## MICROBINGO

## A game where the remedy is to prevent



## Teacher's manual

Authors: Vanderson Cristiano de Sousa and M. Lígia Coutinho Carvalhal<br>Original Drawings: Cibele Berto and Jorge Oyakawa<br>Derivative Drawings: Jorge Oyakawa<br>Illustration: Helena Paca and Vanderson Milton de Souza<br>Translation: Pedro Henrique Machado Cabral<br>Revision: Eric Lopes \& Melissa C. Alterthum

Guidance and Supervision: Maria Lígia Coutinho Carvalhal, Microtodos Project - the microbiology on duty for society

## MICROBINGO

Unlike the traditional bingo game, when it comes to microbes luck isn't the predominant factor. In MicroBingo wins the game the one who knows how to prevent and not to remedy!


#### Abstract

Microbiology presents itself nowadays as a social theme. An adequate organization of information in this area may facilitate the formation of citizens who are aware and capable of initiatives facing health-related situations, especially with regards to "prevention".

The educational games are ideal tools for alternative activities in the classroom because playing, students relate socially, discover, ask, share and reflect on what is proposed. Carvalhal (2000), in the book "Microbiology goes to school" points out the importance of the playful character of the game in learning: students get in contact with the microorganisms that cause disease knowing their scientific names, in addition to knowing the actions related to their transmission and prevention...


## PURPOSE

The game Microbingo aims to show primary students, in a playful and organized manner, information about diseases caused by micro-organisms, their ways of transmission and prevention of their pathogens.

## THE GAME AND ITS PEDAGOGICAL FUNCTION

MicroBingo is an interactive game where the luck is not the determining factor, but the cognitive capacity of the participants to associate the forms of transmission and prevention of some harmful microbes that are disease causative agents. Ludic activities as this game tries to get close to reality with its images and illustrations. Therewith you can break the illusion, as points FrotaPessoa and collaborators (1979), that the words evoke the same images in the head of the teacher and the students.

Careful observation can lead the teacher to learn other skills and forms of intelligence of his/her students, often not perceived in the daily routine of classroom activities.

## THIS GAME CONTAINS

5 MICROBINGO cards with 6 microbial agents each
1 set of 24 DRAW cards
1 set of 24 COMBAT cards
10 WILD cards
10 REPLACEMENT cards

## NUMBER OF PLAYERS

- Minimum of 2 and maximum of 5 players
- A Croupier/Moderator to:

1. deliver the MICROBINGO bingo cards
2. deliver the COMBAT cards
3. read the DRAW cards' texts
4. provide WILD cards after dispute between players
5. Exchange WILD cards for REPLACEMENT cards
6. check COMBAT cards during the game (General Table)

## TARGETED PUBLIC

## 8 years or over

## PREPARATION OF THE GAME

- Each player receives from the croupier, a MICROBINGO bingo card.
- Each player receives from the croupier 4 COMBAT cards.
- The remaining combat cards must stay in the middle of the table.
- The croupier clarifies the rules of the game or provides players the brochure containing the same.


## BEGINNING

1. In possession of the DRAW deck, the croupier draws one card.. Read in clear and loud voice the name of the disease.
2. The players verify their cards in search for the disease-causing Micro-villain mentioned and say aloud: Bingo!
3. Then, the croupier reads the text of the card pulled by DRAW which refers to the form of transmission of the causative agent of the disease. In this moment some situations can occur:

### 3.1. ONLY ONE PLAYER HAS THE MENITONED MICRO-VILLAIN

The player finds finds among his/her COMBAT cards the cards that corresponds to the prevention of the illness. Places it on card, over the corresponding Microvillain. The game continues with new draw.

The player does not find the COMBAT cards among his/her cards. The player looks for it among the COMBAT cards on the "table". If found, the player catches the card and repeats the previous situation, that is, placing it on the bingo card over the corresponding Micro-villain. Returns one of the COMBAT cards for the table. The game continues with new draw.

### 3.1. ONLY ONE PLAYER HAS THE MENITONED MICRO-VILLAIN

The player finds COMBAT cards in the deck, the cards that corresponds to the prevention of the illness. Place it in the bingo card, over the corresponding Microvillain. The game continues with new draw.

The player does not find the COMBAT cards in the deck. The player looks for it among the COMBAT cards on the "table". If found, the player catches the card and repeats the previous situation, that is, placing it in the bingo card over the corresponding Micro-villain. Returns one of the COMBAT cards for the table. The game continues with new draw.

The player does not find the COMBAT card between their cards, neither between the cards from the table. Looks for the COMBAT cards among the cards of the opponents. Once the right card is found, he dispute with the opponent rolling the dice:

If the dice shows an even number, exchange a card from your deck with one from the opponent and place it on the bingo card appropriately, over the disease-
causing Micro-villain. The game continues with new draw.lf the dice shows an odd number: receives a WILD card from the croupier and places it on your bingo table, over the disease causing Micro-villain. The drawn card returns back to the middle of the deck of cards. When new draw of the same illness happens, this player will not have to dispute by rolling the dice, he will simply take a COMBAT card from the opponent or the table, exchanging for another COMBAT card chosen between his/her deck.

### 3.2. TWO PLAYERS HAVE MICRO-VILLAIN

One of the two players has the corresponding COMBAT card.
Place it on the bingo card, over the corresponding Micro-villain. The other player gets a WILD card and waits for a new draw for the same disease. The DRAW card must go back to the middle of the deck that is with the couprier. When there is a new draw for the same disease, he exchanges the WILD card for the REPLACEMENT card (the REPLACEMENT card has the same value as the COMBAT). If none of the two players has the corresponding COMBAT card, the dispute for the card that is on the table occurs by rolling the dice, following the same rules described in the previous section.

### 3.3. NONE OF THE PLAYERS HAVE THE MICRO-VILLAIN

- A new draw is made by the croupier and this card is eliminated of the game.


## Who wins the game?

Just like in the classic bingo, wins the game first one to complete the MICROBINGO card.

