knight more than makes up for this: 1. Nc3+ Kb4 2. Nxd5+. No matter where the Black king goes, the black rook is also in for it: 2. ... Ka4/Kc4 3. Nb6+. Better is 2. ... Kb5 3. Nc7+, when Black will get the knight in the comer as a consolation prize.
On the right, we see that chasing is not the only type of preparatory move. The knight first harries the rook: 1. Nf3 Rg2 (the rook is tied to the protection of the knight) 2. Nh4 (a move with two intentions) 2. ... Rg1 3. Rxg3+ (luring) 3. ... Rxg3 4. Nf5+. White wins a piece.
The move 2. Nh4 is an example of another type of preparatory move, called 'aiming'. The ternn 'aiming' is used for preparatory moves that prepare a double attack with tempo; that is, a piece attacks a particular

target (e.g. the king, a piece, or a square) and at the same time threatens to initiate a double attack.
In the diagram ( $৫$ ) a double attack is looming on a2. White's problem is that the queen cannot go from d4 to a2 in one move. After a move like 1 . Qal Black can secure his bishop. However, White can gain time by attacking the rook on b8 with 1. Qa7. Now Black has no time to bring his bishop into safety.
Aiming therefore involves gaining time; we call this a gain of tempo. A gain of tempo is an important weapon in chess.
Preparatory moves that involve aiming are usually found in double attacks that feature knights.
The left part of the diagram ( $\Rightarrow$ ) contains an illustrative example. White has the prospect of a knight fork on b5. With 1. Nd6+ White can overcome the distance with a gain of tempo. Black has no defence.
On the right, White seems to be doing okay. The black pawn is lost after I. ... Rf8 2. e6. Unfortunately for White, Black has no need for the pawn. After 1. ... Ng5 the white position collapses. Black threatens to take on h7, and after 2. Rxe7 Nf3 White cannot escape mate. White is also lost after 2. Rh2 Nf3 3. Rg2 Rh8+.
In the diagram ( $\downarrow$ ) we see a typical middle game position. The unprotected bishop on c6 invites a tactical shot, as does the bishop on d6. In addition, White has an eye on g 7 . White can exploit the weaknesses in the black camp with an aiming move: after 1. Qd3 Rad8 2. Qc3 Black loses a piece.
To conclude this lesson, we discuss two nice examples that each involve a combination of preparatory moves.


In the diagram (©) White has a surprising way to regain the material that he is behind. 1. Rc3! not only threatens to take the queen but also 2. Nd6\#. Black is therefore forced to take the rook: 1. ... Qxc3, after which it is harvest time: 2. Nd6+ Kc7 3. Nxb5+ Kc6 4. Nxc3. Since White can easily stop Black's last pawn, the game will end in a draw.

The diagram ( $\Rightarrow$ ) contains another example of a 'superfork'. White first eliminates one of the defending pawns and then continues to chase around the black king with his knight: 1. Qxa7+ Nxa7 2. Nb6+ Kb8 3. Nxd7+ Kc7 4. Nxf6 and White goes on to capture h5 on the next move.
Step 4 students like these positions.

## Search strategy

The search strategy for the exercise sheets is as follows:

- Can the king or another piece be chased to a square that invites a double attack?
- Is there a double attack, but no piece to execute it? Can such a piece be brought in with a gain of tempo?

The diagram ( $(\downarrow)$ contains all the necessary ingredients for a double attack. First the knight is brought into play with $1 . \ldots \mathbf{N g} 3+$. This prevents the king from going to gl on account of 2. ... Ne2+. White is also lost after 2. Kh2. The type of preparatory move that is in order was introduced in lesson 3:
2. ... Qxe3 3. Qxe3 Nf $1+$.


## Practice

## Workbook

Double attack / Chasing or aiming: $A$
Explanation: There are two ways to win material:
o For the double attack to work, one of the targets must be forced to a particular square. The target can be forced to this square by means of chasing.
o For the double attack to work, the piece that is to execute it must be played to a particular square. The piece can be played to that square with a gain of tempo.
The arrangement of this exercise sheet is as follows:

- $3 x$ chasing + double attack with the knight
- $3 x$ aiming + double attack with the knight
- $3 x$ chasing + double attack with the queen
- $3 x$ aiming + double attack with the queen

Mistake: There is a mistake in an exercise that involves 'aiming'.
Help: Help should be provided only when the student fails to find the right move. In that case the exercise in question can be transformed into a Step 2 exercise by removing the queen or knight that is to execute the double attack. Where can this piece execute a double attack? How can this piece be played there with tempo from the original position?
Mistake: There is a mistake in an exercise that involves 'chasing'.
Help: Find an unprotected piece and try to set up a double attack that involves this piece.

Double attack / Chasing or aiming: B IIE
Explanation: See exercise sheet $A$. There is no specific arrangement.
Mistake: Position 12 is not solved correctly.
Help: $\quad$ This position is difficult. Study the position without the pawn on d6. In that case White has an easy win with 1. Rd7. With this information, the solution 1. Nc5 will no longer pose a problem.
$\square$ Double attack / Chasing or aiming: A

1) Drawing
Qa8+? Rd8
2) 3. ... Qc5+ 2. Kfl Ne3+; 2. Khl Nf2+
1) 2. .. Qel+2. Kg2 Qe4+; 1 . Qe4+? 2. Qg2
1) 2. Nb6+ Kb8 2. Nd7+
1) 2. Qc2+ Kg8 2. Qc8+
1) $1 . \mathrm{Nc} 7$ and 2 . Ne6+ or 2 . Nxa8
2) 3. Qh5 g6 2. Qd5
1) $1 . \ldots \mathrm{Nf} 3+2 . \mathrm{Kxg} 2 \mathrm{Nd} 2$
2) 3. Qa4 b6 2. Qe4
1) 2. ... Nc5 and 2. ... Nd3
1) 2. Qa7 and 2. Qa2+
1) 2. Qe8+ Kh7 2. Qe4+; 1 .
$\square$ Double attack / Chasing or aiming: $B$
1) 2. Qe5+ Kg8 2. Qd5+ winning a rook.
1) 2. Nf5 Qf6 2. Nh6+
1) 1 . ... $\mathrm{Bb} 7+2 . \mathrm{Kgl} \mathrm{Ne} 2+$
2) 3. Qb2 Rdl 2. Qb4+
1) 2. ... Qd4+ 2. Qf2 Qb4
1) $1 . \ldots \mathrm{Qd} 1+2 . \mathrm{Kg} 2 \mathrm{Qc} 2+$
2) 3. f4 Re6 2. $\mathrm{Ng} 7+$
1) 2. ... Qd4+ 2. Be3 Qxb2
1) 2. $\mathrm{Be} 3 \mathrm{Qa} 82 . \mathrm{Nc} 7+$
1) 2. ... Nd4 2. Qe3 Ne2+
1) 2. b4 Bd4 2. Qe4+
1) 2. Nc5! Re8 2. Na6; 1. ... dxc5 2. Rd7


## GOAL OF THE LESSON

- leaming to recognise a mating attack
- learning to execute a mating attack


## PRIOR KNOWLEDGE

- tactical subjects
- mate by access, mating patterns


## ACQUISITION

## Instruction

We have already touched on the topic of 'attack on the king' in relation to a number of previous topics (mate in two by access, the magnet, etc.).
It is a good idea to repeat these previous topics. More generally, it is important that the students recognise the relevant mating patterns. We therefore recommend that this lesson is done in combination with the three exercise sheets on mating patterns.
An attack on the king often involves a castled king. This type of attack can be likened to an attack on a real castle. For such an attack to succeed, the defensive wall must be breached. Only then can the attacking pieces gain access to the king.
In the diagram (ß) White plays 1. Rxg7+ (breaching the wall) 1. ... Kxg7 2. Qg5+ (bringing in pieces) 2. ... Kh8 3. Qf6+ Kg8 4. $\mathbf{R g l}$ mate. Note that threatening mate directly with 1. Qf6, 1. Qg5 or 1. Qh6 does not work, since Black can defend with 1. ... g6. When it comes to attacking the king, three general rules apply:


- gain access
- bring in pieces (preferably by giving check, so as to proceed with tempo)
- give mate

Breaking through a castled position does not necessarily involve a capture.
In the diagram ( $(\mathbb{)}$ ) White can demolish the protective pawn shield with 1. Nf6 + . Black has to take, since $1 . \ldots \mathrm{Kh} 8$ is met by 2. Qh5\#. After 1. ... gxf6 White gains access to the Black king. White first brings in the queen with 2. Qg4+, and after 2. ... Kh8 goes on to prepare the decisive rook jump with $\mathbf{3}$. $\mathbf{K g} 2$. Mate is inevitable.
In order to correctly execute an attack on a castled king, a good knowledge of mating patterns is essential. Once the final position, i.e. a particular mating pattern, is known, the combination that is needed to get there is usually easy to find. This is true even if a queen sacrifice is in order, as in the diagram $(\neg)$. White plays 1. Qf6 and after the forced 1. ... gxf6 gives mate with $2 . \operatorname{Rg} 3+$ Kh8 3. Bxf6\#. This mate with the rook and bishop is a characteristic mating pattern.

Learning to attack is a three-step process:

1) Exploit a hole in the king's position. If there is such a hole, bringing in additional pieces is essential. The diagram ( $(\Omega)$ contains a characteristic example of how to open a file and aim new pieces at the enemy king. With 1. Rf4 White forces the opening of the g-file. After 1. ... exf4 2. gxf4 (with the lethal threat of 3. $\mathrm{RgI}+$ ) 2. ... Kh8 3. Qxf6+ Black is mated.
2) Eliminating the defender (capturing, luring away, chasing away, blocking and interfering)


Before capitalising on a weakened king, any defending pieces must first be eliminated.
In the left part of the diagram ( $\uparrow$ ) White has already brought over half of his army to the black kingside. Nevertheless, White must still lure away the defending bishop that controls the d7-square. White achieves this with the help of a familiar blocking combination: 1. Rb7+ Bxb7 2. Nd7\#. Note that 1. Nd7+ Bxd7 leads to nothing.
On the right, the black king can still escape after the tempting 1. Qxh7+ Kf8. White can prevent this by playing 1. Bh6 first, after which mate is inevitable. Retaining the enemy king is an important attacking technique.
3) Creating a hole and bringing in pieces.

This technique has already been illustrated in the first three diagrams. In the left part of the diagram ( $\Rightarrow$ ), White must refrain from opening up the position: after 1. Rb4 (1. Rxa7+ Kxa7 and the rook on b7 is not pinned any more), there is no defence against 2. Rxa7+ and 3. Ra4 mate.
On the right, Black plays 1. ... Ng3+ 2. hxg3 Rf6, with mate on h6 to follow.
In many cases a mating attack involves a combination of the points mentioned above. A typical attacking position is shown in the diagram ( $\mathfrak{B}$ ). Ask the students to analyze the possibilities I. Qxh7+, I. Rh2 and I. Qh6. Of course, I. Qxh7+ is met by 1. ... Kxh7 2. Rh2+ Kg8; 1. Rh2 h5 2. Qg5 is also insufficient on account of 2....Qa7+.
The correct move is 1. Qh6. Black is forced to play 1. ... Rg8, thus removing the only flight square available to his king. White can now play 2. Qxh7+ (not 2. Rh2? Qb6+ and Black plays the queen to d3 with check and then g5) 2. ... Kxh7 3. Rh2\# .


In the diagram ( $\mathbb{0}$ ) White's queen, rook and f-pawn already occupy menacing positions. Black's castled position is defended by the king and the f8-rook only. White decides the game with 1. f6 g6 2. Qg5 (threatening 3. Qh6 with mate on the next move) 2. ... Kh8 3. Qh6 Rg8 4. Qxh7+ (or the less pretty but equally sufficient 4. $\mathbf{R h} 3$ ).


## Practice

Reminder<br>$\diamond$ Attack on the king

## Workbook

$\square$ Attack on the king / Mating pattern (e) : A E
Explanation: The first three diagrams contain mating patterns that have been taken from the exercises. In each case there is a forced mate in three. Exercises in which the goal is mate are all about recognizing the mating pattern concerned. When mating the king, the students should make use of familiar motifs such as double check, access, the different forms of eliminating the defender and, last but not least, preparatory luring and chasing moves.
Mistake: An occasional mistake is likely. If the exercises are too difficult, the student should tackle easier exercises first.
Help: Determine the nature of the mistake and ask the student to try once more.
$\square$ Attack on the king / Mating pattern ( Explanation: See exercise sheet A.
$\square$ Attack on the king / Mating pattern ( $£$ (D): C
Explanation: See exercise sheet A.
$\square$ Attack on the king / Attacking a castled king: A $\quad$ E
Explanation: The attack on the king is in an advanced stage. A hole has
already been created in the enemy's castled position. Mate can be achieved by executing a familiar (mating) combination and by bringing in extra pieces.
The students may require board and pieces for these exercises. By their nature some of these exercises are up to four moves deep.
Mistake: The attack is not successful.
Help: Set up the position and play it to a finish. Why is the attack unsuccessful? Is it because of a defender? Then eliminate it! Is it because of insufficient material? Then bring in some extra pieces!

## $\square$ Attack on the king / Attacking a castled king: B E

Explanation: In these exercises the attacker can break open, i.e. gain access to, the enemy's castled position with a sacrifice. Finishing the mating attack takes one extra move. Nearly all of the exercises lead to mate quickly.
Mistake: There is still a defence.
Help: The exercises should not be done too hastily. In position 6, for example, the hasty 1 . Nh6 6 Kh8 2. Bxf6 is incorrect on account of 2. ... exf3. In position 9, 1. Rxh7 Kxh7 2. Qg4 does not win, since Black still has 2. ... f6. The students should find these defences themselves, and then try their hand at these positions once more.

## $\square$ Attack on the king / Attacking a castled king: $C \quad \square$

Explanation: The attack on the king cannot be executed yet, since there is an important defender which has to be eliminated first. The types of eliminating the defender that are featured on this sheet include capturing, luring away, chasing away and interfering. A useful technique to eliminate a defender is to pin (and, if necessary, capture) it. This sheet is more dif ficult than the previous one.
Mistake: The attack is not properly followed up.
Help: Ask the student to find the important defender. How can this defender be eliminated?
$\square$ Attack on the king / Mating pattern (요) : A

1) 4 mating patterns
2) 3. $\mathrm{Ne} 7+\mathrm{Kh} 8$ 2. $\mathrm{Ng} 6+$
1) 4 mating patterns
2) 3. Qa8+Kh7 2. Qh8+
1) 4 mating patterns
2) 3. ... Qxfl+ 2. Kxfl Bd3+
1) 2. $\mathrm{Ra} 8+\mathrm{Kxa8} 2 . \mathrm{Bxc} 7 \mathrm{gxh} 33$. Ral\#
1) $1 . \mathrm{Rf} 3+\mathrm{Kh} 82 . \mathrm{Ng} 6+\mathrm{hxg} 63$. Rh3\#
2) 3. Qxd4 Bxd4 2. Bxd4 b5 3. Rh8\#
1) 2. Qxg8+ Kxg8 2. Rh8+
1) 2. Be6+ Kb7 2. Bd5+Ka7 3.
1) 2. ... Rxh2+ 2. Qxh2 Qxh2+ 3 . Kxh2 Rh8\#
Ra8\#; 1. Bd5+ Qxh8

Attack on the king / Mating pattern (』) : B

1) 4 mating patterns
2) 3. Ndf7+ Kh7 2. Ng5+
1) 4 mating patterns
2) 3. Qxh6+ Bxh6 2. Ng5+ Kh8 3. Rh7\#
1) 2. Qxh7+ Kxh7 2. Rh3+
1) 2. Qg6 fxg6 2. Rxg7+
1) Drawing
2) 3. ... Qh3 2. Rbgl Qxh2+
1) Drawing
2) 3. Qxg7+ Nxg7 2. Rxh6+
1) 2. Ne7+ Kh8 2. Qxh7+

Attack on the king / Mating pattern (今@): C

1) 4 mating patterns
2) 4 mating patterns
3) 4 mating pattems
4) 5. ... Qb4+ 2. $\mathrm{Kal} \mathrm{Qc3+}$
1) 2. ... Qxg2+ 2. Kxg2 Bf3+
1) 2. Qxh7 $+\mathrm{Nxh} 72 . \mathrm{Ng} 6+$
1) 2. $\mathrm{Ng} 6+\mathrm{Kh} 7$ 2. Ne5+
1) 2. Qxc7+ Kxc7 2. Nd5+
1) 2. ... Qxg2 2. Kxg2 Nf4+
1) 2. Nef6+ gxf6 2. Bh6 ${ }^{+}$
1) 2. Qf6 gxf6 2. Nh6+
1) 2. $\mathrm{Qg} 8+\mathrm{Kxg} 8$ 2. Ne7+
$\square$ Attack on the king / Attacking a castled king: A
1) 2. Bxh7+ Kh8 2. Bg6+Kg8 3. Qh7+ Kf8 4. Qxf7\#
1) 2. $\mathrm{Qg} 3 \mathrm{Rg} 82 . \mathrm{Qc} 3+$
1) $1 . \mathrm{Qg} 7+\mathrm{Bxg} 7$ 2. $\mathrm{Bxg} 7+\mathrm{Kg} 83$. Bf6\#
2) 3. Rf4 exf4 2. gxf4 and 3. Rgl
1) 2. ... Ng3 2. Kgl Qg2+ 3 . Rxg2 Nh3\#
1) $1 . \mathrm{Qg} 7+\mathrm{Bxg} 72 . \mathrm{Rd} 8+\mathrm{Bf} 83$.
2) 3. Bf 6 Rxf8\#
1) 2. Bh6+Kxh6 2. Qf6+ Kh5 3. g4\#
1) 2. $\mathrm{Ng} 4 \mathrm{fxg} 42 . \mathrm{Bxh} 7+$ with mate as in position 1.
1) 2. Qh6 Qe7 (protects f7; see 1 )
2. Qxh7+Kf8 3. Qh8\#
11) 12. Qxf7 Nxf7 2. Rg8+ Rxg8 3.

Nxf7\#
12) 1. Qg4+ Kh8 2. Qh4
$\square$ Attack on the king / Attacking a castled king: B

1) 2. Nf6+ gxf6 2. Qg3+Kh8 3. Bxf6\#
1) 2. Qxh7+ Rxh7 2. Rg8+ and mate; 1. ... Kxh7 2. Rh5\#
1) 2. Ng6+ hxg6 2. Qh6 + Bh7 3. Qxg7\#
1) 2. Ne7+ Kh8 2. Rxh7+ Kxh7 3. Qhl\#; 2. ... Nxh7 3. Ng6\#
1) 2. Ng6+ fxg6 2. Qxh7+ Kxh7 3. Rh4\#
1) 2. Nh6 + gxh6 2. Qxf6; 1. ... Kh8 2. Qxf6!; 2. Bxf6? exf3
1) Drawing
2) Drawing
3) 4. Qh5 Bh4 2. Qxh7+ Kxh7 3. Rxh4+Kg84. Rh8\#; 1.... gxh5 2. $\mathrm{Rg} 3+$ and mate.
1) 2. Qg6 hxg5 (1. ... fxg6 2. Ne7+ Kh8 3. Nxg6+) 2. hxg5 fxg6 3. Ne7\#
1) 2. Qxh7+Kxh7 2. Rh5 +Kg 73. Bh6+Kh8 4. Bf8\#
1) 2. Qc7+Ka7 2. Qxb7+Kxb7 3. Rb3+Ka7 4. Rc7\#
$\square$ Attack on the king / Attacking a castled king: C
1) 2. ... Ne2+ 2. Rxe2 Nf4
1) 2. Qxg7+ Kxg7 2. Rh8! and 3. Rlh7\#
1) 2. Re8 Qxe8 2. Qxf6+; 1. ... Bc4 2. Qg7\#
1) 2. Qh6 Rg8 2. Re8 Qxe8 3. Qf6+
1) 2. Nf6+ Bxf6 2. Bd3
1) 2. Nf5 fxg5 2. Ne7\#
1) 2. Re7 Rxe7 2. Qxf8\#; 1. ...

Bxe7 2. Qxh7\#
8) 1. Bxh7+ Nxh7 2. Qxf7+ Kh8 3. Ng6\#
9) 1. Rg3+ Kh8 2. $\operatorname{Re} 4$; 1. Re4? Qg 7
10) 1. Rf5 and 2. Qh6
11) 1. Rxd7 Bxd7 2. Nf6+Kf8 3. Nd 5
12) 1. Qf6 Bxf6 (otherwise 2. Rh8+) 2. gxf6 and 3. Rh8\#

## Goal of the lesson

- learning new tactical possibilities
- exploiting the $7^{\text {th }}$ rank


## Prior knowledge

- mating patterns


## ACQUISITION

## Instruction

We start this lesson by repeating some mate in two exercises in which a rook on the $7^{\text {th }}$ rank plays an important part.
All it takes to show the strength of a rook on the $7^{\text {th }}$ rank is a board with a white rook on e7 and the black king on g8. The king is tied to the back rank. Note, too, that a rook on the $7^{\text {th }}$ rank cannot be attacked by pawns and so has to cope with fewer defenders. The cramping effect of a rook on the $7^{\text {th }}$ rank can be exploited for both tactical and positional ends.
The tactical ends usually involve mate. In some cases, however, a rook on the $7^{\text {th }}$ rank can be used to gain material or escape with a draw. We first look at two typical examples that illustrate the attacking possibilities of two rooks on the $7^{\text {th }}$ rank. The upper part of the diagram ( $\circledR$ ) contains an elementary position. White has mate in three after 1. Rh7 (threatening mate on h8) 1. ... Kd8 2. Rcg7, with mate on the next move.
In the lower part, this strategy does not work because there is not enough room between the king and the comer square. Hence, there

is no mate; after 1. ... Rh2 2. Rd1 Rdg2+ 3. Kf1 Rb2 4. Kg1 White defends himself. In this case, then, the king is safer on the wing than in the centre. Away from the centre, the rooks need a little help from a friend.
In the diagram ( $\uparrow$ ) White has two rooks on the $7^{\text {th }}$ rank and a pawn on a6. White wins after 1. Rb7+ Ka8 2. Ra7+ Kb8 3. Rfb7+ Kc8 4. Ra8\#.
Sometimes help is provided not by one's own pieces, but by an enemy piece. This is the case in the lower part of the diagram, where the castled rook is still on fl. Black plays 1. ... Rg2+ 2. Kh1 Rh2+ 3. Kg1 Rdg2 mate. The king is trapped between the edge of the board and his own rook, which is blocking the flight path.

The above examples show that the rooks on the $7^{\text {th }}$ rank can be assisted in two ways:

- by one's own pieces
- by the opponent's pieces

Both have typical combinations associated to them.
In the diagram ( $\Rightarrow$ ) White controls the $7^{\text {th }}$ rank, but cannot give mate yet. White must first play 1. Qxf8+ (1. Qf7? Rdl+). After 1. ... Rxf8 White has eliminated the defender of h 7 and the rook on f 8 is now blocking the black king's escape route. The majority of combinations that are based on the $7^{\text {th }}$ rank involve eliminating the defender.

In the diagram ( 8 ), the rooks on the $7^{\text {th }}$ rank cannot give mate on their own. Therefore White first plays 1. Rh7+ Kg8 2. Reg7+ Kf8 so as to get in the knight with 3. Nf5 (or 3. Nxh5), which provides support on the $7^{\text {th }}$ rank. There is no defence against the mating threat 4. Rh8.


Another characteristic $7^{\text {th }}$ rank combination is one in which material is won by means of a repeated discovered check.
In the diagram ( $₫$ ) the battery of rook and bishop proves to be an all-destructive force. The black king has to move back into the discovered check time and time again. In the meantime White picks off Black's pieces one by one: 1. Rxi7+ Kg8 2. Rg7+ Kh8 3. Rxd7+ Kg8 4. Rg7+ Kh8 5. Rxc7+ Kg8 6. Rg7+ Kh8 7. Rxb7+ Kg8 8. Rg7+ Kh8 9. Rc7+ Kg8 10. Rxc8. White has won a total of 19 points. Note that White recharged the battery of rook and bishop on every move. This was possible because the black king has nowhere to go.

The black king is equally powerless in the diagram ( $\lrcorner$ ). White first introduces a mating threat: 1. Ra7+ Kb8 2. Rcb7+ Kc8 3. Rxf7. Now the only way for Black to prevent 4. Ra8\# is to retreat his king: 3. ... Kb8 4. Rfb7+ Kc8 5. Rxg7. The recurrent mating threat gives White the opportunity to clear the $7^{\text {di }}$ rank: 5. ... Kb8 6. Rgb7+ Kc8 7. Rh7 Rxh7 8. Rxh7 and White wins.
The position in the diagram ( $(\mathbb{)}$ ) is taken from the game Anand-Kamsky, New Delhi 1990. White would love to get his two rooks to the $7^{\text {th }}$ rank, but after 1. gxf5 Rxf6 2. Rdl Kg8 3. Rd8+ Rf8 4. Rdd7 Rxf5 this will not be sufficient. Instead, Anand played the powerful 1. Rd1. With this move White retains the strong knight (1.... Rxf6 2. Rd8+ and mate). Black's bishop now has to give up the control of d7. The game continued 1. ... Bg6 (1. ... Be4 2. f3 is the same) 2. Rdd7 and all Black can do to postpone mate is give a couple of innocent checks.


In the diagram (©) White again has two rooks on the 7th rank, but this time his situation is less enviable. With his rook on the $2^{\text {nd }}$ rank, Black has the better chances. The immediate threat is mate on aI. White must use the good position of his rooks to give perpetual check. Ask the students to find out with which rook they should give check. The correct rook is the f-rook. If the d-rook gives the checks, Black will move his king to b8, after which White will have run out of checks.
In the diagram ( $\Rightarrow$ ) White must also try to draw the game. He can achieve this by setting up a familiar drawing mechanism with rook and knight. White must first bring his rook and knight into position with the help of a luring tactic: 1. Rd7+! Ke8 (1. ... Kc8? 2. Nb6\# or 1. ... Kxd7 2. Nb6+) 2. Nf6+.
This position, which was discussed in Step 3 , should be memorised by all the students, since it occurs very frequently (also with the king cut off on the edge of the board). The knight gives check and protects the rook at the same time. Black has to move away with his king: 2. ... Kf8 3. Nh7+ Kg8 4. Nf6+. Black is forced to go back to f8 (4. ... Kh8 5. Rh7\#), and so White has a perpetual.

## Search strategy

The rook on the $7^{\text {th }}$ rank must be assisted by other pieces. The task is thus to either bring in new troops or eliminate defenders. In the diagram ( $₫$ ) the h-pawn prevents the queen from taking part. At Step 4 level, a student should not miss the sacrifice on h 7 . After 1. Nxh7 Nxh7 2. Qg6 Black cannot avoid being mated on g 7 .


## Practice

## Reminder

$\diamond$ Seventh rank

## Workbook

Tactics / Seventh rank: A
Explanation: A rook on the $7^{\text {th }}$ rank is the pride and joy of the position. In one position, the win involves eliminating the defender which is preventing mate. In some other positions, mate is made possible with the 'assistance' of enemy pieces.
Mistake: The suggested solution is incorrect.
Help: No help is necessary. Check the mistake and ask the student to try once more.
Mistake: The suggested answer for position 12 is $1 . \mathrm{d} 6$.
Help: Ask the student to find the correct defence (1. ... Ne8). Provide the correct answer if necessary.
$\square$ Tactics / Seventh rank: B
Explanation: See the A-sheet.
Mistake: The suggested answer for position 10 is 1. Ne6.
Help: While this is a good idea, Black can defend with 1. ... Re7. How can this idea be improved upon?
Mistake: Position 12 is too difficult.
Help: The students should discover that the queen is tied to the protection of the d1-rook.

## ANSWERS

Tactics / Seventh rank: A

1) 2. $\mathrm{Qfl}+\mathrm{Ke8} 2 . \mathrm{Qb5}+\mathrm{Kf} 83$. Qxc5+
1) I. $\mathrm{Rb} 7+\mathrm{Ka8} 2 . \mathrm{Qxc} 8+\mathrm{Rxc} 83$. Rxa7+ Kb84. Rhg7\#
2) I. $\mathrm{Ra} 7+\mathrm{Kb} 8$ 2. $\mathrm{Rcb} 7+\mathrm{Kc} 83$. a6 and mate on a8.
3) 4. ... Rxb2 2. Qxa8+ Ke7
1) I. ... Qe3 2. Rxf2 Qxh3+ 3.
$\mathrm{Kgl} \mathrm{Qg} 3+$
2) 3. ... Qxe4+! 2. Nxe4 Nf3; 1. ... Nf3? 2. Qxh7\#
1) 2. Nf6+ Kh8 2. Qxh6+; 1. ... gxf6 2. Qe6+ Kh8 3. Qxf6+; 1. Qxh6? blQ!
1) 2. ... Rg 2 2. a 8 Q Rbf 23 . Kel Rgl\#
1) 2. ... Nf3 2. gxf3 Rd2
1) 2. Qxg6 fxg6 2. Rxg7+Kh8 3. Rh7+ Kg8 4. Rag7\#
1) 2. Qxf4+ Nxf4 2. Rcf7+ Ke8 3.

Rg8\#
12) 1. Nxf6+exf6 2. Re7; 1. d6!? Ne8!
$\square$ Tactics / Seventh rank: B

1) $1 . \ldots \mathrm{Qxd} 4+2 . \mathrm{Qxd} 4 \mathrm{Rg} 2+3$. Khl Rxh2+ 4. Kgl Rbg2\#
2) $1 . \mathrm{Rg} 7+\mathrm{Kh} 82$. Nf 8 (threatens 3. Ng6\#) 2.... Rxf8 3. Rh7+ Kg8 4. Rcg7\#
3) 4. Nf6 Bg7 2. Qh6 and 3 . Qxh7\# or 3. Rxh7\#
1) 2. Rxg7+ Kxg7 2. Rc7+
1) 2. Qd7 Qh8 (otherwise 2. Rf8+) 2. Rh7 Qf6 3. Rh8+
1) 2. c8Q Rxc8 2. Qb7; 1. ...

Qxb2 2. Qc7; 1. Qb7? Re2 or 1. ... Rc8
7) Drawing
8) Drawing
9) 1. ... Rf8 2. Qxd2 Rxd2+
10) 1. Nf 5! (1. Ne6 Re7); 1.... gxf5 2. Rd7
11) I. Bh6 gxh6 2. Rle7; 1.... Rg8 2. Rle7
12) 1. ... Be3! 2. fxe3 Qh3+; 2. Qxe3 Qxdl; 2. Nc2 Qf3


## GOAL OF THE LESSON

- learning how to plan in the endgame


## PRIOR KNOWLEDGE

- square of the pawn
- key squares


## ACQUISITION

## Instruction

Some of the principles of endgame play are specific to endgames and do not play a role in the opening and middlegame. In this lesson we discuss a number of general endgame principles using the pawn ending as example.
The pawn ending in the diagram ( $\Delta$ ) is winning for White on account of his extra pawn. The road to victory consist of giving up the a-pawn in exchange for time. Here is a possible variation: 1. a5 Kc6 2. Ke5 Kb5 3. Kd6 Kxa5 4. Ke7 f5 5. Kf7 g5 6. Kg7 h5 7. Kg6 g4 8. Kxf5 and White collects all of Black's pawns. White has given up a pawn to gain time and to get at the black pawns more quickly. The black king was lured away by the white a-pawn.
In the diagram ( $\Omega$ ) material is even. Once again, White can gain time by giving up his a-pawn. After 1. a5+ Kxa5 2. Kxc5 White's king is closer to the black kingside pawns. In the starting position White's a-pawn is farther removed from the kingside pawns than Black's c-pawn. White therefore has what is called the distant passed pawn.


Having the distant passed pawn is a great advantage.
In endgames, 3 elements have to be weighed against each other continuously:
a) Is my king active?
b) Can 1 create a passed pawn?
c) Is my opponent threatening anything?

Each move must be determined on the basis of the relative importance of these elements.
We now consider the diagram ( $\uparrow$ ) and try to weigh the points under a) an b) against each other.
White's king can go to the centre and he can create a passed pawn. We let White try the latter first: 1. b5 axb5 2. axb5 Kc7 3. Kd2 Kb6 4. Kd3 Kxb5 5. Kd4 Kc6 and Black's king is back in time. Next we let White activate his king first: 1. Kd2 Kd7 2. Kd3 Kd6 3. Kd4 Kc6 4. f4 Kd6 5. b5 axb5 6. axb5 Kc7 7. Kd5 Kb6 8. Kd6 Kxb5 9. Ke7 g5 10. 55 and White has an easy win.
The latter approach is similar to that in the first diagram of this lesson. Make sure to show the whole variation on the board.
The situation in the diagram ( $\omega$ ) is rather different. Black has two passed pawns already, and so it is too late for White to activate his king. Much more effective is 1 . b6 (or I. a6) 1. ... axb6 2. a6, and White queens.
Creating a passed pawn should be done with care and involves more than just advancing pawns.
In the diagram ( ${ }^{( }$) White can create a passed pawn on the queenside. At first sight, the move 1. a3, with the aim of following up with 2. b4, looks attractive. Unfortunately, 1. a3 can be met by I. ... a4, after which Black fixes the white majority and wins! Ask the students to discover this themselves.


Black has more than one road to victory. The nicest is to 'stalemate' the white king on fl and force a move with the b-pawn. That is why White should start with 1. b3. After 1. ... Kg6 2. a3 Kf6 3. b4 Black is without a chance. The b-pawn is the 'candidate' passed pawn. The rule is: the candidate first!
Another strategic advantage is to have a protected passed pawn. In the diagram ( $(\mathbb{)}$ ) White's king is forced to remain within the square of the h-pawn. As such he is unable to support his own pawn. Black has all the time in the world to collect the b-pawn.
It is important not to lose one's options. In the left part of the diagram ( $\Leftrightarrow$ ) White seems to be lost. However, White has 1. Ka5, giving Black the choice between stalemate after 1. ... Kxc5 or losing a pawn (with a draw).
On the right, the h-pawn is in danger. If Black can take it on h4, his king will occupy a key square. White can escape with 1. h5. After 1. ... gxh5 2. Ke2 Kg3 3. Knl the White king reaches the comer or he closes in the Black king after 3. ... Kh2 4. Kf2. In both cases the game will end in a draw.
One rather difficult technique that plays a role in some pawn endings is that of Zugzwang. In Zugzwang positions it is a drawback to be the one to move. In such cases the best option would be to pass, but this, of course, is not allowed. The diagram ( $(\mathbb{)}$ contains a tricky position in which it is essential to choose the right strategy. As White, it is tempting to attack the black pawn and protect the pawn on c4. If he does this, however, he will be lost after $\mathbf{I}$. Kb5 Kd4. Using the concept of Zugzwang White will emerge victorious: 1. Kb6 Kd4


## 2. Kb5.

The same position with Black to move is also interesting. There are three variations. Winning is $\mathbf{1 .} . .$. Kd3! 2. Kb5 Kd4. Losing would be I. ... Kd4 2. Kb5, while the game is drawn after 1. ... Ke5 2. Kb6! Kd6 3. Kb5 Kd7! 4. Kxc5 Kc7. A useful revision of key squares!
In the diagram ( $\mathbb{\bullet}$ ) the g-pawn is still in its initial position. This type of pawn is a valuable asset in Zugzwang positions, since it affords White the choice between a single or a double step forward.
Ask the students to find out whether White should start with I. g4 or I. g3. A single step forward leads to a win; a double step forward leads to a draw.
The technique of shielding off the king, as was discussed in the lesson on key squares in Step 3, remains a convenient weapon. In the diagram ( $\Rightarrow$ ) White must start with 1. Kb5. The black king has to move away, after which 1. ... Kxa2 2. Kb6 wins easily. An instructive variation is the incorrect 1 . Kb6 Kb4! (not 1. ... Ka4 2. a3 with zugzwang) 2. a3+ Ka4 and White does not have a good move any more.
In the diagram ( $\sqrt{ }$ ), we see a similar scenario. White wins with 1 . Kf5 (shielding off) 1. ... Kg2 2. Kg6.

The aim of this lesson has been to provide a first step towards planning in the endgame. To this end, we introduced 3 general endgame rules, which we illustrated against the backdrop of a number of pawn endings.

## Practice

## Reminder

$\bigcirc$ Strategy in pawn endings


## Workbook

## $\square$ Endgame strategy / Pawn ending: A

$\Xi$
Explanation: Ask the students to write down more than the moves only; they should add why a particular position is winning or a draw (e.g. king on a key square, king outside the square of the pawn). Some positions can also be played to a finish; in that case the trainer plays against one student first and then moves on to the next.
Mistake: The suggested answer is wrong.
Help: Help is required only when the student cannot himself find the mistake. In that case it is advisable to play the position to a finish using the right move, and to discuss the position with the student afterwards.

## Test / Mix: G <br> ²

Explanation: Most of the topics on this exercise sheet have been taken from previous lessons (chasing and aiming, attack on the king, $7^{\text {th }}$ rank)

## Test / Mix: H E

Explanation: The themes on this exercise sheet have been taken from all previous lessons. Solving these exercises requires the students to recognize the characteristics of the positions. It is a good idea to discuss the first three exercises on the demonstration board, emphasizing the correct search strategy.

## ANSWERS

## Endgame strategy / Pawn ending: $A$

1) 2. h4 Kd4 2. f6 (putting in place an obstacle; the black king must remain outside of the square of the pawn)
1) 2. a4 Kc5 2. a5 (the pawns hem in the king; White captures on h3 and then approaches with the king)
1) $\mathrm{l} . \mathrm{g} 3 \mathrm{~g} 5$ 2. g 4 Kc 63 . Kxc4; 1 .
g4? g 5 (making use of Zugzwang)
2) 3. a $5 \mathrm{bxa} 52 . \mathrm{Kd} 2 \mathrm{~Kb} 33 . \mathrm{Kcl}$ (changing the pattern of key squares by giving Black a rook's pawn)
1) 2. ... Kb8; 1. ... b5 2. axb6 drawing (activate the king first)
1) 2. ... b6 2. Kf3 a6 (advance the
candidate passed pawn first)
1) 2. ... Kc3 2. a4 Kxd4 3. Ke6 Kc5 4. Ke5 drawing (shield off the king first)
1) 2. ... g5 +2 . hxg 5 Kg 6 (weaken the pawn structure first)
1) 2. ... a6 2. Kd2 Kb3 (prevent b5 and then activate the king)

## Test / Mix: G

1) 2. Qb8+ Kh7 2. Qbl+ (double attack: chasing)
1) 2. Ne6 Bxe3 2. Nxd8+ (discovered attack)
1) 2. ... Rxc3 2. Rxa2 Rf3+ (7 $7^{\text {h }}$ rank)
1) $1 . \mathrm{Qgl}+\mathrm{Kf} 82 . \mathrm{Qcl}$ (double attack: aiming)
2) 3. Rgl+ Kh8 2. Qxh7+ Kxh7 3. Rh4\# (mate through access)
1) 2. Rc7+ Kg6 2. Qdl (double attack: chasing)
1) 2. ... Re2 2. Qxc5 Rgxg2+; 2. Rxg5 Rxf2 3. Rxf2 hxg5 (7 ${ }^{\text {h }}$

## $\square$ Test / Mix: $H$

I) I. Ra8+ Bd8 2. Rxd8+Kxd8 3. Nxf7+ (double attack: luring)
2) Drawing
3) I. Bf8 Rxf8 2. Ne7\# (mate)
4) I. e4 Bxe4 2. Qbl (placing the front piece)
5) 1. Rxf6 Qxf6 2. Qc2; 1. Qc2? Rc4 (double attack: eliminating the defender)
6) 1. Qxg6+ hxg6 2. Nf6 +Kg 73. Rh7\# (attack on the king: gaining access)
7) 1. d6 Bxd6 2. Qd2 (double attack: luring)
10) 1. ... f5 (prevent e4 first and then activate the king)
11) 1. ... f4 2. Kc4 Kg6 (activating the king; 1. ... Kg6 first is met by $2 . \mathrm{g} 3$ )
12) 1. ... h4 (1. ... Kg4 2. Kh6 Kxg3 3. Kxh5) 2. gxh4 h5 (shielding off the king)
rank)
8) 1. Qg6 Bxg3 2. f6 (attack on the king)
9) $1 . \mathrm{Rg} 4+\mathrm{fxg} 42 . \mathrm{Qg} 6+\mathrm{Kh} 83$. Qh7\# (attack on the king: gaining access)
10) 1. h3 Nh6 2. Qe4 (double attack: eliminating the defender)
11) 1. ... Qxg2+ 2. Rxg2 Rdxg2+ 3 . Khl Rgl $+\left(7^{\text {di }}\right.$ rank)
12) 1. Qh5 Nc6 2. Qh2+ (double attack: aiming)
8) 1. Rf6 Qxe5 2. Qxh6+; 2. Rh6+? Kg8 (attack on the king)
9) $1 . . .$. Qxh2 +2 . Kxh2 Nf3 + and 3. ... Nf2\# (double check: luring)
10) 1. ... Qg 3 2. fxg3 Rxg2+ 3. Khl Rdd2 ( $7^{\text {th }}$ rank)
11) 1. Bg6+ Kxg6 2. Qh5\#; 1. ... Ke6 2. Qc8+ Qd7 3. Bf5+ (double attack: chasing)
12) 1. ... Bxf2+ 2. Kxf2 Nxe4+; 2. Qxf2 Nd3+ (double attack: luring)

## Goal of the lesson

- learning tactical skills


## Prior knowledge

- double attack


## ACQUISITION

## Instruction

The fifth and last type of preparatory move that sets up a double attack is the 'clearing' of a line (file, rank or diagonal) or a square. A clearing move involves moving away a piece of your own army, thereby preparing a double attack.
In the left part of the diagram ( $\Leftrightarrow$ ) the queen on b3 has to make way for the double attack to work. It is important that the queen move with tempo. This can best be done by giving check. Black therefore plays 1. ... Qa4+ and after 2. Na3 picks up the queen with 2. ... Nb3+ .
On the right, the gain of tempo also involves check. Black's 1. ... Qh5+ sets up 2. ... Ng5, winning an exchange.
The diagram ( $₫$ ) contains some examples of clearing that involve pieces other than the queen. On the left, a clearing move with the knight sets up a pawn fork. It goes without saying that the knight should be played to a6: 1. Na6+ Kb7 2. $\mathbf{\text { b4}}$.
On the right, the king on h 2 and the rook on d6 are placed on the same diagonal. The black bishop can fork the two if the knight is moved away first. After 1. ... Ng4+ 2. hxg4


Be5+ Black picks up the exchange.
Another way to gain a tempo is by means of a capture. Capturing in most cases forces the opponent to recapture; the time it takes to do this can be used to set up a double attack. In the left part of the diagram ( $(\mathbb{)}$ ) White can clear square c4 with 1. Bxa6. White wins a piece after 1. ... bxa6 and 2. Rc4.
In the right part we see a similar position. Note, however, that $1 . \ldots$ Qh4 can be met by $2 . \mathrm{Kgl}$. The correct move is 1 . ... Qxf4. White loses a piece, regardless of whether he takes on f 4 or not.
Clearing with a gain of tempo can also be done by attacking an enemy piece that is unprotected or insufficiently protected. A simple illustration is provided in the left part of the diagram ( $\lrcorner$ ). White can clear the b4square by means of $\mathbf{1}$. Nd5, after which he threatens both 2. Nxc7 and 2. b4. Either way Black will lose material.
On the right, the clearing move $\mathbf{1 .}$ Nf4 also wins material. If the bishop moves, White picks up a rook with 2. Kg6.
In the diagram ( $($ ) we can see a remarkable example of clearing. If it were not for the queen, White would have a knight fork on f8. This suggests that White should try to clear the f 8 -square. However, this is easier said than done, since the queen neither has a suitable attacking target, nor does she seem able to protect the pinned knight. White does not win after 1. Qxg7+? Qxg7 2. Nxg7 Kxg7 3. Kg4 Kf7 4. Kg5 Kg7 5. h5 gxh5 6. Kxh5 Kf6 7. Kg4 Kg6. But White has the surprising 1. Qf5 up his sleeve. This move not only protects the knight and releases it from the pin, but it also clears f8: 1. ... gxf5 is met by $\mathbf{2}$. Nf8+, and White wins.
Besides clearing a square it is also possible

to clear a line (i.e. a file, rank or diagonal). Clearing a line involves moving away a piece with a gain of tempo, thereby setting up a double attack. Here, too, the tempo can be gained by giving check or by attacking an enemy piece.
In the upper part of the diagram (©) White can win the rook on c8 with 1. f6 Bxf6 2. $\mathbf{Q g 4} 4$. With the first move White clears the $\mathrm{h} 3 / \mathrm{c} 8$ diagonal. This preparatory move is necessary, because the direct $1 . \mathrm{Qg} 4+$ can be met by $1 . . . . \mathrm{Bg} 5$.
In the lower part of the diagram, the bishop on e3 obstructs a double attack of the rook. White clears the e3-square with tempo by 1. Bg1 and picks up an exchange. Note, again, that White cannot do without a preparatory move. After the immediate 1. Rd3+ Black can save himself with $1 . . . . \mathrm{Kc} 2$.
In the diagram ( $\Rightarrow$ ) Black's knight on e5 hems in the bishop on g 7 . Black clears the bishop's diagonal by capturing on f 3 with check. Now, all of a sudden, two attacking targets have become available. White loses a piece after 1. ... Nxf3+ 2. Bxf3 Qf6. It seems as though Black can also win a piece with Qb4. However, in that case White can escape with 2. Ne4!
Double attacks can also arise in the opening phase. After the moves 1. e4 c5 2. Nf3 Nc6 3. c3 d6 4. Be2 Nf6 5. d4 Nxe4 we arrive at the position in the diagram ( $(\mathbb{)}$. Black's last move is a well-known mistake. White can win a piece with 6. d5. The pawn chases the knight away and at the same time clears the $4^{\text {th }}$ rank. After 6. ... Ne5, 7. Qa4+ picks up the knight on e4. This trap is found in a number of openings and has claimed many a victim over the years.
Queens, rooks and bishops are line pieces.


As a consequence, they of ten take part in double attacks that involve clearing moves. But sometimes a knight fork can also be set up by means of clearing. In such cases, the help of a pin is usually required.
In the diagram ( $(\mathbb{)}$ ) White wins the exchange with 1. Nxf5 gxf5 2. Nd4, regardless of whether Black takes on d4. Below, we will also see an example of a clearing move that sets up a double attack for a pawn (cf. the second position under Search Strategy).

## Search strategy

The search strategy for the exercises focuses on opportunities for a double attack. Targets include unprotected pieces and open kings. The piece that obstructs the double attack must be played away with a gain of tempo.
In the first diagram ( $\Rightarrow$ ) we see an example of square clearing. One likely target is the rook on h 8 , which is unprotected. A second target is harder to find. The e7-square is a possible mating square, since the queen can be lured away with Nxc6. Unfortunately, the rook on a7 also protects e7. Luring away the queen does set up a double attack, however. With 1. Nxc6 White does not only clear d4 for the queen, but also lures the queen away from the protection of the rook. After 1. ... Qxc6 White attacks both rooks with 2. Qd4.

The second example, shown in the diagram $(\Omega)$, involves line clearing. Black has just protected his pawn on b7 with Na5. The drawback of this move is that it invites a pawn fork on b4. White's problem is that his rook is in the way. The solution is simple: the rook clears the b-file and attacks the black queen in the process. After 1. Rh3 Qg6 White wins a piece with 2. b4.


## Practice

## Reminder

$\diamond$ Clearing

## Workbook

$\square$ Double attack / Clearing: $A$
플
Explanation: The position already contains a double attack. All it takes is to move away the obstructing piece with gain of tempo.
Mistake: The suggested move does not win any material.
Help: Explain the goal of the exercise. Ask supporting questions but let the student draw his own conclusions. If necessary, take away the obstructing piece. This reduces the exercise to a Step 2 level exercise.
Mistake: Position 8 is too difficult.
Help: This exercise does not only involve clearing, but also chasing away (i.e. the rook on g3).

Double attack / Clearing: A 遇
Explanation: The goal is to set up X-ray checks and attacks by means of any of the five preparatory moves (luring, chasing, aiming, eliminating the defender and clearing).
Mistake: The position is too difficult.
Help: Provide the type of preparatory move that is required.

## ANSWERS

Double attack / Clearing: A

1) I. Nxc6 Rxc6 2. Qd4+
2) 3. ... $\mathrm{Qxf} 3+2$ 2. $\mathrm{Bxf} 3 \mathrm{Ne} 3+$
1) 2. $\mathrm{Qa} 8+\mathrm{Kh} 7$ 2. Nf3
1) I. ... Nxf3 +2 . $\mathrm{gxf} 3 \mathrm{Qd} 4+$
2) 3. ... Nf5 2. Rf3 Qb8+; 1. ...

Qb8? 2. Be5
4) I. g 5 Bg 7 2. $\mathrm{Qh} 3+$; 1. $\mathrm{Qh} 3+$ ?
9) 1. Rxc3 bxc3 2. g4

Kg 8 2. g5 Bf5
10) 1. e6 fxe6 2. Qc3; 1. Qc3? Bb4
5) 1. Bxd5 Nxd5 2. Nc6

1I) 1. ... Bb3 2. Rel Nc4
6) 1. Qxf5 Rxf5 2. Ne6+
12) 1. ... b3 2. axb3 Nb4

Double attack / X-ray: $A$

1) 2. Qxd6 Rxd6 2. Bb4
1) 2. $\mathrm{e} 4 \mathrm{dxe} 42 . \mathrm{Bg} 4 ; 1 . \mathrm{Bg} 4$ ?

Qbl+
3) 1. ... d4 2. Bxd4 Bd5+
4) I. ... f5 2. Nd2 Bb4
5) 1. ... Re5+ 2. Kc4 Be2+; 2. Kc6 Bd7\#
6) 1. ... Rbl 2. Qxbl Qhl+
7) 1. ... Nc6+ 2. Bxc6 Rbl+
8) 1. ... Nf5 2. exf5 Rh2+
9) $1 . \ldots \mathrm{g} 52$. Qxg 5 Be 7 and 3. ... Bxh4
10) 1. $\mathrm{Qb} 8+\mathrm{Kf} 5$ 2. $\mathrm{Qf} 8+\mathrm{Kg} 43$. Qg8+
11) 1. Qe3 Qb8 2. Rel; 2. ... Bxd5 3. Bxd5+ Nf7 4. Rf1
12) 1. ... Bc5 2. Bxc5 Qxc4+


## Goal of the lesson

- leaming about piece cooperation
- playing according to a plan
- extending the level of endgame skills


## Prior knowledge

- mating with king + queen against king


## ACQUISITION

## Instruction

In this lesson we focus on endings in which one side has a king and queen and the other side a king and pawn.
In the diagram ( $\curvearrowleft$ ) we see a typical position. The pawn has advanced up to the last but one rank, where it is supported by the king. Positions in which the pawn has advanced less far are not of much interest. In such positions the side with the queen wins
 easily.
In this lesson we will look at a number of winning and drawn positions. By doing this, the students will not only leam to evaluate this type of ending. They will also learn the importance of piece cooperation and planning. It is obvious that these skills are also relevant in other positions.
Before discussing the first diagram, we will first discuss some general characteristics of this ending. First, the side with the queen has an easy win if the queen manages to occupy the promotion square. Then all that needs to be done is to bring in the king and take the pawn. The diagram ( $₫$ ) contains

two simple exercises. The defending side must try to keep the queen away from the promotion square at all cost. For now, all the side with the queen must try, is to occupy the promotion square. In the diagram (©) there are three possibilities:

- checking the king
- pinning the pawn
- attacking the unprotected pawn (and controlling the promotion square at the same time)
Preventing promotion does not guarantee winning the pawn. It is essential that the side with the queen bring in the king. This can be done only if the pawn is prevented from promotion, either because the pawn is pinned or because the king is positioned on the promotion square.
In the left part of the diagram ( $\Leftrightarrow$ ) the black king must go to the square directly in front of the pawn, otherwise the pawn is lost. After $1 . \ldots \mathrm{Kbl}$ the threat of promotion has gone, at least until the next move.
The right part of the diagram shows how the previous position can be reached. White attacks the pawn with 1. Qe3, forcing Black to protect it with 1. ... Kf1. After 2. Qf3+ Black has to position his king in front of the pawn. That is the moment for the white king to draw a step closer.
Now it is time to return to the first diagram ( $\downarrow$ ) of this lesson. We will look at a possible continuation (it is important to keep pointing out the parallels with the position in the diagram $\Rightarrow$ ).

1. Qe6+ Kf2 2. Qd5 (or 2. Qg4) 2. ... Ke2
2. Qe4+ Kf2 4. Qd3+ Kel 5. Qe3+ Kd1 and now White can bring his king closer to the pawn; 6. Kd6 Kc2 7. Qe4+ (or 7. Qe2) 7. ... Kcl 8. Qc4+ Kb2 9. Qd3 Kc1 10.


Qc3+ Kd1 11. Kd5 Ke2 12. Qc2 Kel 13. Qe4+ Kf2 14. Qd3 Ke1 15. Qe3+ Kd1 16. Kd4 Kc2 17. Qc3+ Kd1 18. Ke3 Kel 19. Qxd2+ Kf1 20. Qf2 mate.
A comment is in order regarding a number of special positions. One of these is shown in the diagram ( $\mathbb{\cup}$ ).
White tries to force the king to the square in front of the pawn: 1. Qb3+. Black responds with the surprising 1. ... Kal. He abandons his pawn with good cause, since Black will be stalemated after 2. Qxc2. Giving check with the queen does not help; White cannot force Black to occupy the cl-square. Hence, White does not have any opportunity to bring in his king. This defensive strategy is possible only with c-pawns and f-pawns. In such cases, the game will end in a draw.
A similar example is shown in the diagram $(\Rightarrow)$. After 1. Qb3+ the black king willingly moves into the comer. Again, the white king cannot approach the pawn as Black would once more be stalemated. The side with the queen therefore cannot reach more than a draw against a-pawns and h-pawns. There are, however, a couple of provisos. Rook and bishop pawns draw only if the following conditions are met:

- The king is close to the pawn.
- The queen cannot occupy the promotion square.
- The enemy king is not too close.

The last point is vital. If the side with the queen has the king close by, the combined force of king and queen can be used to give mate or conquer the pawn.
In the upper part of the diagram ( $(\mathfrak{)}$ ) Black has the king nearby, and this grants him an easy win: 1. ... Kb6 2. c8Q Qa7\#.
In the lower part of the diagram, White wins

with 1. Qf3+ Kg1 2. Ke3 h1Q 3. Qf2\#. In the left part of the diagram ( $\uparrow$ ) White plays 1. Kb3, preventing stalemate. 1. ... Kb1 is met by 2. Qel\#.
On the right, White wins the f-pawn after 1. Ke2. Black is lost, provided that after 1. ... Kh1 White does not capture on f 2 with the queen. Once again, the side with the queen wins because the king is close by.

## Summary

In with the queen almost always wins against b - , d- ,e- and g-pawns. If the pawn side has an a-, c-, f- or h-pawn, the result depends on the position of the king. The side with the queen has an easy win if the queen can occupy the promotion square.

## Practice

## Simultaneous display

Testing the students' skills in this ending can best be done by having them play game positions to a finish. A simultaneous display is admirably suited for this purpose. The trainer plays the side of the pawns! In the diagram ( $\Leftrightarrow$ ) a possible continuation is 1. Qc4+ Kd2 2. Qb3 Kc1 3. Qc3+ Kb1
4. Kb6 Ka2 5. Qc2 Kal 6. Qa4+ Kb1 7. Kc5 Kc1 8. Qc4+ Kd2 9. Qb3 Kc1 10. Qc3+ Kb1 11. Kb4 Ka2 12. Qc2 Kal 13. Ka3b1Q 14. Qc3+ Qb2+ 15. Qxb2\#.
In the diagram ( $(\square)$ Black can postpone the impending defeat the longest with 1. Qb5 Kf2 2. Qf5+ Kg2 3. Qe4+ Kf2 4. Qf4+ Kg2 5. Qe3 Kfl 6. Qf3+ Ke1 7. Ke6 Kd2 8. Qf2 Kd1 9. Qd4+ Kc2 10. Qe3 Kd1 11. Qd3+ Ke1 12. Ke5 Kf2 13. Qd2 Kf1 14. Qf4+ Kg2 15. Qe3 Kf1 16. Qf3+ Kel 17.


# Kd4 Kd2 18. Qc3+ Kd1 19. Kd3 elQ 20. 

 Qc2\#.
## Reminder

$\bigcirc$ Queen against pawn

## Workbook

$\square$ Endgame / Queen against pawn: $A$ 䪩
Explanation: This exercise sheet contains a combination of winning and drawn positions. The students should find out for themselves whether a given position is winning or drawn. Bright students will discover that all positions in which White is to move are winning and that all positions in which Black is to move are drawn. Noting down the first move is usually sufficient. Ask the students to also indicate the function of the move (see the ANSWERS section).
Mistake: The suggested solution is incorrect.
Help: Put the position on a board and play the suggested move. Consider the position from the opponent's perspective. Play the position to a finish if more than one correct move is required.

## E

Explanation: The end of the Step 4 is near. The mixed sheets are a good tool to find out whether the students can apply the topics considered to unfamiliar positions. It is not a good idea to skip these sheets for the sake of convenience. Students who do not obtain a satisfactory result are advised not to continue with Step 5. It is pointless to offer new topics to students who have insufficiently mastered previous topics.
Mistake: The exercise is too difficult.
Help: Ask the student to evaluate the position first, and then offer a specific search strategy.

Test / Mix: J
쁠
Explanation: See Mix: I

## ANSWERS

Endgame / Queen against pawn: A

1) 2. Qel (the queen occupies the promotion square)
1) $1 . \ldots \mathrm{Kc} 2(1 / 2-1 / 2$ on account of the rook's pawn; the white king is too far away)
2) $1 . \mathrm{Kg} 3$ (1. Qxd2 stalemate)
3) 4. Qa6 (the queen occupies the promotion square)
1) 2. Qe5 Kb3 2. Kf5 c2 3. Qal (the queen occupies the promotion square or the pawn fails to reach the $2^{\text {nd }}$ rank)
1) 2. $\mathrm{Kb} 3 \mathrm{clQ} 2 . \mathrm{Qh} 7+\mathrm{Kal} 3$. Qa7+ (the white king is close
enough to the pawn)
1) Drawing
2) Drawing
3) 4. Kd3 (the white king is close enough to the pawn)
1) 2. Kb4 Kb2 2. Ka4+ (the white king is close enough to the pawn)
1) 2. $\mathrm{Kf} 4 \mathrm{fIQ}+2 . \mathrm{Kg} 3$ (the white king is close enough to the pawn)
1) 2. Qb3 or 1. Qal+ (preventing the black king from occupying the comer)
1) 2. ... Qxb3 2. axb3 Nf3+ (double attack: eliminating the def ender)
1) 2. Qh6 gxh6 2. Nxh6\# (mate through access)
1) 2. Qd5 Nc6 2. Qxc6 (double attack: luring)
1) 2. Bh6 winning the exchange; 1. ... Re8 2. Bxa6 (attack on the king)
1) 2. Rg7!; l. Rg8+? Qxg8 2. Bxg8 Rxg8 and Black wins ( $7^{\text {th }}$ rank)

Test / Mix: J

1) 2. ... Nxd5 2. exd5 Qh4+ (double attack: clearing)
1) 2. ... Be5! 2. Qxe5 Nf3+; 2.

Qg5 Nf3+ (double attack: luring/chasing)
3) I. ... Rfl+2. Kxfl Qf5+; 2.

Rxfl Qxe3+ (magnet/luring away + mate)
4) I. Rh6 gxh6 2. Qf6\# (mate through access)
5) 1. ... Qf1 + 2. Rxf1 Rxfl\# (mate on account of X-ray protection)
6) 1. Nxc5 Qxc5 2. Qe4 (double attack: clearing)
7) 1. ... Nf3+2. Bxf3 Be5\# (blocking)
8) 1. Re8 Qxc8 2. Ne7+ (double attack: luring)
9) 1. $\mathrm{Ne} 7+\mathrm{Qxe} 72 . \mathrm{Qg} 4+$; 1. $\mathrm{Qg} 4+\mathrm{Kf8}$ (double attack:
clearing/eliminating the defender)
10) 1. ... Rel 2. Qxel Qg4\#; 2. Re8+ Qxe8+ (luring away + mate)
11) 1. ... Rxe3 2. Qxe3 Bd4
12) 1. Nf $6+\mathrm{Kh} 82 . \mathrm{Qg} 5$ with the threat of 3 . Qxh6 + ; 2. ... hxg 5 is met by 3 . Rh3\# (attack on the king: access)


## The preparatory move

In the fourth Step the preparatory move has been introduced. The outline below gives an overview.


The preparatory move is treated in connection to the double attack (Step 4), the pin (luring in Step 4, the other in Step 5) and trapping (Step 4+ and 6).

## List of concepts

\(\left.$$
\begin{array}{ll}\text { alternative } & \begin{array}{l}\text { A move which, besides the move played, } \\
\text { comes into consideration. }\end{array}
$$ <br>
A very bad move. The term is relative. At a <br>
lower level, a blunder allows mate or loss of <br>
a piece. At a higher level, a serious posi- <br>
tional error is also considered to be a blun- <br>
der. <br>
Playing the pieces to the middle of the board <br>
so that they gain mobility. <br>
The middle of the chess board (the squares <br>

d4, d5, e4 and e5).\end{array}\right\}\)| A forced series of moves leading to mate, |
| :--- |
| loss of material or a draw. |

endgames is that the king can start to play an active role.

| exchange | As a noun, it refers to the difference between <br> a rook and a bishop or knight. The player |
| :--- | :--- |
| who captures a protected rook with his |  |
| bishop or knight wins the exchange, and so |  |
| he has made a profitable exchange (or 'is the |  |
| exchange up'). It makes a difference of two |  |
| points. |  |
| A term that is mostly used to indicate a |  |
| square to where the king may escape to. Less |  |


| kingside | The part of the board that consists of the e-, $f$-, g- and h-files. |
| :---: | :---: |
| line piece | Queen, rook or bishop. |
| line | A file, rank or diagonal. |
| major pieces | Queens and 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. |
| piece | Strictly speaking, this term refers to kings, queens, rooks, bishops and 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. |
| place of battle | The part of the board where most of the action takes place. |
| ply | A term from computer chess which stands for half a move (i.e. a white or black move). |
| poisoned pawn | A pawn which a player is ill-advised to take. |
| 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 | Demonstrating that a certain move (or series of moves) is not correct. |
| resigning | Giving up a game before being mated. This only happens now and then at Step 4 level. |
| sacrifice | Giving up material voluntarily in order to gain another advantage or to avoid a greater disadvantage. |


| simultaneous display | A match in which one player plays against <br> more than one player at the same time. <br> To make a weakness disappear, e.g. un- <br> doubling a doubled pawn. |
| :--- | :--- |
| solving | A long-tern plan. |
| strategy | A move or series of moves to force a mate- <br> rial gain, mate or a draw. |
| tactics | Indication for a move (Italian for 'time'). |
| tempo | A sacrifice in which the sacrificed material is <br> won back within the next couple of moves. |
| temporary sacrifice | A move which, while perhaps not object- <br> ively the best, entices the opponent to play <br> an obvious but wrong move. |
| Zugzwang | A situation in which the side that is to move <br> cannot help but weaken his position. |



## Information

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 |

English versions have been represented in boldface.
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For more information, please contact
C. van Wijgerden

Lotte Stam-Beesestraat 78
3066 HB Rotterdam
The Netherlands
Tel: 31 (0) 104564122
Fax: 31 (0)10 4564184
E-mail: info@stappenmethode.nl


