

## BRAIN FITNESS

CROSS TRAIN YOUR BRAIN

Instructions and Solutions

# SOLITAIRE CHESS

STRATEGIC SKILL BUILDING GAME



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#### STRATEGIC SKILL BUILDING GAME

ThinkFun's Brain Fitness games are designed as a fun way to help you exercise your brain. The 80 challenges will stretch your mental muscles, strengthening speed, focus, and memory. We recommend that you start with the beginner level and work through the challenges progressively. Just 15 minutes of play a day will reduce stress and provide a good brain workout. You're on your way to a healthier brain!

Chess has long been known as the world's deepest thinking game.

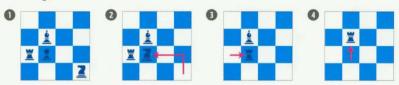
Solitaire Chess® combines the rules of traditional chess and peg solitaire to bring you a delightful and vigorous brain workout! It's ok if you've never played chess before, this is an inviting way to learn some chess playing strategies or build the skills that you already have!

#### Includes:

- 1 Booklet with 80 Challenges
- · 10 Chess Pieces
- · 1 Booklet with Instructions and Solutions

#### Your Goal:

Capture the chess pieces until only one piece remains on the challenge card.



### Setup:

Choose a challenge card and cover the chess piece icons with the matching chess pieces.

### To Play:

- Move the chess pieces according to the movement rules (pages 6-7)\*. Each move must result in a captured piece.
- 2. If you are left with two or more pieces on the challenge card, reset and try again.
- 3. When there is only one piece remaining, you win!
- 4. If you are stuck, reference the solutions on pages 8 to 11.

\*Movements are the same as in standard chess.

## Solitaire Chess Compared to Standard Chess:

Solitaire Chess is a single-player logic puzzle, not a chess game. The basic piece movements are the same as with standard chess but there are some key differences between the two games:

#### The differences are:

- Solitaire Chess is a single-player game; all the pieces are the same color.
- Every move you make must result in a capture.
- Pawns can be placed anywhere on the board. They may only move up the board by diagonally capturing another piece.
- Pawns are not promoted when they reach the top rank (top row).
- · There is no "check" rule for the King.
- By our design, every challenge that uses a King will end with the King as the last remaining piece.
   (This is not a rule; it is a hint for you.)

#### **Chess Pieces:**



#### About the Inventor:

Solitaire Chess® was invented by Vesa Timonen, a software engineer living in Finland. His interests include puzzles, magic, programming and woodworking. This is Vesa's second ThinkFun product; the first being the Aha Brainteaser, Rec-Tangle.

## Movement Rules:



King captures after moving exactly one square horizontally, vertically, or diagonally.

The challenges are designed such that in the solution the **King** will <u>never</u> be captured.



**Queen** captures after moving across any number of vacant squares horizontally, vertically, or diagonally.



Knights capture after moving in an "L" (or inverted "L") with two steps in one direction, a 90° turn and one step in the new direction.

**Knights** are the only pieces that can jump over other pieces. They capture only the piece that occupied the final square.



**Bishops** capture after moving across any number of vacant squares diagonally.

**Bishops** always remain on their original square color.



**Rooks** capture after moving across any number of vacant squares vertically or horizontally.



**Pawns** capture after moving one square <u>diagonally upward</u>.

# Solutions: Beginner

Challenge 1: a1 → b2

 $b2 \rightarrow c3$  $c3 \rightarrow b4$ 

Challenge 2:  $b4 \rightarrow c4$   $c4 \rightarrow c3$  $c3 \rightarrow a3$ 

Challenge 3:  $b2 \rightarrow a1$   $a1 \rightarrow c3$  $c3 \rightarrow b4$ 

Challenge 4:  $b4 \rightarrow a2$   $a2 \rightarrow c3$  $c3 \rightarrow b1$ 

Challenge 5:  $d3 \rightarrow b2$   $a1 \rightarrow b2$  $b2 \rightarrow a3$ 

Challenge 6:  $a1 \rightarrow b2$   $c4 \rightarrow b2$  $b2 \rightarrow a4$  Challenge 7:  $d3 \rightarrow b2$  $b3 \rightarrow b2$ 

 $b2 \rightarrow a2$ Challenge 8:  $b2 \rightarrow b3$  $d2 \rightarrow b3$  $b3 \rightarrow a1$ 

Challenge 9:  $a3 \rightarrow a2$   $a2 \rightarrow b3$  $b3 \rightarrow c4$ 

Challenge 10:  $d3 \rightarrow a3$   $b2 \rightarrow a3$  $a3 \rightarrow b4$ 

Challenge 11:  $a1 \rightarrow b3$   $c4 \rightarrow b3$  $b3 \rightarrow a4$ 

Challenge 12:  $a2 \rightarrow b3$   $c4 \rightarrow b3$  $b3 \rightarrow c2$  Challenge 13:

Challenge  $a2 \rightarrow b3$   $d3 \rightarrow b3$  $b3 \rightarrow b4$ 

Challenge 14:  $a1 \rightarrow a3$   $c2 \rightarrow a3$  $a3 \rightarrow c4$ 

Challenge 15:  $b2 \rightarrow a4$   $c4 \rightarrow a4$  $a4 \rightarrow a1$ 

Challenge 16:  $c4 \rightarrow c3$   $a2 \rightarrow c3$  $c3 \rightarrow b1$ 

Challenge 17:  $b2 \rightarrow c1$   $c1 \rightarrow c2$   $c2 \rightarrow b3$  $b3 \rightarrow a4$  Challenge 18:  $b2 \rightarrow a1$   $a1 \rightarrow c3$  $b4 \rightarrow c3$ 

Challenge 19:  $a3 \rightarrow c4$   $c4 \rightarrow b2$   $b3 \rightarrow b2$  $b2 \rightarrow a1$ 

 $c3 \rightarrow d3$ 

Challenge 20:  $a1 \rightarrow b1$   $b1 \rightarrow b3$   $c2 \rightarrow b3$  $b3 \rightarrow c4$ 

## Solutions: Intermediate

Challenge 21:	Challenge 27:	Challenge 33:	Challenge 38
b3 → a1	d3 → b3	a4 → b4	c3 → b4
$a1 \rightarrow c2$	a1 → b3	b4 → b2	d4 → b4
a4 → c2	c2 → b3	c1 → b2	b4 → b2
$c2 \rightarrow d3$	b3 → c4	a3 → b2	a1 → b2
		b2 → a1	b2 → c1
Challenge 22:	Challenge 28:		
d3 → c2	a4 → a2	Challenge 34:	Challenge 39
c2 → a4	b1 → a2	b4 → a4	b2 → c3
$c4 \rightarrow a4$	c3 → a2	a4 → a2	b3 → c3
a4 → a1	a2 → c1	a2 → c2	c3 → c2
a4 - a1	az Li	b3 → c2	d4 → c2
Challenge 23:	Challenge 29:	c2 → d3	c2 → a1
b3 → d4	$c2 \rightarrow b3$	CZ 7 U3	LZ 7 d1
$d4 \rightarrow c2$	b3 → a4	Challenge 35:	Challenge 40
$c2 \rightarrow b4$	$b4 \rightarrow a4$	a3 → b3	b4 → c3
	a4 → a1		
b4 → a2	a4 → a1	a2 → a4	c3 → d4
Challana 24	Cl11 20-	a4 → c4	a1 → b2
Challenge 24:	Challenge 30:	b3 → c4	d4 → b2
$a2 \rightarrow c3$	al → a3	c4 → d3	b2 → c1
c3 → a4	a4 → a3	of II as	
a4 → b2	a3 → b4	Challenge 36:	
$b2 \rightarrow d3$	b4 → d2	$d2 \rightarrow c3$	
	S. 11	a4 → c3	
Challenge 25:	Challenge 31:	c3 → a2	
a4 → a1	d1 → a1	b3 → a2	
al → cl	b2 → a1	a2 → a1	
c1 → c3	$a1 \rightarrow c3$		
c3 → b3	c3 → b4	Challenge 37:	
		$c3 \rightarrow d4$	
Challenge 26:	Challenge 32:	d4 → b2	
b3 → d4	al → a3	a1 → b2	
$d4 \rightarrow c2$	a3 → d3	b3 → b2	
c2 → b4	c2 → d3	b2 → c2	
E4 > -2	12 4		

## Solutions: Adva

$d3 \rightarrow d2$ $c3 \rightarrow a1$ $a1 \rightarrow d4$ $d2 \rightarrow d4$ $d4 \rightarrow c4$	di cz al bi
Challenge 42: $b2 \rightarrow a3$ $a3 \rightarrow c1$ $c3 \rightarrow c1$ $c1 \rightarrow c4$ $c4 \rightarrow d4$	ci ci di bi
Challenge 43: $b3 \rightarrow c4$ $c3 \rightarrow a3$ $a3 \rightarrow d3$ $c4 \rightarrow d3$ $d3 \rightarrow b1$	C al c <sup>2</sup> al bi
Challenge 44: $a3 \rightarrow b2$ $a4 \rightarrow a1$ $b2 \rightarrow a1$ $a1 \rightarrow c3$ $c3 \rightarrow d2$	Cl b2 b4 d2 d3 a3
Challenge 45: $b2 \rightarrow c1$ $c1 \rightarrow a3$ $a3 \rightarrow b4$ $b4 \rightarrow c3$ $c3 \rightarrow d4$	

Solutions	s: Advance
Challenge 41: $d3 \rightarrow d2$ $c3 \rightarrow a1$ $a1 \rightarrow d4$ $d2 \rightarrow d4$ $d4 \rightarrow c4$	Challenge 46: $d4 \rightarrow c2$ $c2 \rightarrow a1$ $a1 \rightarrow b3$ $b2 \rightarrow b3$ $b3 \rightarrow d3$
Challenge 42: $b2 \rightarrow a3$ $a3 \rightarrow c1$ $c3 \rightarrow c1$ $c1 \rightarrow c4$ $c4 \rightarrow d4$	Challenge 47: a1 $\rightarrow$ c1 c1 $\rightarrow$ c3 c3 $\rightarrow$ b3 d2 $\rightarrow$ b3 b3 $\rightarrow$ d4
Challenge 43: $b3 \rightarrow c4$ $c3 \rightarrow a3$ $a3 \rightarrow d3$ $c4 \rightarrow d3$ $d3 \rightarrow b1$	Challenge 48: $a3 \rightarrow c4$ $c4 \rightarrow b2$ $a1 \rightarrow b2$ $b2 \rightarrow c3$ $d2 \rightarrow c3$
Challenge 44: $a3 \rightarrow b2$ $a4 \rightarrow a1$ $b2 \rightarrow a1$ $a1 \rightarrow c3$ $c3 \rightarrow d2$	Challenge 49: $b2 \rightarrow b4$ $b4 \rightarrow d4$ $d4 \rightarrow d2$ $d2 \rightarrow c2$ $a3 \rightarrow c2$ $c2 \rightarrow a1$
Challenge 45: $b2 \rightarrow c1$ $c1 \rightarrow a3$ $a3 \rightarrow b4$ $b4 \rightarrow c3$ $c3 \rightarrow d4$	CZ 7 d1

1		
	Challenge $b3 \rightarrow c3$ $c4 \rightarrow a2$ $a2 \rightarrow b1$ $b1 \rightarrow d3$ $c3 \rightarrow d3$ $d3 \rightarrow d4$	50
	Challenge $c2 \rightarrow d3$ $b4 \rightarrow d3$ $d3 \rightarrow b2$ $a1 \rightarrow b2$ $b2 \rightarrow c3$ $d2 \rightarrow c3$	51
	Challenge $d4 \rightarrow a4$ $a1 \rightarrow b3$ $c2 \rightarrow b3$ $b3 \rightarrow a4$ $b2 \rightarrow a4$ $a4 \rightarrow c3$	52
	Challenge $d1 \rightarrow c2$ $a3 \rightarrow c2$ $c2 \rightarrow a1$	53

 $a1 \rightarrow b3$  $b2 \rightarrow b3$  $b3 \rightarrow b4$ 

Challenge 56 $c3 \rightarrow c4$ $b2 \rightarrow d4$ $c2 \rightarrow d4$ $d4 \rightarrow b3$ $c4 \rightarrow b3$	$\rightarrow$ c4 $\rightarrow$ d4	c3 -
D3 → a4	→ b3	d4 ·
Challenge 57: $b3 \rightarrow d4$ $c3 \rightarrow a3$ $a3 \rightarrow a2$ $d4 \rightarrow c2$ $a2 \rightarrow c2$ $c2 \rightarrow c1$	alleng $\rightarrow$ d4 $\rightarrow$ a3 $\rightarrow$ a2 $\rightarrow$ c2 $\rightarrow$ c2	Cha b3 - c3 - a3 - d4 - a2 -

Challenge 55:  $d2 \rightarrow c1$  $b3 \rightarrow c1$  $c1 \rightarrow a2$  $c4 \rightarrow a2$  $a3 \rightarrow a2$  $a2 \rightarrow a1$ 

Challenge 54:	Challenge 58:
b1 → c3	b3 → a3
$d3 \rightarrow c1$	a3 → d3
cl → a2	a4 → c2
$a2 \rightarrow c3$	c2 → d3
b2 → c3	b4 → d3
c3 → d4	d3 → c1

Challenge 59:
b3 → a2
$a4 \rightarrow a2$
$a2 \rightarrow d2$
$c1 \rightarrow d2$
$d2 \rightarrow c3$
$c3 \rightarrow d4$
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Challenge 60:
c4 \rightarrow b3
b1 \rightarrow b3
b3 \rightarrow c3
d2 \rightarrow c3
d4 \rightarrow c3
c3 \rightarrow a1
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# Solutions: Expert

Challenge 61:	Challenge 65:	Challenge 69:	Challenge 73:	Challenge 77:
$a1 \rightarrow d4$	b2 → c1	a1 → b2	d1 → c3	c1 → d1
b1 → c2	c1 → b1	c2 → b2	c3 → a2	d1 → a1
$a2 \rightarrow c2$	b1 → a2	b2 → b1	a2 → c1	b4 → a3
c2 → c4	a2 → a3	b1 → b3	$c1 \rightarrow d3$	a1 → a3
$c4 \rightarrow d4$	a3 → b4	b3 → c3	d3 → b4	$a3 \rightarrow d3$
$d4 \rightarrow d3$	b4 → c3	c3 → c4	b4 → c2	$c2 \rightarrow d3$
	c3 → d4	c4 → d4	c2 → a1	d3 → c4
Challenge 62:				
$a2 \rightarrow c4$	Challenge 66:	Challenge 70:	Challenge 74:	Challenge 78:
c4 → d3	a2 → a3	b1 → c3	c1 → d1	c3 → b1
$d3 \rightarrow c2$	a3 → b4	c4 → c3	d1 → a1	c1 → b2
b1 → c2	a1 → a4	c2 → b3	al → a2	b2 → a3
$d4 \rightarrow c2$	b4 → a4	c3 → b3	a2 → c2	b1 → a3
c2 → al	a4 → b3	b3 → b2	d3 → c4	a3 → c2
CZ - d1	b3 → c2	a1 → b2	c2 → c4	c2 → d4
Challenge 63:	c2 → d2	b2 → d4	$c4 \rightarrow b4$	d4 → b3
$a1 \rightarrow b3$	CZ Z UZ	DZ 7 U4	(4 7 04	U4 7 03
$b3 \rightarrow c1$	Challenge 67:	Challenge 71:	Challenge 75:	Challenge 79:
c1 → d3	d2 → b4	a2 → a1	b4 → a4	b1 → a2
$b1 \rightarrow d3$	$d2 \rightarrow b4$ $d3 \rightarrow c4$	a2 → a1 a1 → b1	$a4 \rightarrow a3$	$a1 \rightarrow b2$
		b1 → b2	b3 → a2	$b2 \rightarrow c3$
$d2 \rightarrow d3$	a3 → b4	The second secon	$a2 \rightarrow a2$	b3 → c3
d3 → d4	b4 → c4	c3 → d4		
Cl. II. CA	c4 → b3	d4 → b2	a3 → c1	a2 → c4
Challenge 64:	b3 → a2	c4 → b2	c1 → c3	c3 → c4
$d3 \rightarrow d4$	a2 → al	b2 → d3	c3 → d3	c4 → d4
$d4 \rightarrow d2$	ol II .co	ol II To	ot II as	ci ii oo
a1 → b3	Challenge 68:	Challenge 72:	Challenge 76:	Challenge 80:
$c1 \rightarrow d2$	b3 → a2	b1 → a2	a1 → b1	b1 → a3
b3 → d2	a2 → c4	b2 → a2	b2 → c1	a2 → b3
d2 → b1	$a1 \rightarrow b2$	a2 → a1	c1 → b1	d3 → c4
	d3 → b2	c3 → a1	$b1 \rightarrow d3$	a3 → c4
	b2 → c4	a1 → d4	a2 → b3	c4 → d2
	b4 → c4	c4 → d4	d3 → b3	d2 → b3
	c4 → d4	$d4 \rightarrow d3$	b3 → b4	b3 → a1

# ThinkFun's Mission is to Ignite Your Mind!®

ThinkFun® is the world's leader in addictively fun games that stretch and sharpen your mind. From lighting up young minds to creating fun for the whole family, ThinkFun's innovative games and mobile apps make you think while they make you smile.











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