

Bitcoin Miner™

RULEBOOK



Components



60 Transaction Cards



70 Block Cards



280 Coins



1 Bi-Fold Board

Gameplay

To play the game, players are seated in a circle (like any traditional card game) with the game board in the center of the circle. One player volunteers to shuffle and distribute the block and transaction cards as described in Shuffling and Distribute.

The game is played in rounds, with a different player starting each round and every player taking turns to play in each round in a clockwise fashion. How the first and onward rounds of the game are played are explained below.

Please pay careful attention to how players can use the block cards, as explained in Block Card and Block Claiming Rules. The game ends when one of the Ending Conditions is reached and a winner is declared, as explained below.

Shuffling and Distribute

One player volunteers to shuffle and distribute (to all players) all the block and transaction cards as follows:

1. Shuffle all 60 transaction cards and equally distribute among players.
2. Shuffle all 40 block cards, distribute 1 card per player, keep remaining cards aside (facing down).

Set aside all cardcoins for use after the game commences.

Starting Player and Starting Round

After all block and transaction cards are distributed among all players, the first or starting round is played as follows:

1. Each player rolls the die. Player with the highest number starts the game. Tied players roll again until the tie is broken.
2. Each player plays a transaction card by putting it face up in front of them and next to the board. Players take turns in playing their transaction card in a clockwise fashion starting from the first player.
3. Once every player has played their transaction card, stack all the transaction cards together in no specific order. This stack is called a "Block". Place this block in any one of the free "Available Blocks" area of the board.
4. Calculate the total transaction value of the newly formed Block by adding together values on the face of each transaction card in the Block. Place cardcoins equal to this transaction value, plus 1 cardcoin, on top of the Block on the board. For example, if the total transaction value comes up to be 11, place 12 cardcoins on top of the Block on the board.

Second and Onward Rounds



After the first or starting round, second and future rounds are played as follows until the game ends.

1. From the second round onwards, the starting player of each round is revolved clockwise by one, every round. The starting player of each round should be clearly visible to all other players by placing some marker in front of the player. The dice supplied with the game can be used as a marker.
2. Starting from round two, each player has a choice of either playing (facing up) a transaction card or a block card during their turn.
3. During their turn,
 - A player can play a block card to claim one of the available blocks in the “Available Blocks” area of the board. The player does that by placing his/her block card in the “Claim” box next to the Block being claimed. See the Block Card and Block Claiming Rules below for rules that must be followed for claiming a block.

OR

- A player can play a transaction card, in a similar fashion as the first round. When a transaction card is played by any (even one) player, a new Block is formed which will be available for claiming in the next round.
4. During their turn, if a player has no transaction cards remaining, he/she may choose to pass his/her turn in that round. Otherwise, the player must play either a transaction card or a valid block card if he/she wishes to claim a Block in that round. Remember: If the player no longer has any transaction cards remaining, claiming blocks (by playing a block card) in that round is optional and depends on the player.

5. At the end of each round, a new Block is created if a transaction card is played by at least one player in that round. Place the new Block (stack of transaction cards in that round) in one of the empty "Available Blocks" area of the board, and place cardcoins equal to the total transaction value of the newly formed block, plus 1 cardcoin, on top of the block. If you run out of empty "Available Blocks" area on the board, place the newly created blocks on an empty area next to the board.

6. At the end of each round, claims on the blocks are processed as follows:

6.1. For each of the claimed blocks, starting with the Block with the lowest value, all the players decide the successful claimant (player) using the Block Card and Block Claiming Rules described below.

6.2. The successful claimant moves his/her claimed Block from the "Available Blocks" area of the board to the top of the "Blockchain". He/she does that by placing the successful block card face-up on the claimed Block and move it to the "Blockchain" area on the board. If there are already Blocks in the Blockchain area, place the newly claimed Block on top of the last block already in the Blockchain area. Each successful claimant collects the cardcoins assigned to their corresponding claimed block as a reward for successfully claiming the block.

6.3. Remember: When multiple Blocks are successfully claimed in a round (by different players), the Block with the highest value is placed on top of the "Blockchain". And the block card used to claim that Block should be on top of the Blockchain before starting the next round.

6.4. Finally, players who successfully claimed a Block, draw a new block card from the shuffled deck of undistributed block cards. Players whose claims were unsuccessful take back their block cards.

Block Card and Block Claiming Rules

- **Block value rule:** To claim an available Block, players must use a block card with a block value greater than or equal to the available block's total transaction value (i.e., the cardcoins placed on top of the available block when the Block is formed).
 - In case more than one block cards are claiming the same Block, the player who used the smallest value block card will win the claim to the Block.
 - Because of the above rule, when a player is attempting to claim a Block that has already been claimed by another player who played earlier in the same round, he/she must use a block card equal to or smaller than the currently winning block card claiming the Block. More than one players attempting to claim the same Block in a round is also called a "Block Contest". Players in each round must strategically plan to either play a transaction card (to create a Block) or play a valid block card (to claim a Block) because it is possible that their "claim" may be outbid by another player whose turn is later in that round. In general, the closer the value of the block card is to the total transaction value of the Block being claimed, the higher are the chances of that block card winning the claim to that Block.
 - During a Block Contest, if there are two players who are in a tie for the smallest value block card claiming the same block, the player whose turn came later in the round will successfully claim the Block.
 - At the end of the round, players losing a Block Contest immediately take back their block card. The successful Block claimants collect the cardcoins assigned to their respective Block as a reward for successfully claiming the Block.
- **Chain Symbols rule:** In addition to following the block value rule described above, to claim an available Block a player's block card must have at least one "chain symbol" matching the chain symbols of the block card on top of the Blockchain (i.e., the block card that was used to add the last block on the Blockchain).

- Even when multiple Blocks are being claimed in a round (by different players), the chain symbol of all claiming block cards must match at least one chain symbol of the block card on top of the Blockchain.
- Only in the first round, any combination of the four chain symbols is acceptable to claim a Block.
- If during his/her turn in a round, a player does not have a block card that satisfies both the block value rule and the Chain Symbols rule for any unclaimed Block on the board, then the player must either perform a block card substitution (described next), just play a transaction card without a block card substitution or pass his/her turn if he/she does not have any transaction cards remaining.
- Block Card Substitution: Players unsatisfied with their current block card may substitute their block card for a new one from top of the shuffled deck of undistributed block cards, only once per round. Block card that is substituted out must be placed at the bottom of the deck of undistributed block cards.
- Players that substitute a block card will not be able to play a block card in the same round, but they must play a transaction card if they still have unspent transaction cards. If a player has already spent all transaction cards, then the player must pass after a block card substitution.

Ending Conditions

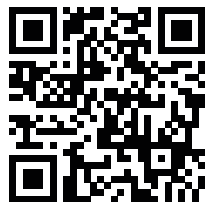
The game ends if one of the following conditions is reached after a round:

- All transaction cards are used up, and no Blocks are available to be claimed.
- All transaction cards are used up, and none of the players have a block card that can be used to claim any available Blocks.

Winner

All players count the cardcoins that they have received from all the successful Block claims during the game. The player who has earned the most cardcoins is the winner!

For more information and gameplay
help, please visit:
<https://sprite.utsa.edu/cryptominer>



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