

Chess for Overall Development

# Chess Workbook

Student \_\_\_\_\_

\_\_\_\_ Grade \_\_\_\_ School No \_\_\_\_\_

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#### ADDRESS TO STUDENTS

#### Dear Students!

You are in luck! You have such a school subject as Chess. It is a very interesting and useful game. However, only some schools teach Chess. Your class has Chess. Chess training is a good opportunity to learn to play and to develop various abilities that will be helpful both in your studies and your life. We have created this Workbook so that the training will be interesting and useful for you.

We invite those who will engage in a year-long chess training to use this Workbook. It is a very unusual Workbook. You will use it both when working on the assignments (just like in workbooks on other subjects) and when filling out a special form at the bottom of each page. Take a close look at this form when you have faced the first challenging assignment and felt the need for the teacher's help. This form is necessary for challenging assignments – those that you may fail to complete by yourself. Filling it out, you will be able to understand what you have managed to do yourself (without the teacher's help); what challenges you have faced and what your teacher has helped you with. Tomorrow you will be able to autonomously do things that you are doing with the teacher's help today. This is what learning means: when you are gradually proceeding from what you do not know and fail to accomplish to the ability to independently perform most advanced tasks.

At first, you may find it challenging to fill out this form. Your teacher may help you with that. Please keep it in mind that each student fills this form out by him/herself depending on which mistakes the student has made and which challenges the student has faced. If you do it on a regular basis, by the end of the year, the Workbook will contain the whole story of your journey on the way to playing Chess and...something else. Chess is a game that may help to develop various useful abilities and skills. That is why, you will be able to see both your challenges and resources that you use to overcome these challenges. The key thing is to be active and courageous! Don't be afraid of mistakes and don't be ashamed of them! All people who are learning make mistakes as it is impossible to do anything new and make no mistakes. Share your challenges with the teachers and they will help you. Good luck and success to you on your training journey!

#### ADDRESS TO TEACHERS

#### Dear Teachers!

This Workbook enables you to design your lessons so that they may be useful to every child in the classroom. The assignments that you will give to your students may seem simple to someone (and these students will complete them independently, without your help); challenging but doable to some other children (students are able to complete these assignments with your help only), and extremely difficult to others in which case it is too early for these students to attempt to work on these assignments. You will see that qualification of assignments into elementary, difficult and advanced is very relative. This differentiation characterizes the quality that an assignment has for a student rather than the quality of the assignment as such.

The most efficient lesson is the one during which each student is doing what benefits him/her best, i.e. the student is working on assignments that are challenging but doable, and if he/she fails to complete these assignments him/herself, the child obtains such help from you that enables him/her to perform these assignments absolutely autonomously in the future. There is nothing new in this approach for you as teachers.

A new thing is the form at the bottom of each page, where we invite each child (with your help) to record the most relevant things that have happened to him/her during the lesson. In our opinion, several essential events may occur. The first event relates to what the child has been able to complete absolutely independently, without your help. The second event relates to what he/she has failed to accomplish; to what the child has experienced challenges with and what has been done with mistakes. The third event is the help that the child has obtained from you. The fourth event is the effect of this help: what it has given to the child. This is the Reflection Form, i.e. a form that enables the child to conceptualize (to reflect on) what has happened during a lesson. If these events take place every lesson, it will soon become clear both to you and the child whether the child makes progress or not (whether the child advances in learning or has got stuck on something); what the child's challenges relate to; which kind of help is most beneficial for this student; which issues need to be thought over. Filling out this form will enable the student to become the agent of his/her learning activity and it will enable you to help him/her on this way. We wish you fruitful cooperation with children and success in supporting them!

#### SAMPLE WORKBOOK PAGE (FOR TEACHERS)

(overall modi	. 0	ssboard"	dule. Problems , "Movement" es the children i		. , .	blems that the		
ElementaryDifficultAdvancedExample. How many squaresExample. Name the squaresExample. Find mentally and name the squaresdoes the Knight control when occupying c3 and how many squares does the Knight con- trol when occupying a1?Cupying c3 and the squares that the Knight controls oc- cupying a1.AdvancedExample. Name the squares 					Find mentally and e squares moving ich the Knight can a1 to h8 as quickly e, i.e. making as few			
edge of the chesse each following pro problems more ch mentally; looking d	You can see that all these problems pertain to the Knight's movement, and draw on the knowl- edge of the chessboard and chess notation, which the students have acquired earlier, with each following problem being more challenging than the previous one. The teacher may make problems more challenging or simpler by indicating the difficulty level (doing the problem mentally; looking at a chessboard; being able to use pieces, i.e. performing an ideal, material- ized or purely material action).							
Problem s	olving (to be	filled out	by the student	and ch	becked by t	he teacher)		
In this part of the dents write down tions, indicating r the exercises	their solu-							
(to be			g on problem so	0	the teacher	's helt)		
(to be filled out by the student at first, then – with the teacher's help)What have you done by yourself?What have you failed to do by yourself?What help have you needed?What has this help given to you?Comment.Intention for the next lesson								

Each action has its composition. The teacher is aware of what the student needs to know and to be able to do so as to solve some problem successfully. If the student solves the problem, it means that he/she has relevant abilities. If he/she makes a mistake or experiences some challenge when doing the problem, this is a red flag signifying that the student lacks some knowledge, skill or that some of his/her abilities are still underdeveloped. The Year-1 Chess for Overall Development Training (COD training) focuses, first and foremost, on developing the ability to perform mentally. Therefore, the teacher invites the students to solve problems in all modules at different levels: purely ideal ("in one's head"); materialized (i.e. some part of an action is carried out on the ideal plane, and some – with the use of material tools); purely material (using a chessboard, pieces, and supplementary material tools).

Thus, the difference in the problems' difficulty levels may relate both to the complexity of the chess-related subject matter (e.g. such questions as how many squares the Pawn controls and how many squares the Queen controls differ as far as the subject of Chess is concerned, as the Queen controls more squares), and to the level of completing the assignment on the material-ideal continuum.

When assisting the child, the teacher can help him/her to identify both the zone of proximal development in terms of learning Chess and the zone of proximal development of the ability to perform mentally (which relates closely to other functions: attention, memory, capacity for analysis, and many other functions that may develop in chess training). If the teacher is aware of individual zones of proximal development of his/her students, the teacher may adjust assignments to suit their specific traits. In this sense, the teacher may and needs "to digress" from the Workbook, to amend and to modify problems and even to invent his/her own assignments, just as Satka teachers have been doing. They have created numerous original assignments, which we have included in this Workbook with their permission.

Filling out the Reflection Form is the essential part of the lesson. In the beginning, children will experience it as a great challenge. Spare neither time nor effort in helping them. It will pay off. Reflection, i.e. in this case, the ability to conceptualize one's activity, is a fundamental developmental mechanism that will be evolving and improving throughout this work. At some point, you will become able to use it as a vehicle.

#### MODULE: INTRODUCTION TO CHESS. CHESS QUIZ FOR CHILDREN AND ADULTS

#### Lesson № 1 Chess Quiz for Children and Adults

## Please, read a question carefully; choose and circle an answer that you believe to be correct.

1.	Which colour is the a1 squar	e on the	Choices					
1.	chessboard: light or dark?	Light Dark						
2.	Which colour is the e4 square	e on the	Choices					
2.	chessboard: light or dark?		Lig	ght		Dar	·k	
3.	How many squares does a Roo	ok on a1		Cho	pices			
5.	control?		2	4	8		14	1
4.	How many squares does a Knig	,ht on <b>a1</b>		Cho	oices			
т.	control?		2	4	8		14	1
5.	How many squares does a Knig		Cho	oices				
5.	control?		2	4	8		14	ł
6.	How many moves does a Knight need to make to get to c3 from a1?	Problems 6 and 7 are solved on a nine-squared chessboard diagram				Ch	oices	
7.	How many options does a Knight have to make its way to <b>a1</b> from <b>c3</b> ?	K	+		1	2	4 3	5
8.	Look at the position on a display Memorize it. Put down the names of that have been occupied by Black as pieces. Unless you know chess not	f the square nd by White	s White e King	Ch White Pawn	oices Black King		Blac Paw	

8.	Memorize it. Put down the names of the squares that have been occupied by Black and by White pieces. Unless you know chess notation, mark the pieces' locations on the chessboard				White King	White Pawn	Black King	Black Pawn						

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	Reflecting on Problem Solving							
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment				

#### Module: Introduction to Chess.

#### Lesson № 2

This lesson takes shape of a conversation about Chess; about who knows what about this game. Therefore the first two columns may contain information on what the child is aware and unaware of, and the third and fourth columns may describe what has changed as a result of this lesson.

	Reflecting on Problem Solving								
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment					

#### MODULE: CHESSBOARD: "CHESS BATTLESHIP". LESSONS № 3-7.

Lesson № 3

BASIC LESSON (BL) Chessboard. Chessboard + Chess Notation - Square Names

Hi, kids! We invite you to play Chess Battleship so that you could learn to find and name the squares on the chessboard. There are some rules: each player has 6 ships. Each ship occupies a square. Three ships occupy light squares and three ships occupy dark squares. The ships can touch each other neither with their sides nor corners. The players take turns calling "shots" at each other's ships. When shooting, you announce the name and the colour of the target square (e.g. a1, dark). If there is a ship on that square, then you sink it and get the right to shoot one more time. If you miss, then your opponent makes a move. The goal is to sink all the enemy ships. Good luck!



Reflecting on Problem Solving							
What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment				
	What have you failed to do by	What have you failed to do byWhat help have you needed?	What have you failed to do byWhat help have you needed?What has this help given to				

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BL Chessboard. Chessboard + Chess Notation - Square Names
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Hi, kids! We invite you to play Chess Battleship so that you could learn to find and name the squares on the chessboard. There are some rules: each player has 6 ships. Each ship occupies a square. Three ships occupy light squares and three ships occupy dark squares. The ships can touch each other neither with their sides nor corners. The players take turns calling "shots" at each other's ships. When shooting, you announce the name and the colour of the target square (e.g. a1, dark). If there is a ship on that square, then you sink it and get the right to shoot one more time. If you miss, then your opponent makes a move. The goal is to sink all the enemy ships. Good luck!

Attacking





	Reflecting on Problem Solving								
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment					

```
BL Chessboard. Chessboard + Chess Notation – Square Names
```

Hi, kids! We invite you to play Chess Battleship again so that you could learn to find and name the squares on the chessboard. There are some rules: each player has 6 ships. Each ship occupies a square. Three ships occupy light squares and three squares occupy dark squares. The ships can touch each other neither with their sides nor corners. The players take turns calling "shots" at each other's ships. When shooting, you announce the name and the colour of the target square (e.g. a1, dark). If there is a ship on that square, then you sink it and get the right to shoot one more time. If you miss, then your opponent makes a move. The goal is to sink all the enemy ships. Good luck!

Attacking





	Reflecting on Problem Solving									
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment						

#### MODULE: CHESSBOARD: "CHESS BATTLESHIP". LESSONS № 3-7

#### Lesson № 6

BL Chessboard. Chessboard + Chess Notation – Square Names

Hi, kids! We invite you to play Chess Battleship again so that you could learn to find and name the squares on the chessboard. There are some rules: each player has 6 ships. Each ship occupies a square. Three ships occupy light squares and three squares occupy dark squares. The ships can touch each other neither with their sides nor corners. The players take turns calling "shots" at each other's ships. When shooting, you announce the name and the colour of the target square (e.g. a1, dark). If there is a ship on that square, then you sink it and get the right to shoot one more time. If you miss, then your opponent makes a move. The goal is to sink all the enemy ships. Good luck!



	Reflecting on Problem Solving								
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment					

BL Chessboard. Chessboard + Chess Notation - Square Names

Hi, kids! We will play Chess Battleship again. However, today, we invite you to find and name the squares on the chessboard from memory, without looking at the diagram. There are some rules: each player has 6 ships. Each ship occupies a square. Three ships occupy light squares and three squares occupy dark squares. The ships can touch each other neither with their sides nor corners. The players take turns calling "shots" at each other's ships. When shooting, you announce the name and the colour of the target square (e.g. a1, dark). If there is a ship on that square, then you sink it and get the right to shoot one more time. If you miss, then your opponent makes a move. The goal is to sink all the enemy ships. Good luck!





	Reflecting on Problem Solving									
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment						

#### MODULE: CHESSBOARD. LESSONS № 8-13

BL Chessboard. Chessboard + Chess Notation - Square Names

#### Lesson № 8

#### Diagram for Solving Problem 1



Diagram for Solving Problem 2





#### Elementary Problem 1.

Draw a house

in a square whose

address is on your mail delivery list: a6, b2, d4, h7.

#### Difficult Problem 2. Identify Chessboard Lines

Try to complete this exercise in your head (using your eyes):

There are two lines running through the f3 square: a rank and a file.

Write down which light squares does the file have?

Which dark squares does the rank have?

#### Advanced Problem 3.

House the guests in the like-coloured "apartments":

#### F1 A1 B1 D1 C1 E1 G1 H1

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Reflecting on Problem Solving									
What have you failed to do by yourself?	iled to do by needed? help give		Comment						
	What have you failed to do by	What have youWhat help have youfailed to do byneeded?	What have you failed to do byWhat help have you needed?What has this help given to						



#### Elementary Problem 1. Hide-and-Seek

You know that there is a hide-and-seek player hiding behind each tree on chessboard squares. Use square names to identify points of ambush. Write down a square's name and its colour.

#### Difficult Problem 2. Identify Chessboard Lines

				Dime
				Draw
				on a n
				How
				Draw
				How
				How
				ours)?
				What
				lines?
				l

Draw a line connecting like-coloured squares on a mute chessboard diagram. How is this line called? .....

Draw all suchlike lines.

How many lines of one colour are there? . . . .

How many lines are there in total (of both colours)? .....

What can you say about the length of these lines?

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#### Diagram for Solving Problem 3

#### Advanced Problem 3. Two Wonderful Lines

Try to solve this problem in your head. If you find it difficult, mark the paths.

The line linking like-coloured squares runs diagonally from the left bottom corner to the h8 square.

Which colour is this line? ...... Another line linking like-coloured squares runs diagonally from h1 to the opposing corner. Which colour is this line?

These diagonals intersect, and two light and two dark squares become adjacent to each other: this is the centre of the chessboard.

Write down the names of the squares that constitute the chessboard centre.

Reflecting on Problem Solving									
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment					

#### Diagram for Solving Problem 1

#### 8 S G А В 7 Κ Q 6 P W 5 IJ E $\mathbf{O}$ 4 Ι Τ 3 N 2 Η 1 В С D Е F G Н Α

# Difficult Problem 2. EncryptionDecipher words using a key:1. d6 b4 f4 f4 f2.2. g7 c3 b8 c1 h4 e5.

- 3. a7 f2 c3 d8 c1 e3.
- 4. a7 c3 f2 d8.
- 5. e5 g8 d5 f2.

#### Cipher your name using a key:



1. Find diagonals that contain two pieces (including Pawns) in the starting position. How many diagonals have you found?

2. Find diagonals that contain three pieces (including Pawns) in the starting position. How many diagonals have you found? Write them down using square names.

3. Name all diagonals that contain four pieces (including Pawns) in the starting position.



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#### Elementary Problem 1. Searching for the Colour

Put down "L" if the square that you have identified is light, and "D" if it is dark.

Write "L" or "D" on d6, f3, g7, a2, f2.

What have	What have you	What help have you	What has this	Comment
you done by yourself?	failed to do by yourself?	needed?	help given to you?	

Elementary Problem 1. Guess the Paths	Solve the problem here:
Try to solve this problem in your head. Use the	Path 1 –
chessboard unless you can solve it mentally.	Path 2 –
c1, c2, c3, c4, c5, c6, c7, c8 –	Path 3 –
a4, b4, c4, d4, e4, f4, g4, h4 –	
g1, f2, e3, d4, c5, b6, a7 –	

How did you guess which path is running from the bottom upwards; which is running

from left to right and which – diagonally? .....

Difficult Problem 2. Finish the Paths	Solve the problem here:
Try to solve this problem in your head. Use	a6, b6, c6,,,,,
the chessboard unless you can solve it men- tally.	b1, c2, d3,,,,,
	f1, f2, f3,,,,,

How did you guess? Name the paths. Which colour is the diagonal?

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#### Diagram for Solving Problem 3

#### Diagram for Solving Problem 4

	S				р		
e		g					u
			q			а	
b			W				n
	u			S	e		
	i	i					
			g		n		
e		h		р			0

#### Advanced Problem 3. Plant Fir Trees along the Paths

Try to solve this problem in your head. If you find it difficult, mark all the squares along these paths

On the c-file –

On the  $7^{th}$  rank –

Name the square where all the paths intersect.

Which colour is this square?

Optional Advanced Problem 4. Game of "Spies"

Try to solve this problem in your head. If you find it difficult, mark the paths.

Decipher a word:

a7, e4, f8, b3, h1, h5, g6, d2, a1

Mark spelling challenges in this word.

Reflecting on Problem Solving							
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment			

#### Diagram for Solving Problem 1

#### Diagram for Solving Problem 2

#### Diagram for Solving Problem 3

#### Elementary Problem 1. Help Kolobok<sup>\*</sup> Get Home

Kolobok can move only along the dark squares; draw his path:

b2, b3, a3, b4, c5, d6 ,e6, e7, f6, g6, g5, h6, h7, g7, h8.

\* Translator's comment: Kolobok (a yellow round cake) is the main character of a Russian national fairy tale, the plot of which is similar to that of "The Gingerbread Man").

#### Difficult Problem 2. Football

(If you find the game difficult, mark the paths)

Send the balls to the following squares:

e4, a1, h8, c3, f6, b2, g5, d7.

Colour in only dark squares.

#### Advanced Problem 3. Post Officer

(If you find the game difficult, mark the paths).

Deliver mail to the following locations. Keep it in mind that the letters can come only to the light squares:

c4, g7, a5, d1, f3, b8, e2, h6.

Reflecting on Problem Solving							
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment			

Diagram for Solving Problem 1

## Elementary Problem 1. Clear the Chessboard of Mines

(Play the game in your head, but if you find it difficult, mark the paths).

Identify the mined squares and mark them on the chessboard:

On the longest light-squared diagonal and the last rank.

On the c-file and the first rank.

On the longest dark-squared diagonal and the f-file.

On the central light square on the d-file.

On the central dark square on the e-file.

#### Difficult Problem 2. "Dark and Light"

Try to solve this problem in your head. If you find it difficult, count using a blind chessboard.

Identify colours of the squares and underline dark ones only:

Solve Problem 2 here. c2, g7, a3, d8, h4, b6, e5, f1.

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#### Advanced Problem 3

Hi, kids! We invite you to recall how to play Chess Battleship and play it so that you could learn to find and name the squares on the chessboard. We would like to remind you about the rules: each player has 6 ships. Each ship occupies a square. Three ships occupy light squares and three ships occupy dark squares. The ships can touch each other neither with their sides nor corners. The players take turns calling "shots" at each other's ships. When shooting, you announce the name and the colour of the target square (e.g. a1, dark). If there is a ship on that square, then you sink it and get the right to shoot one more time. If you miss, then your opponent makes a move. The goal is to sink all the enemy ships. Good luck!

Try to play this game without marking the paths with letters and numbers. If you find it difficult, mark the paths.



 My fleet (Being Attacked)						

	Reflecting on Problem Solving							
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment				

#### MODULE: CHESS PIECES. MOVEMENT AND LAWS OF CHESS. LESSONS № 14-28.

#### Chess Pieces. Lesson № 14

Solve the puzzle:

Fond of quiet open lines, walking any path he likes: He travels diagonals and files, and ranks he also passes by. Still, you will notice it quite quickly, that walking makes him feeling sickly. He moves one square at one go – he's not light-legged, my dearest bro.

Your answer: ......

Diagram for Solving Problem 1


#### Elementary Problem 1. Chess Bingo

(If you find the game difficult, mark the paths)

Identify the specified squares on the chessboard and mark them with a dot:

a1, a2, a5, a6, b1, b2, b4, b7, c1, c3, c7, d1, d6, e1, e6, f1, f3, f7, g1, g2, g4, g7, h1, h2, h5, h6.

What have you got?

To Problem 1: Try to answer the questions in your head. If you find it difficult, use the chessboard.

Write down the name and the colour of the square that the White King occupies in the starting position:

Write down the name and the colour of the square that the Black King occupies in the starting position:

Difficult problem 2. Playing with the King (Mentally)

How many squares does the King control when it is in the centre of the chessboard? . .

How many squares does the King control when it is in the corner of the chessboard? . .

How many squares does the King control when it is on the rim of the chessboard? . . . .

#### Advanced Problem 3. Save the King from Check

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White: K b8.	Black: K b1, Q b7.
Solution:	
White: K b8, B b7.	Black: K a5, R e8.
<b>Solution:</b> 1)	
,	,
White: K b8, B b7.	Black: K d8, R b1, N c6.
Solution:	

#### Optional Tricky Problem: "Kings' Game"

Can K! get home (H)? How many moves does it need to make? If you think that the King cannot get home, explain why.

#### **Diagrams for Optional Problem**

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		ġ



	Reflecting on Problem Solving								
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?							

#### Chess Pieces. Lesson № 15

#### Solve the puzzle:

She is a champion in Chess, she walks in giant steps. Like a Bishop diagonally she walks, like a Rook she strides back and forth. She moves to the left, she moves to the right, upwards and downwards. She strikes from the distance, she strikes point-blank. She has a top-two hierarchical rank.

**Diagram for Solving Problem 1** 

#### Elementary Problem 1. Chess Bingo

(If you find the game difficult, mark the paths)

Identify the specified squares on the chessboard and mark them with a dot:

a4, b1, b3, b4, c1, c2, c4, d1, d5, e1, e2, e4, f1, f3, f4, g4.

<b>To Problem 1:</b> Try to answer the questions in your head. If you find it difficult, use the chessboard.
Write down the name and the colour of the square that the White Queen occupies in
the starting position:
Write down the name and the colour of the square that the Black Queen occupies in
the starting position:
<b>Difficult Problem 2. Playing with the Queen</b> (Mentally) The Queen is on h8 (in the corner of the chessboard), which squares can it move to:
The Queen is on e4 (in the centre of the chessboard), which squares can it move to:
The Queen is on c8 (on the rim of the chessboard), which squares can it move to:
How many squares does the Queen control when it is in the centre of the chessboard?
How many squares does the Queen control when it is in the corner of the chessboard?
How many squares does the Queen control when it is on the rim of the chessboard?
Draw a conclusion:

#### Advanced Problem 3. Mate-in-One Problem

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White: K b8.

Black: K b6, Q b4.

Reflecting on Problem Solving								
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment				

#### Chess Pieces. Lesson № 16

#### Solve the puzzle:

Always walks along straight lines; never wants to step aside, Never wanders round the squares: never does and never cares. Therefore, I must concede that she is of a stubborn breed.

#### Diagram for Solving Problem 1

#### Elementary Problem 1. Chess Bingo

(If you find the game difficult, mark the paths)

Identify the specified squares on the chessboard and mark them with a dot:

a1, a2, a5, a6, a7, a8, b1, b3, b5, b7, c1, c4, c8, d1, d7, e1, e4, e8, f1, f3, f5, f7, g1, g2, g5, g6, g7, g8.

What have you got? .....

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To Problem 1: Try to answer the questions in your head. If you find it difficult, use the chessboard. Write down all the squares that the White Rooks occupy in the starting position: ..... Write down all the squares that the Black Rooks occupy in the starting position: ..... Difficult Problem 2. Playing with the Rooks (Mentally) The Rook is on e4, which squares can it move to: ..... The Rook is on c8, which squares can it move to: ..... The Rook is on h8, which squares can it move to: ..... How many squares does the Rook control when it is in the centre of the chessboard? . . How many squares does the Rook control when it is in the corner of the chessboard?. How many squares does the Rook control when it is on the rim of the chessboard? ... Draw a conclusion .....

#### Advanced Problem 3. Mate-in-One Problem

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White: K d8.

Black: K c3, R h7, R a4.

Reflecting on Problem Solving								
What have you done by yourself?	one by failed to do by needed?		What has this help given to you?	Comment				

#### Chess Pieces. Lesson № 17

#### Solve the puzzle:

When he starts the battle standing on the light,

He'll always move along light paths in every other fight.

When he joins the battle standing on the dark,

He'll move along the dark-squared lines – we are wishing him good luck! Till the end of the fight, he stays true either to the dark or to the light.

#### **Diagram for Solving Problem 1**

r		 	 	

#### Elementary Problem 1. Chess Bingo

(If you find the game difficult, mark the paths)

Identify the specified squares on the chessboard and mark them with a dot:

a3, b3, b6, c3, c4, c5, c7, d3, d8, e3, e4, e5, e7, f3, f6, g3.

**To Problem 1**: Try to answer the questions in your head. If you find it difficult, use the chessboard.

Write down all the squares that the White Bishops occupy in the starting position: . . .

Write down all the squares that the Black Bishops occupy in the starting position: . . .

#### Difficult Problem 2. Playing with the Bishops (Mentally)

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The Bishop is on g8. Which squares does it control; what type of the Bishop is it (light-

The Bishop is on c7. Which squares does it control; what type of the Bishop is it (light-squared or dark-squared):

How many squares does the Bishop control when it is in the centre of the chessboard?

How many squares does the Bishop control when it is in the corner of the chessboard?

How many squares does the Bishop control when it is on the rim of the chessboard?...

Draw a conclusion:

#### Advanced Problem 3. Mate-in-One Problem

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White: K h6, B d5, B h4

Black: K h8. White to move.

Reflecting on Problem Solving								
What have you done by yourself?	What have you failed to do by yourself?	failed to do by needed?		Comment				

#### Chess Pieces. Lesson № 18

#### Solve the puzzle:

Hates all prisons, locks and keys.

Leaps over squares – not one but three.

His move is L-shaped, after all. He always jumps and never crawls. If he is encircled with his foes, he'll jump them over: he has gone!

Diagram for Solving Problem 1

#### Elementary Problem 1. Chess Bingo

(If you find the game difficult, mark the paths)

Identify the specified squares on the chessboard and mark them with a dot:

a4, a5, a6, b1, b2, b4, b6, c3, c4, c7, d8, e8, f7, g2, g3, g6, h1, h4, h5.

To Problem 1: Try to answer the questions in your head. If you find it difficult, use the chessboard.

Write down all the squares that the White Knights occupy in the starting position: ....

.....

Write down all the squares that the Black Knights occupy in the starting position: . . .

#### Difficult problem 2. Playing with the Knights (Mentally)

How many squares does the Knight control when it is on the rim of the chessboard?

How many squares does the Knight control when it is in the centre of the chessboard?

Draw a conclusion:

#### Advanced Problem 3. Mate-in-One Problem

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

	Reflecting on Problem Solving								
What have you done by yourself?	a done by failed to do by needed?		What has this help given to you?	Comment					

#### Chess Pieces. Lesson № 19

#### Solve the puzzle:

A tiny little soldier is standing on a line. He looks so timid and so brave, so strong and so fragile. The Marshal gives an order. The soldier joins the fight, Advancing square after square; all day and all long night. The soldier can't move backwards, he cannot step aside. The secret hope that makes him high is to reach the other side.

Your answer: .....

#### Diagram for Solving Problem 1

-			 	

#### Elementary Problem 1. Chess Bingo

(If you find the game difficult, mark the paths)

Identify the specified squares on the chessboard and mark them with a dot:

b1, b2, c2, c3, c6, d1, d5, d8, e1, e2, e3, e6, f1

### To Problem 1: Try to answer the questions in your head. If you find it difficult, use the chessboard.

Write down all the squares that the White Pawns occupy in the starting position: .....

Write down all the squares that the Black Pawns occupy in the starting position: .....

#### Difficult Problem 2. Playing with the Pawns (Mentally)

The White Pawn is on c2.

Which squares can it move to: ..... Which squares does it control: .....

The Black Pawn is on a7.

Which squares can it move to: ..... Which squares does it control: .....

The Black Pawn is on d5.

Which squares can it move to: ..... Which squares does it control: .....

#### Advanced Problem 3

How many squares does the Pawn control when it is in the centre of the chessboard? . .

How many squares does the Pawn control when it is on the rim of the chessboard?...

· · ·

How many squares does the Pawn control when it is in the corner of the chessboard?

Draw a conclusion:

A Black Pawn has reached the first rank. What will it do next?: .....

Recall how the Pawn moves; how it captures and what happens to it when it reaches the edge of the chessboard. Draw a conclusion as to how the Pawn differs from other pieces.

1)	)	•	•	 •	•	•	 •	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• •	 •	•	•	•	•	•	• •	•	•	•	•	•	•	•	 •	•	•	•	•	•••	•	•	
2)	)	•	•	 •	•	•	 •	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• •	 •	•	•	•	•	•	• •	•	•	•	•	•	•	• •	 •	•	•	•	•	• •	•	•	
3)	)		•	 •		•	 •		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				•	•		•		 •	•	•	•	•	•	• •	•			•		•						•		•		

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What have	What have you	What help have you	What has this	Comment
you done by	failed to do by	needed?	help given to	
yourself?	yourself?		you?	

#### Starting Position. Lesson № 20

Elementary Problem 1
Set up White's starting position.
Do the problem mentally. If you find it difficult, use the chessboard.
K, Q, R, R, B, B, N, N, N
Pawns:,,,,,,,,,,

#### **Difficult Problem 2**

Which pieces does Black lack in the starting position?

Do the problem mentally. If you find it difficult, use the chessboard.

K e8, ....., R a8, ...., B f8, ...., N b8, .....

Pawns: a7, ....., e7, ....., e7, .....

#### **Advanced Problem 3**

Find mistakes in the starting position record.

Do the problem mentally. If you find it difficult, use the chessboard.

White: K d1, Q d8, R a1, R a8, B b1, B f1, N b8, N g1, a2, b7, c7, d2, e2, e7, g3, h2.

		Reflecting on Problem Solving												
What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment											
	failed to do by	failed to do by needed?	failed to do by needed? help given to											

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#### Starting Position. Lesson Nº 21

Elementary Problem 1
Set up Black's starting position.
Do the problem mentally. If you find it difficult, use the chessboard.
K, Q, R, R, B, B, N, N
Pawns:,,,,,,,

#### **Difficult Problem 2**

Which pieces does White lack in the starting position?
Do the problem mentally. If you find it difficult, use the chessboard.
, Q d1,, R h1, B c1, B f1,,,
Pawns: a1, b1,,,, f1,, f1,

#### Advanced Problem 3

Find mistakes in the starting position record.

Do the problem mentally. If you find it difficult, use the chessboard.

Black: K e1, Q d8, R a8, R h1, B b8, B f8, N b8, N g1, a2, b7, c7, d2, e2, e7, g3, h2.

	Re	eflecting on Problem Solvin	g	
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment
### Starting Position. Lesson Nº 22

### **Elementary Problem 1**

Set up the starting position of White's and Black's light pieces.

Do the problem mentally. If you find it difficult, use the chessboard.

White: B....., B...., N...., N.....

Black: B....., B...., N...., N....

## Difficult Problem 2

Which pieces and pawns does Black lack in the starting position? Do the problem mentally. If you find it difficult, use the chessboard. ....., Q d8, ....., R h8, B c8, ...., N g8

Pawns: ....., c7, ...., e7, ...., h7.

# Advanced Problem 3

Find mistakes in the starting position record.

White: K e1, Q d8, R a8, R h8, B c1, B f8, N c1, N g1, a7, b7, c2, d7, f2, f7, g2, h3.

Reflecting on Problem Solving					
What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment		
	What have you failed to do by	What have you failed to do byWhat help have you needed?	What have you failed to do byWhat help have you needed?What has this help given to		

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## King's Safe Position. Castling. Lesson № 23

## Elementary Problem 1

Castle short and long as White (write down your moves).

Castling short	Castling long
----------------	---------------

## Difficult Problem 2. Finish the castling rules

Castling is illegal:
1. If K and R have already
2. If there is / are between K and R
3. If K is in
4. If K passes through
5. If castling results in K occupying the square

## Advanced Problem 3. Can the Kings Castle?

Which King can castle and which King cannot? Why castling is illegal for this King?

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

A) White: K e1, R a1, R g2, B c3. Black: K e8, R h8, B f4.
Solution: .....
B) White: K e1, R h1. Black: K e8, Q h8, R a8.

Reflecting on Problem Solving					
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

## King's Safe Position. Castling. Lesson № 24

## Elementary Problem 1

Castle short and long as Black (write down your moves).

Castling short	Castling long
----------------	---------------

## Difficult Problem 2. Finish the castling rules

Castling is illegal:

1. If K and R have already	
2. If there are pieces between	
3. If K is in	
4. If passes through an attacked square.	
5. If castling results in K occupying the square	

## Advanced Problem 3. Can the Kings Castle?

Which King can castle and how? Which King cannot castle and why?

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

A) White: K e1, R a1.Black: K d8, Q E4, R h8.Solution:.....

B) White: K e1, R h1, B c8.

Black: K e8, R a8, B e4.

Reflecting on Problem Solving					
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

#### King's safe position. Castling. Lesson № 25

#### **Elementary Problem 1**

Castle short and long as White and as Black (write down your moves).

Castling short	Castling long
Castling short	Castling long

#### Difficult Problem 2. Finish the castling rules

Castling is illegal:

1. If K and R have already
2. If there is between K and R.
3. If K is in
4. If K passes through
5. If castling results in K occupying the square

### Advanced Problem 3. Can the Kings Castle?

Which King can castle and how? Which King cannot castle and why?

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

A) White: K e1, R b1, N f6.

Black: K e8, R h8.

B) White: K e1, R a1, B b3.

Black: K e8, R h8.

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

## Lesson № 26

Problems to review the material (at the teacher's discretion)

Elementary Problem 1

**Difficult Problem 2** 

Advanced Problem 3

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

## Lesson № 27

Problems to review the material (at the teacher's discretion)

Elementary Problem 1

**Difficult Problem 2** 

Advanced Problem 3

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

## GAME ESSENCE AND POSSIBLE OUTCOMES: WINNING, LOSING, DRAWS. LESSONS № 28-30

# Lesson 28. The Game's Essence is to Checkmate the Opponent's King

## **Elementary Problem 1**

What is check?	
Give an example of check:	

## Difficult Problem 2

List the ways to defend from check
Give an example for each defense variant:

## Advanced Problem 3

What is a mate?
How can you ascertain that there is no defense from mate?
Give an example of mate (write down pieces' position):

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What have	What have you	What help have you	What has this	Comment
you done by	failed to do by	needed?	help given to	
yourself?	yourself?		you?	

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## Lesson № 29. Game Outcomes: Winning, Losing, Draws

## **Elementary Problem 1**

What is the difference between check and mate?
Give an example of the position in which the opponent's King is in check and is
checkmated:
What is the difference between stalemate and check?
What is the difference between stalemate and mate?

# **Difficult Problem 2**

What is a draw?	· · · · · · · · · · · · · · · · · · ·	 

# Advanced Problem 3

When does the game end in a draw?

1)	•	•	•	•	•	•	•	•	• •	 •	•	•	•	•	•	• •	 •	•	•	•	•	•	•	• •	••	•	•	•	•	• •	•	•	•	• •	• •	•	•	• •	•	•	•	•••		•	•	•	• •	•	•	•	•	•
2)	•	•	•	•	•	•	•	•	• •	 •	•	•	•	•	•	• •	 •	•	•	•	•	•	•	• •	••	•	•	•	•	• •	• •	•	•	• •	• •	•	•	• •	•	•	•	•••		•	•	•	• •	•	•	•	•	•
3)	•	•	•	•	•	•	•	•	• •	 •	•	•	•	•	•	• •	 •	•	•	•	•	•	•	• •		•	•	•	•	• •	• •	•	•	• •	••	•	•	• •	•	•	•	•••	, .	•	•	•	• •	•	•	•	•	•
4)	•	•	•	•	•	•	•	•	• •	 •	•	•	•	•	•	• •	 •	•	•	•	•	•	•	• •	••	•	•	•	•	•••	• •	•	•	• •	• •	•	•	•••	•	•	•	•••		•	•	•	• •	•	•	•	•	•
5)	•	•	•	•	•	•	•	•		 •				•	•	• •	 •			•		•	•	• •				•	•		• •		•	• •			•		•	•					•	•		•	•		•	•

What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

# Lesson № 30. Game Outcomes: Winning, Losing, Draws. Review

# **Elementary Problem 1**

A player wins if:	
1) he / she the King.	,
2) he / she achieves such an advantage that the opponent declares	
3) the opponent's time allocated for his/her game	•
A draw is a game outcome when	

# **Difficult Problem 2**

1)	Unless there is a sufficient number of pieces on the chessboard to checkmate
	either of the players, the game ends in
• •	
2)	If a position on the chessboard has repeated three times, then
•••	
3)	A perpetual check is
••	
4)	The rule of fifty moves is
••	
••	
5)	A stalemate is a game outcome when
••	
••	

## Advanced Problem 3

Position: White K d6, e6. Black K d8.

How will the game end if the first player to move is:

Black:			
Prove it:			
White:			
Prove it:			
Attempt to infer a rul	le about the King's p	oosition at which a Pawn	queens.

	Re	flecting on Problem Solvin	ıg	
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

### MODULE: CHESS PIECE VALUE. LESSONS № 31-32

#### Lesson № 31

## **Elementary Problem 1**

Recall and write down the chess piece value:

K (King) –	Q (Queen) –	R (Rook) –
B (Bishop) –	N (Knight) –	p (pawn) –

Place the pieces in ascending order of their chess piece value: N, R, p, Q, B.

WEAKEST STRONGEST
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## **Difficult Problem 2**

Do the facts:

$Q + N + p = \dots$	$R+B+p=\ldots$	$Q + R + R = \dots$
$N + N + R = \dots$	$B + B + Q = \dots$	$Q + Q + R = \dots$

#### Advanced Problem 3

Insert the right pieces so that the equations are correct:

$9 + 3 + 5 = Q + \ldots + R$	$B + N + \ldots + p = 3 + 3 + 9 + 1$
$5 + 5 + 3 + 1 = \dots + R + N + \dots$	Q + R + + p = 9 + 5 + 3 +

Reflecting on Problem Solving					
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

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#### Lesson № 32

## **Elementary Problem 1**

Recall the chess piece value and connect the pairs:

Κ	5 pawns
В	3 pawns
R	1 pawn
Ν	9 pawns
р	3 pawns
Q	invaluable

Place the pieces in ascending order of their chess piece value: N, R, p, Q, B.

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### **Difficult Problem 2**

Do the facts:

$B + N + p = \dots$	Q+ N + p =	$N + R + R = \dots$
$N + Q + R = \dots$	$B + B + Q = \dots$	$Q + Q + B = \dots$

### Advanced Problem 3

Insert the right pieces so that the equations are correct:

$3 + 3 + 5 = B + \ldots + R$	$R + N + \ldots + p = 5 + 3 + 9 + 1$
$9 + 5 + 3 + 1 = \dots + R + N + \dots$	$Q + B + \ldots + p = 9 + 3 + 3 + 1$

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What have	What have you	What help have you	What has this	Comment
you done by	failed to do by	needed?	help given to	
yourself?	yourself?		you?	

## MODULE: CHESS POSITION. LESSONS № 33-34

### Lesson Nº 33. Analyzing, Evaluating, Memorizing Chess Position

**Recommendation for Teacher.** In order for the students to analyze, evaluate and memorize the position, the teacher arranges positions of three types on a display chessboard: elementary (4-7 pieces); difficult (8-14 pieces); advanced (exceeding 15 pieces). Then, the teacher turns the display chessboard upside down or covers it, and invites the students to reproduce the position on their chessboards or to write the position down by means of chess notation.

Difficulty level	Evaluation of performance	Mistakes and ways to eliminate them
Elementary Problem 1		
Elementary Problem 2		
Difficult Problem 3		
Difficult Problem 4		
Advanced Problem 5		
Advanced Problem 6		

Reflecting on Problem Solving					
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

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### Lesson № 34. Analyzing, Evaluating, Memorizing Chess Position

**Recommendation for Teacher.** In order for the students to analyze, evaluate and memorize the position, the teacher gives them individual assignments of three types depending on the students' performance during the previous lesson: elementary (4-7 pieces); difficult (8-14 pieces); advanced (exceeding 15 pieces). The students memorize the position and then reproduce it on their chessboards or write it down using chess notation.

Difficulty level	Evaluation of performance	Mistakes and ways to eliminate them
Elementary Problem 1		
Elementary Problem 2		
Difficult Problem 3		
Difficult Problem 4		
Advanced Problem 5		
Advanced Problem 6		

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

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#### MODULE: GAME STAGES: OPENING, MIDDLEGAME, ENDGAME. LESSONS № 35-37

#### Lesson № 35. Chess Opening Basics

#### Game stages:

The opening is
The middlegame is
The endgame is

#### **Elementary Problem 1**

#### Finish the opening rules:

1. Develop pieces:
2. Capture
3. Perform
4. Don't play your too soon.
5. Don't move the same twice.
6. Don't play the edge

#### **Difficult Problem 2**

## Exercise your pieces

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White:	Black:
1. e2 – e4	1
2. N g1 – f3	2
3. B f1 – c4	3
4. 0-0	4. 0-0
5. N b1 – c3	5
6. d2 – d3	6
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#### **Advanced Problem 3**

Analyze each move in the opening.

Write "!" if the move is good, and "?" if it is poor. Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White:	Black:
1. e2 – e4	1. e7 – e5
2. a2 – a4	2. N q8 – f6
3. N g1 – f3	3. h7 – h5
4. Q d1 – g4	4. B f8 – c5
5. B f1 – c4	5. b7 – b5
6. g2 – g4	6. g7– g5
7.0-0	7. 0-0

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

### Lesson № 36. Chess Opening Basics

### **Elementary Problem 1**

### Finish the chess opening rules:

1 light pieces:
2. Capture
3 play your Queen.
4. Don't move the same piece
5. Castle
6. Try to threaten with your moves.
7. Don't blunder and don't sacrifice
8. Look for weaknesses in the move Pay attention to the opponent's

#### **Difficult Problem 2**

#### Exercise your pieces

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White:	Black:
1	e7 – e5
2	N g8 – f6
3	B f8 – c5
4. 0-0	0-0
5	d7 – d6
6	N b8 – c6

#### **Advanced Problem 3**

Analyze each move in the opening.

Write "!" if the move is good, and "?" if it is poor. Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White:	Black:
1. a2 – a4	e 7 – e 5
2. R a1 – a3	B f8:a3
3. b2:a3	h7– h5
4. e2 – e4	N g8 – f6
5. d2 – d3	N b8 – c6
6. N g1 – f3	g7–g5
7.0-0.	0-0

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

### Lesson № 37. Chess Opening Basics

# **Elementary Problem 1**

Finish the opening rules:

1. Capture
2. Develop
3. Perform
4. Don't move
5. Don't too soon.
6. Try to threaten your opponent
7. Don't
8. Look for weaknesses in

### **Difficult Problem 2**

## Exercise your pieces

Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White:	Black:
1. e2 – e4	1
2	2. N g8 – f6
3. B f1 – c4	3
4	4. 0-0
5. N b1 – c3.	5
6	6. N b8 – c6

#### Advanced Problem 3

Analyze each move in the opening.

Write "!" if the move is good, and "?" if it is poor. Try to solve the problem in your head. Use the chessboard without pieces, unless you can solve the problem mentally. Use the pieces unless you can solve the problem using the chessboard alone.

White:	Black:
1. e2 – e4	1. e7 – e5
2. b2 – b4	2. N g8 – f6
3. h2 – h3	3. h7 – h5
4. d2 – d4	4. d7 – d6
5. B f1 – c4	5. B f8 – c5
6. N g1 – f3	6. 0-0
7. 0-0.	7. g7 – g5

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

#### MODULE: SOLVING MATE-IN-ONE PROBLEMS. LESSONS № 38-60

In this section, you will find problems from the following chess puzzle books: S. D. Ivashchenko's "Chess Combinations Book" ["Sbornik Shakhmatnykh Kombinatsiy]; M. V. Blokh's "Grandmaster's Advice" ["Nastavleniya grossmeistera"]; I. L. Slavin "Chess Textbook. Volume 1" ["Uchebnik-zadachnik shakhmat. Kniga 1"]; I. Maiselis "Chess" ["Shakhmaty"]. If you face the need to include other chess problems in addition to those that are provided in this Workbook, we advise you to use the problems from the aforementioned books.

Let us clarify the differences in the difficulty levels:

- Elementary problems include few pieces and have an apparent solution. Any elementary problem can be solved in one's head (solving problems mentally is, of course, a challenging task).
- Difficult problems involve interaction between pieces (a piece is defending another piece or a piece is interposed between the piece to be defended and the opposing one) and some tactics (connection, discovered check, double check).
- Advanced problems include a large number of pieces and possibility to solve the problem both as Black and as White. The skill of taking the opponent's perspective is very important in Chess. From the psychological perspective, this skill means that the person is capable of taking the other person's perspective, and that the person is capable of critical thinking and reflection. These chess problems represent "a bridge" to the Year-2 training.

In order to make assignments more challenging, the teacher may invite students to memorize the position; cover it with a sheet of paper and solve mentally. This exercise is well suited for pair work.



### Lesson № 38. Mate-in-One

	Reflecting on Problem Solving			
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Mate-in-One			
	Chess Problem		
Elementary	Difficult	Advanced	
Ivashchenko 1-6 (the White Bishop may be replaced with the other Queen, and the Black Rook may be removed unless children have a good working knowledge of these pieces	Ivashchenko 1–30 7 $6$ $5$ $4$ $3$ $2$ $1$ $a$ b c d e f g h	To be solved when: White to move. Black to move. Blokh 30	
White to move	White to move		
Solution	Solution	Solution 1	
		Solution 2	

# Lesson № 39. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself??	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Mate-in-One			
	Chess Problem	-	
Elementary	Difficult	Advanced	
Ivashchenko 1-54 (the White Bishop may be replaced with the other Queen; the Black Pawn may be removed)	Ivashchenko 1–44 7 $6$ $5$ $4$ $3$ $2$ $1$ $a$ $b$ $c$ $d$ $e$ $f$ $g$ $h$	To be solved when: White to move. Black to move. Blokh 35	
White to move	White to move		
Solution	Solution	Solution 1	
		Solution 2	

## Lesson № 40. Mate-in-One

	Reflecting on Problem Solving			
What have you done by yourself??	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment



## Lesson № 41. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself??	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Mate-in-One			
	Chess Problem		
Elementary	Difficult	Advanced	
		To be solved when: White to move. Black to move.	
Slavin A-9	Ivashchenko 1–52	Blokh 32	
8 7 6 5 4 3 2 1 a b c d e f g h	8 7 6 5 4 3 2 1 a b c d e f g h	8 7 6 5 4 3 2 A A A 1 2 b c d e f g h	
White to move	White to move		
Solution	Solution	Solution 1	
		Solution 2	

## Lesson № 42. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Mate-in-One				
	Chess Problem			
Elementary	Difficult	Advanced		
		To be solved when: White to move. Black to move.		
Ivashchenko 1–17	Ivashchenko 1–80	Blokh 3 (Black to move, mate in two)		
$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \hline a \\ b \\ c \\ c$	8 7 6 5 4 3 2 1 a b c d e f g h	8 7 6 5 4 3 2 1 2 a b c d e f g h		
White to move	Black to move			
Solution	Solution	Solution 1		
		Solution 2		

# Lesson № 43. Mate-in-One

	Reflecting on Problem Solving				
What have you done by yourself??	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

Mate-in-One				
	Chess Problem	I		
Elementary	Difficult	Advanced		
		To be solved when: White to move. Black to move.		
Ivashchenko 1–29	Ivashchenko 1–82	Blokh 38		
$ \begin{array}{c}                                     $	8 7 6 5 4 3 2 1 a b c d e f g h	$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ \hline a \\ b \\ c \\ d \\ e \\ f \\ f$		
White to move	Black to move			
Solution	Solution	Solution 1		
		Solution 2		

## Lesson № 44. Mate-in-One

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

Mate-in-One					
	Chess Problem				
Elementary	Difficult	Advanced			
Ivashchenko 1–1	Ivashchenko 1–91				
8; 7; 6; 5; 4; 3; 2; 1; a b c d e f g h	8 7 6 5 4 3 2 1 a b c d e f g h	8 7 6 5 4 3 2 1 a b c d e f g h			
White to move Solution	Black to move Solution	White to move Solution 1 Solution 2			
		Solution 3 Solution 4			

## Lesson № 45. Mate-in-One

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

	Mate-in-One			
	Chess Problem			
Elementary	Difficult	Advanced		
Ivashchenko 1–2 $ \begin{array}{c}                                     $	Ivashchenko 1–104 <sup>8</sup> <sup>7</sup> <sup>6</sup> <sup>5</sup> <sup>4</sup> <sup>3</sup> <sup>2</sup> <sup>1</sup> <sup>a</sup> <sup>b</sup> <sup>c</sup> <sup>d</sup> <sup>e</sup> <sup>f</sup> <sup>g</sup> <sup>h</sup>	Find as many mate-in-one variants as possible. The Babson Task (Maiselis I., Shakhmaty. 1960. P. 19) 8 7 6 5 4 3 2 1 a b c d e f g h		
White to move	White to move	Joke Problem		
Solution Solution				
The Babson Task solution				

# Lesson № 46. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Mate-in-One			
	Chess Problem		
Elementary	Difficult	Advanced	
Slavin A-2 7 $6$ $5$ $4$ $3$ $2$ $1$ $a$ b c d e f g h	Ivashchenko 1–109	Joke problem: Find a move that does not end in mate as White and as Black. (Maiselis I., 1960, P. 24)	
White to move	White to move		
Solution	Solution	Solution	

# Lesson № 47. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Mate-in-One				
	Chess Problem			
Elementary	Difficult	Advanced		
Ivashchenko 1–5	Ivashchenko 1–110 <sup>8</sup> 7 6 5 4 3 2 1 a b c d e f g h White to move Solution	At the teacher's discretion		

## Lesson № 48. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

	Mate-in-One				
	Chess Problem				
Elementary	Difficult	Advanced			
Ivashchenko 1–9	Ivashchenko 1–111	At the teacher's discretion			
8 7 6 5 4 3 2 1 a b c d e f g h	8 7 6 5 4 3 2 1 a b c d e f g h				
White to move	White to move				
Solution	Solution				

# Lesson № 49. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

	Mate-in-One			
Chess Problem				
Elementary	Difficult	Advanced		
Ivashchenko 1–4	Ivashchenko 1–112	At the teacher's discretion		
$ \begin{array}{c}                                     $	8 7 6 5 4 3 2 1 a b c d e f g h			
White to move	White to move			
Solution	Solution			

## Lesson № 50. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Mate-in-One Chess Problem				
Ivashchenko 1–23	Ivashchenko 1–113	At the teacher's discretion		
8 7 6 5 4 3 2 1 a b c d e f g h	8 7 6 5 4 3 2 1 a b c d e f g h			
White to move	White to move			
Solution	Solution			

# Lesson № 51. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

Chess Problem				
Difficult	Advanced			
Ivashchenko 1–122	At the teacher's discretion			
8 7 6 5 4 3 2 1 a b c d e f g h				
White to move				
Solution				
	Difficult Ivashchenko 1–122 8 7 6 5 4 3 2 1 a b c d e f g h White to move			

## Lesson № 52. Mate-in-One

Reflecting on Problem Solving					
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	
	Mate-in-One				
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	Chess Problem				
Elementary	Difficult	Advanced			
Ivashchenko 1–24	Ivashchenko 1–123	At the teacher's discretion			
8 7 6 5 4 3 2 <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u> <u>A</u>	8 7 6 5 4 3 2 1 a b c d e f g h				
White to move	White to move				
Solution	Solution				

# Lesson № 53. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

	Mate-in-One				
	Chess Problem	-			
Elementary	Difficult	Advanced			
Ivashchenko 1–19	Ivashchenko 1–128	At the teacher's discretion			
$\begin{bmatrix} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ h$	$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \end{array} $				
White to move	White to move				
Solution	Solution				

### Lesson № 54. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

	Mate-in-One				
	Chess Problem	-			
Elementary	Difficult	Advanced			
Ivashchenko 1–20	Ivashchenko 1–129	At the teacher's discretion			
8 7 6 5 4 3 2 1 a b c d e f g h	$ \begin{array}{c} 8\\ 7\\ 6\\ 5\\ 4\\ 3\\ 2\\ 1\\ \hline \\ a \ b \ c \ d \ e \ f \ g \ h \end{array} $				
White to move	White to move				
Solution	Solution				

### Lesson № 55. Mate-in-One

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

	Mate-in-One				
	Chess Problem				
Elementary	Difficult	Advanced			
Ivashchenko 1–27	Ivashchenko 1–130	At the teacher's discretion			
8 7 6 5 4 3 2 1 a b c d e f g h White to move	8 7 6 5 4 3 2 1 a b c d e f g h White to move				
Solution	Solution				

# Lesson № 56. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

	Mate-in-One				
	Chess Problem				
Elementary	Difficult	Advanced			
Slavin A-14	Ivashchenko 1–131	At the teacher's discretion			
8 7 6 5 4 3 2 1 a b c d e f g h	$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \end{array} $				
White to move	White to move				
Solution	Solution				

# Lesson № 57. Mate-in-One

What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

	Mate-in-One				
	Chess Problem				
Elementary	Difficult	Advanced			
Slavin A-18	Ivashchenko 1–133	At the teacher's discretion			
$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \end{array} $ White to move	8 7 6 5 4 3 2 1 a b c d e f g h White to move				
Solution	Solution				

### Lesson № 58. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

	Mate-in-One	
	Chess Problem	
Elementary	Difficult	Advanced
Ivashchenko 1–28	Ivashchenko 1–142	At the teacher's discretion
8 7 6 5 4 3 2 1 <b>a</b> b c d e f g h	$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ \end{array} $	
White to move	White to move	
Solution	Solution	

# Lesson № 59. Mate-in-One

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

	Mate-in-One	
	Chess Problem	-
Elementary	Difficult	Advanced
Ivashchenko 1–31	Ivashchenko 1–150	At the teacher's discretion
$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\  \end{array} $ $ \begin{array}{c} 1 \\ 2 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 3 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 3 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \\ 3 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 3 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 4 \\ 3 \\ 2 \\ 1 \\ 3 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4$	$ \begin{array}{c} 8\\ 7\\ 6\\ 5\\ 4\\ 3\\ 2\\ 1\\ a \ b \ c \ d \ e \ f \ g \ h \end{array} $	
White to move	Black to move	
Solution	Solution	

### Lesson № 60. Mate-in-One

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

	Mate-in-One	
	Chess Problem	
Elementary	Difficult	Advanced
Ivashchenko 1–39	Slavin A–47	At the teacher's discretion
$ \begin{array}{c}                                     $	8 7 6 5 4 3 2 1 a b c d e f g h	
White to move	White to move	
Solution	Solution	

# Lesson № 61. Mate-in-One

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

	Mate-in-One	
	Chess Problem	_
Elementary	Difficult	Advanced
Ivashchenko 1–67	Slavin A–51	At the teacher's discretion
$ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ a \ b \ c \ d \ e \ f \ g \ h \end{array} $	8 7 6 5 4 3 2 1 a b c d e f g h	
White to move	White to move	
Solution	Solution	

### Lesson № 62. Mate-in-One

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

### Lesson № 63. Reflecting on Chess Training

1. Which goals have you set for yourself at the beginning of the chess training? 2. Have you accomplished these goals? What have you managed to accomplish? What have you failed to accomplish? 3. What has been your main challenge in the training? 4. What has been most interesting for you? 5. What would you like to do the next year?

6. Do you like to play chess? Do you play chess with someone outside your school?

7. Have you improved your chess play?

8. Do you find chess training helpful as far as learning other school subjects is concerned?

9. Do you find chess training helpful as far as your life in general is concerned?

10. Do your parents believe that the chess training has been useful for you?

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# Additional Assignments

Mate-in-One				
Chess Problem				
Elementary	Difficult	Advanced		
	Mate in one	Mate in two		
Ivashchenko 1–21	The ending of the endgame study by D. Gurgenidze (1975) (E-Resource "Chess Combinations")	The ending of the endgame study by D. Gurgenidze (1975) (E-Resource "Chess Combinations")		
8 7 6 5 4 3 2 1 <i>a b c d e f g h</i> White to move	8 7 6 5 4 3 2 1 a b c d e f g h White to move	<ul> <li>8</li> <li>7</li> <li>6</li> <li>5</li> <li>4</li> <li>3</li> <li>2</li> <li>1</li> <li>a b c d e f g h White to move</li> <li>1.</li> <li>2.</li> </ul>		
	Mate in one			
Ivashchenko 1–22 $ \begin{array}{c} 8 \\ 7 \\ 6 \\ 5 \\ 4 \\ 3 \\ 2 \\ 1 \\ a \\ b \\ c \\ d \\ e \\ f \\ g \\ h \\ W hito to move$	The ending of the endgame study by A. Troitsky (1924) (E-Resource "Chess Combinations") 8 7 6 5 4 3 2 1 a b c d e f g h	Mate in two A. Petrov, 1864. (I. Maiselis , 1960, P.378		
White to move	White to move	White to move 1. 2.		



	Reflecting on Problem Solving					
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment		

GAME 1	GAME 2	GAME 1	GAME 2
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

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GAME 3		GAME 4	
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

GAME 5		GAME 6	
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

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GAME 7		GAME 8	
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

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GAME 9		GAN	1E 10
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

#### CHESS WORKBOOK

MODULE: P	LAYING LESSONS
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GAME 11		GAM	1E 12
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

GAME 13		GAN	IE 14
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

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GAME 15		GAN	IE 16
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

GAME 17		GAN	1E 18
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment

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GAME 19		GAN	IE 20
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

	Reflecting on Problem Solving				
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment	

GAME 21		GAN	1E 22
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving						
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment		

GAME 23		GAME 24	
White's moves	Black's moves	White's moves	Black's moves
1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

Reflecting on Problem Solving						
What have you done by yourself?	What have you failed to do by yourself?	What help have you needed?	What has this help given to you?	Comment		

### FINAL ASSESSMENT RESULTS

### Lesson № 64. Final Reflection

What are the main results for this year? What have you achieved? What do you have to achieve (yet)?



### **Final Reflection**

What was your greatest challenge? What was most interesting?



### **Final Reflection**

What will be your main goal the next year? What would you like to work on? What would you like to achieve?


Good luck to you in your new academic year!

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#### CHESS FOR OVERALL DEVELOPMENT SOFTWARE

#### Dear Teacher!

If you have acquired the Chess for Overall Development book set and plan to teach Chess according to the COD method, you may use the software version of the COD method (the Chess for Overall Development Software) in your work with students. As an owner of the COD book set, you may create an account and sign in on the COD website, http://chessod.com. Then, you will be able to set up your class and ensure access to the software to every student in your classroom.

What are the advantages of using the software?

- 1. The software enables the teacher to quickly and accurately identify which problems of which difficulty level are feasible for the students at any given moment of the training.
- 2. The software enables the student to proceed within his/her zone of proximal development without forcing this process and without getting stuck on the problems that the student can easily manage by him/herself.
- 3. The software models working with a chessboard and makes it possible to use material tools when the student encounters difficulties while doing problems at the initial stages of learning.
- 4. All the software assignments follow the logic of the method aiming at the development of the ability to perform mentally. The problems switch from simple to more challenging, that is, from elementary problems for identifying a square's location and colour to solving challenging mate-in-two problems in one's head. At each level, the students can learn an action on the material plane, and later on, their involvement in working on the ideal plane gets gradually increased (i.e. the action on the material plane is gradually translated to the ideal plane, one component after another). During the last level, the child solves every problem purely in his/her head without using a chessboard.
- 5. At each stage, the student does problems of various difficulty levels, proceeding gradually to accomplishment of the main goal of the training course namely, to developing the ability to make a mental move visualizing the position, understanding its meaning, analyzing and arriving at one or several solutions mentally.
- 6. When working on mate-in-two problems, the actions relating to analysis and search for solutions become more challenging as the learner needs to mentally play in his/her opponent's place, hence arriving at options to defend from checkmate, and to keep in mind variants of changes in the position after the first move.

Using the software facilitates the training process. It makes the training process more interesting for students; helps the teacher to monitor the dynamics of the development of the ability to perform mentally, and informs the teacher what help his/her students need specifically. Thus, the teacher is supported in fulfilling his/her main objective of *providing every child with one-to-one help* when working on the COD problems.

The software training stages correspond to the stages of developing the ability to perform mentally:

Stage 1 – Identifying a square on the chessboard.

Stage 2 – Identifying a line from the background of the chessboard.

**Stage 3** – Perceiving the chessboard as a whole, and identifying a combination of squares from "the background" of the chessboard.

**Stage 4** – An ability to visualize a simple position and make a deliberate move that requires the ability to analyze the position and to find squares where relevant paths intersect.

**Stage 5** – Perceiving the position and any changes in it resulting from a mental move as a whole ("mate-in-one" problems).

**Stage 6** – Perceiving the position and any changes in it resulting from a mental move as a whole, and being able to act mentally in the alternated position (advanced "mate-in-one" problems involving alternative variants of moves and defenses, and the mate-in-two problems).

A unique feature of this software is *its interactive interface*, that is, the software *interacts with the child who is working on a problem*.

Depending on the student's choices and actions, *the software offers the student relevant help or specific types of working tasks* in line with the principles and stages of developing the ability to perform mentally embedded in the method.

The software may never replace the teacher's personal work with the child. However, it may help the teacher to arrange for students' simultaneous independent work at some point in the classroom; to divide his/her attention among children and to ensure *each child's progress within his/her zone of proximal development*.

The software is designed for use in an ICT room where all the computers have an access to the Internet. The teacher can monitor the way a student was working on a problem; which difficulties he/she faced; and in which manner he/she was overcoming them. Building on this information, the teacher can prepare problems for the student for the next lesson.

The teacher can also use the saved information to involve the child in the joint activity of reflecting on the child's autonomous performance; discussing challenges that the child faced, and building the intention for the next learning stage.

The Chess for Overall Development Software is innovative and has no competitors at the time. As we are still working to improve the software, we will be happy if you share your feedback as users. Therefore, we invite you to answer the following questions:

- 1. Is the product convenient to use?
- 2. Are the user directions clear and complete enough?
- 3. What challenges have you faced when using the software as a student and as a teacher?
- 4. Is the number of problems provided sufficient for learning? If you think that something is lacking, please specify what.
- 5. Do you think learners get sufficient help? Are there more helping tools needed?
- 6. If you have any suggestions that may help us to improve the software, please, feel free to share them with us.

Please fill out the feedback form on http://chess-od.com to respond to these questions, or write a letter to the software developers to info@chess-od.com.

We hope that you, as a teacher, will find the Chess for Overall Development Software most useful, and that your students will enjoy the evolving processes of self-definition and self-development while working with it!

#### V. K. Zaretskii, A. M. Gilyazov

# CHESS FOR OVERALL DEVELOPMENT

### CHESS WORKBOOK

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