

## **The New D-N-A Card Game of 2023: Additional SOLO Mode gameplay**

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The original D-N-A card game (2-6 players) was conceptualised in 2005 and this is an improved version with an inclusion of a SOLO mode into the gameplay.

The objective of SOLO mode is to beat the high scores, with some minor adjustments to the gameplay. This is suitable for Single Player only.

This document has been prepared with the instructions and also the game-ready printouts, for those of you who are interested to try, just print out the pdf for the cards and you can start playing the game.

The original purpose of the game was to promote science and technology, particularly in biotechnology, hopefully, with this reintroduction, it will continue to help others interested in the wonders of biological sciences and technology.

All the best to your adventure. Have fun playing and learning.

Thank you.

## **Original team on D-N-A Card Game (2005)**

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## **D-N-A Card Game: SOLO rules**

### **Objectives**

To beat your own high scores.

### **Setup**

Setup the game with the following changes,

1. Remove all the Reverse (R) and Skip (S) cards and put them aside.
2. Shuffle the deck of cards and divide them evenly into two (2) piles. That will be 42 cards in a pile.
3. Take a pile of cards and deal ten (10) cards face up and the rest (32 cards) face down in a deck.
4. The ten (10) cards will be the cards in HAND and the rest (32 cards) will be the DRAW pile.
5. The functions of the special cards are as follows,
  - a. Mutation/Insertion Card (M+): if drawn, immediately discard and draw two (2) cards from the DRAW pile. If this appears in HAND, please remove it and draw two (2) cards from the DRAW pile.
  - b. Mutation/Deletion Card (M-): if drawn, this can be used immediately to remove any one card from the HAND.
  - c. DNA Polymerase I Card (DP1): the function remains the same as in the normal game. It can be used immediately if drawn, or it can be kept in HAND and used later (or anytime).
  - d. DNA Polymerase III Card (DP3): the function remains the same as in the normal game. It can be used immediately if drawn, or it can be kept in HAND and used later (or anytime).

### **Play**

1. Play proceeds by doing a Card Management of the cards in HAND. All the special cards can be used, and all the matching nucleotide cards (ATGC) can be matched and removed to a DISCARD pile.
2. After card management, the play starts by flipping over one card from the DRAW pile. If there is a match with the card in the HAND, a match can be made, and the two cards will be discarded into the DISCARD pile.
3. Any special card drawn (like M+, M-, DP1 and DP3) can be utilised immediately or it can also be kept for a later time. If they are immediately used, they will be played based on their functions. For example, if an M+ card is drawn and used immediately, an additional two (2) cards will need to be drawn and added to the cards at HAND, and the M+ card will promptly be removed from the DISCARD pile.
4. The play continues with any one of the following events happening
  - a. Matching nucleotide cards and discard them accordingly
  - b. Utilising special cards immediately or at any time during play
5. Game play will end when
  - a. All the cards in the DRAW pile have been drawn OR
  - b. All the cards in HAND have been discarded

- When the event in No. 5 happened, proceed to play with the second pile of cards that remains from SETUP No. 2 above.

### End Game

- If all the cards in the DRAW pile have been drawn and there are still cards in HAND, count the number of cards in HAND and that will be the minus points. For example, if there are six (6) cards left in HAND, then the points will be -6.
- If all the cards in HAND have been discarded successfully, then count the number of cards left in the DRAW pile, that will be the points in plus. For example, if seven (7) cards remain in the DRAW pile, the points will be +7.
- After two consecutive plays, the total points from the two plays will be the final score. For example, if the first play scored -6 and the second play scored +16, then the final score will be +10 ( $16 - 6 = 10$ ).
- You can try another game to improve your scores. The higher the scores, the better the gameplay. Good luck!

Points from two consecutive games	Skill+ Luck level
1-15	A good start
16-25	Good
26-30	Amazing
31-35	Wow
36 and above	Unbelievably lucky

### How to make the games more challenging

The following are some suggestions to make the games more challenging:

- Reduce the number of special cards (like M+, M-, DP1 and DP3)
- Include cards like Reverse and SKIP to introduce new rules, REVERSE can mean to draw from the bottom part of the DRAW pile, and SKIP can mean to skip the first available card on the top of the DRAW file and take the next card. OR REVERSE can mean taking one card from the DISCARD pile and putting it back in HAND.
- Increase the number of cards in HAND.
- You can always introduce your own HOUSE RULES.
- Have fun.