CHROMOSOME THROMOSOME

RULEBOOK



GOAL OF THE GAME

In *Chromosome* you take the role of an alien microbe trapped in a secret facility somewhere in the icy wasteland of Antarctica. Your goal is to defeat other microbes, survive and escape. During the game you will fight, spawn your microbe, manipulate energy and mutate. Only the most effective tactics and manipulation of chromosome will lead you to the final victory!

GAME COMPONENTS



20 room tiles



1 game board



12 event cards



48 population tokens (12 for each microbe)



4 irradiation tokens and 4 fortune tokens



4 player boards



10 radiation cubes



1 time marker cube

64 gene cubes (in 4 colors)



1 unique D4 die

ROOM TILES



1. Sterility level

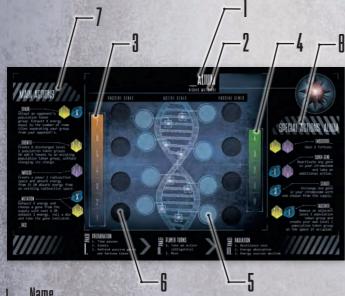
The number of pipes shows the minimum level of a population token group that can enter that room.

7 Number

Identifies the room and is related to some of the event cards.

Note: red numbers show you room tiles that are in danger and can be removed from the game by certain event cards. Be careful entering those rooms! Ignore the color if you're playing the no events variant.

PLAYER BOARD



I. Nullu Species of microbe.

2. Profile

Describes attributes of the microbe.

3. Irradiation track

Shows the irradiation level of your microbe. If, at any time, your irradiation level moves above 7 and cannot be decreased, you immediately lose.

4. Fortune track

Shows the fortune level of your microbe. You can use your fortune in few different ways.

5. Active denes

Place your active, ready to be used, genes here.

6. Passive genes

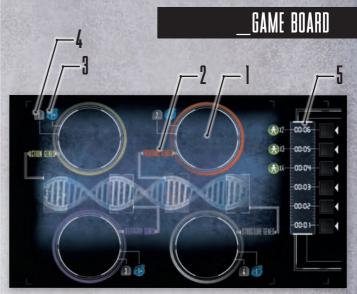
Place your passive, already used, genes here.

7. Main actions

Description and cost of your main actions.

8. Special actions

Description and cost of your special actions.



1. Genes supply

All genes that are not on player boards are kept here.

2. Genes' names

Shows the type of genes.

3. Energy cost

Shows how many energy points you must spend to obtain that gene and add it to your chromosome using the Mutation main action.

/. Fortune value

Shows which gene will be added to your chromosome if you decide to obtain a random gene using the Mutation main action.

5. Timer

Tracks your game progress and shows how many rounds are left before the end of the game.

EVENT CARDS



3

_POPULATION TOKENS









discharged side

charged side









Population tokens represent microbes on the board. Each population token has 2 sides: charged and discharged. Population tokens placed in a stack form a group of a certain level. A single population token on a room tile is a level 1 population token group, two tokens make a level 2 population token group and 3 tokens are a level 3 population token group. Level 3 is the maximum level for a population token group. This means that you cannot have groups that consist of more than 3 population tokens.

GAME SETUP

1. Depending on the number of players, place room tiles on the table as shown in the examples below:



Note: as you become more familiar with Chromosome, you may wish to try your own designs for setup. Just remember that each of the starting rooms should be adjacent to at least one room with sterility level 1!

- 2. Place the game board within reach of all players.
- 3. Put the wooden gene cubes on the game board's indicated spaces.
- 4. Put the time marker on an indicated place next to the timer. 2 player games will last for a maximum of 6 rounds, 3 player games 5 rounds and 4 player games 4 rounds.
- 5. Put the blue radiation cubes beside the game board.
- 6. Shuffle all event cards and place them face down next to the game board.
- 7. Give each player one player board. You can pick them randomly or decide who will play each microbe.
- 8. Each player takes 2 yellow action cubes and 1 purple telepathy cube from the game board and places them on active gene spaces on their player board.
- 9. Each player places one orange irradiation token beside their player board and one green fortune token (active, not faded, side up) on 4 of the Fortune Track.
- 10. Each player takes all 12 population tokens of their microbe and places them next to their player board.
- 11. Place the special D4 die next to the game board.
- 12. The youngest player goes first.
- 13. Starting from the first player and proceeding clockwise, each player places 2 of their population tokens in a stack on their chosen, empty starting tile (blue frame). Placing them with the charged side up.



_PLAYING THE GAME

Chromosome consists of several rounds. Each round consists of three phases that have to be resolved in the following order:

I. PREPARATION PHASE

II. PLAYER Turns phase



III. RADIATION Phase

<u>I. Preparation phase</u>

Note: skip this phase in the first round of the game.

- I.I. Time passes
- 1.2. Events
- 1.3. Refresh passive genes and fortune token

I.I. TIME PASSES

Move the time marker 1 level down on the timer. If it would go below 0, the game ends.

Note: A 2 player game lasts a maximum of 6 rounds, a 3 player game 5 rounds and a 4 player game 4 rounds.

1.2. EVENTS

Reveal the top card from the event cards deck, read it and apply its effect. Then place it face up besides the deck. Effects on the event cards can be – as indicated in the text – immediate, one time effects, last for the entire round or be permanent (in the case of events that remove room tiles from the game).

I.3. REFRESH PASSIVE GENES AND FORTUNE TOKEN

Move all of your genes from the passive spaces to the active spaces on your player board. If your fortune token is exhausted, refresh it.

II. PLAYER TURNS PHASE

In this phase players, beginning with the starting player and proceeding clockwise, take a turn or pass and drop out of the round. Continue taking turns until all players have passed.

Note: after the first round, the starting player will be the player with the fewest of their population tokens on the board. In the case of a tie, start player passes to the first tied player clockwise from the previous start player.

On your turn, in any order:

- 1. You MAY move one of your population token groups
- 2. You MAY discharge 3 energy to increase your fortune by 1.
- 3. You MAY discard structure genes to lower your irradiation level.
- 4. You MUST take one of the available actions either a main action or a special action.

You can make ONE movement with your population tokens before or after taking an action. You can move any number of population tokens from ONE group by ONE space (room). You can move the entire group or split it and move some of the tokens. You cannot, using the same movement, split one big group into smaller groups and move each of them to a different room.

There can only ever be one population token group on each room tile. You cannot move onto tiles occupied by groups controlled by other players. You can move onto rooms containing radiation spaces.

If you move your tokens onto a space where there are already tokens controlled by you, they will merge into one bigger group. Remember though that you cannot make groups larger than 3 population tokens (level 3 groups).

If a charged group merges with a discharged group or vice-versa - the resultant, combined group will always start out discharged.

EXAMPLE: Magda has a level 3 group [1]. She may either move the entire group to an adjacent room [2] or, for example, take two tokens from this group and move them together to an adjacent room [3]. In this way she creates two different groups – a level 2 group in a different room and a level 1 group in the original room. Magda could not move both groups into different rooms with her single movement.







II.2. STERILITY LEVEL

When moving, be aware of the sterility level of each room. Rooms with sterility level 1 can be entered by any population token group. Rooms with sterility level 2 can only be entered by level 2 and 3 population token groups. Sterility level 3 rooms can only be entered by level 3, population token groups (those that consist of 3 population tokens)

Note: if, during the game, for any reason the level of a population group decreases below the level required by the sterility level of the room it's in – nothing happens. This group can leave the room (if it fulfills the sterility level requirements of the new room) but cannot go back unless it grows bigger.

EXAMPLE: Magda decides to split her level 3 population token group and move 1 of its tokens to an adjacent space which already contains discharged tokens controlled by her. Now there is only one population token left in sterility level 3 room but according to the above rule - nothing happens. In this way, she creates a new level 3 discharged population token group [1]. Przemo on his turn doesn't split his group but moves it to the room with sterility level 2 [2]. He cannot move it to the room with sterility level 3 because his population token group (level 2) is too small to enter it. [3]





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II.3. ACTIONS

On your turn, you can choose between taking one of five main actions, which are the same for all players, or one of your special actions, available only to the microbe you control. To use an action you have to pay its cost first. Each turn you can take exactly ONE of 9 possible actions!

ACTION COST

The cost of an action is usually a composition of the following elements:

1. EXHAUSTING AN ACTIVE GENE(S)

If the action cost tells you to exhaust a gene or genes, simply move the indicated gene(s) from active gene spaces on your player board and put them on the respective passive gene spaces. You cannot use passive genes to pay any costs. Once per round (not turn) you may spend one fortune in the place of any one gene. Then flip the fortune token to the exhausted (faded) side. If you don't have enough active genes to pay the

cost of an action, you cannot use it.

2. EXHAUSTING ENERGY

To pay an energy cost you must:

a) Flip over the respective number of your charged population tokens. After that they are

considered discharged.

Note: you always have to discharge the entire group, even if the energy cost is lower than the number of tokens it consists of. Every discharged token counts as one energy. Any "over-payed" energy is lost. Hint: sometimes it is good to split your group first and then discharge only one of the newly created groups, so you don't loose the remaining energy.

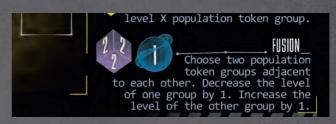
AND/OR

b) Return the respective number of trophy tokens to the supply of their owner(s). Each returned token counts as two energy. (For more about trophies see page 14).

Note: using the above methods you can only gain energy during your turn.

Note: discharged population token groups are fully functional. They can move, fight and perform actions normally. They just cannot be used to pay energy costs, until they have been recharged.

EXAMPLE: Przemo plays Ferox. He wants to use a Fusion action targeting an adjacent enemy level 2 population token group. It costs 2 telepathy genes and 1 energy [1]. He moves 2 purple telepathy gene cubes from active genes spaces on his player board and places them on its passive spaces [2]. Then he needs to exhaust 1 energy but he controls only one level 3 group. He can either discharge the entire level 3 group and loose 2 energy that he doesn't need [3] on first move 1 token to an adjacent norm and then or first move 1 token to an adjacent room and then discharge only this one token [4]. Thanks to this, the other level 2 group stays charged for future use. He decides to use the second option!









MAIN ACTIONS

GROWTH

The Growth action is used to put new population tokens into play. Choose how many action genes you want to exhaust and then

EITHER add that many new population tokens to a group that you already control on the board without changing its charge (remember that the maximum size of the Group cannot exceed 3 tokens!)

OR place that many level 1, discharged population token groups on rooms adjacent to at least one of your existing population token groups. You cannot do so if it is not allowed by the sterility level of a room. If you run out of population tokens in your supply, you cannot use this action until some are returned.

EXAMPLE: Tomek has 2 action genes and he wants to take a Growth action. He can either add 2 tokens to his charged level 1 group on the board [1] and thanks to that create a big, charged level 3 population group OR place 1 discharged population token on each of two different rooms adjacent to his existing level 1 group. [2]





MUTATION

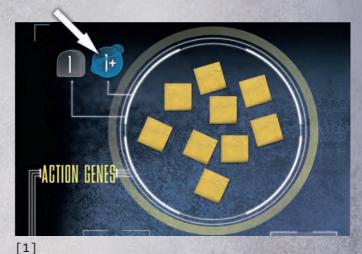
A Mutation action helps you to acquire new genes and add them to your chromosome. You pay its cost by exhausting one action gene and then paying an indicated energy cost. There are two options: Paying (exhausting) the number of energy indicated by the blue symbol shown besides the chosen gene on the game board. [1] You simply exhaust enough energy and take the chosen gene placing it on an empty active space on your player board [2]

Note: +1 on the energy cost means that you need to exhaust energy equal to the number genes of the chosen type that you already have +1.

OR

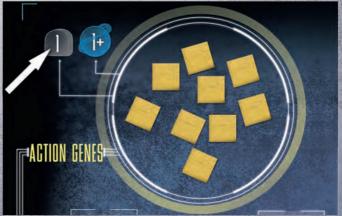
2. You can exhaust just one energy and roll a die. The result will show you which gene you can take from the supply and add to your chromosome. [3] It is a more random option but sometimes can be very profitable!

Note: you can never have more than 8 genes in your chromosome (on your player board). If you already have eight (no matter if active or passive), you cannot take this action.





[2]



GENE TYPES

YELLOW ACTION GENES

(energy cost +1)

These are the basic genes crucial to the survival of your microbe. They help you to take many main or special actions.



PURPLE TELEPATHY GENES

(energy cost +1)
More specialized genes that help
microbes to take more complex
actions and to manipulate
radioactive spaces.



RED FIGHTING GENES

(energy cost 2)

Very aggressive genes, adapted to fight and destroy enemy microbes.

They give you more power when fighting. For every exhausted red gene during the fight, add 1 to your total strength.



BLACK STRUCTURE GENES

(energy cost 1)
Very important genes that constitute the inner structure of your microbe. They help you to survive radiation. You can use them in two different ways:

a) when present on your active spaces, each black gene adds 1 to all of your resilience tests.
b) on your turn, before or after taking an action, you can remove any number of active structure genes from your player board (return them to the supply on the game board) and decrease your irradiation level by 2 for every gene removed.



SPARK

Spark is the basic attack action, available to everyone. To make an attack using Spark, you must exhaust one action gene and pay energy equal to the number of tiles that separate the attacking and defending population token groups.

Note: This does not include the tile the target occupies, so attacking a group in an adjacent space costs no energy!

ATTACK

To perform an attack, resolve the following steps in order:

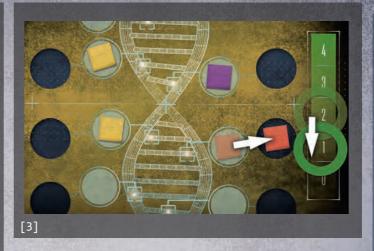
- 1. The attacking player must choose an attacking group and a target group. Then pay the attack cost, which depends on the chosen attacking action.
- 2. The attacking player determines the strength of the attacking group, which equals the level of the group and can be boosted by exhausting fighting genes (+1 per gene exhausted) and/or spending fortune (+1 per fortune spent). (See more about fortune on page 14).
- 3. The defending player then determines the strength of the defending group in the same way.
- 4. The attacking player rolls a die. At this point, they or any other player can spend 1 fortune to have the die re-rolled. This can be done multiple times; continue re-rolling until no one wishes to spend any more fortune.
- 5. The defending player rolls a die. Again, players may spend fortune to force one or more re-rolls.
- 6. Then both players add their final dice results to the strength of their population token groups and possible special action modifiers.
- 7. The player whose population token group has a higher strength wins. The difference between the final strength of the winning and losing group determines how many tokens the loser must remove from their population token group.
- 8. Removed tokens are then handed over to the winner to be kept as trophies.
- 9. In the case of a tie, both players hand over 1 token to each other as a trophy.

 Note: you cannot attack your own population token aroups!

EXAMPLE: Przemo attacks Tomek using the Spark action.[1] His level 3 population token group occupies a room 1 space away from Tomek's group. Tomek has a level 2 group. Przemo exhausts 1 yellow action gene (placing it at the passive space of his player board). Next he also has to exhaust 1 energy because there is 1 space between his group and Tomek's. He decides to discharge the entire group. [2] At this point he also exhausts 1 red fighting gene and on top of that uses 1 fortune to raise its strength by 2 in total (+1 for the red cube and + 1 for the fortune). [3] The strength of his population token group is now 5. Tomek knows that he doesn't stand a chance if he doesn't exhaust his fighting genes so he exhausts 2 red fighting genes. The strength of his defending group is now 4. Przemo is first to roll. The result is a 4. Tomek must use his fortune to make him re-roll it. The second result is a 1. Now Przemo uses his fortune to re-roll. The third result is a 3 and no-one decides to use fortune to re-roll it. So the final strength of the Przemo's population token group is 7 (initial 5 +2 from the roll). Now Tomek rolls. The first result is a 1 so Tomek uses another fortune to re-roll. Now it's 4. Przemo doesn't have more fortune so can not force Tomek to re-roll, nor do any other players wish to, so Tomek's group final strength is 8 (4 initially + 4 from the roll). Tomek wins! Przemo must remove one token from the group that lost and give it to Tomek as a trophy.







IMPULSE

Impulse allows you to create and/or absorb energy from radioactive spaces.

Exhausting 1 telepathy gene, you can use this action in one of two ways:

1. EITHER take TWO radiation cubes and place them in any (empty or occupied) room on the board. If there are no radiation cubes in that room, this creates a power 2 radioactive space. [1] If there are already radiation cubes in the room, this will increase the power of the radioactive space. [2] You can then immediately charge all of your population token groups that are in or adjacent to the affected room, so long as their level is not higher than the present power of the radioactive space.





10

Note: there are only 10 radiation cubes in the game and this is the maximum total power of radioactive spaces that can be present on the board at the same time.

2. OR you can absorb energy from a radioactive space that is already present on the board. Select a room containing a radioactive space and charge all of your population token groups in or adjacent to that room whose level is equal to or lower than the present power of the radioactive space. [1] AFTER doing so, remove one radiation cube from this radioactive space and return it to the supply. [2]





RADIOACTIVE SPACES

Energy is a very important element of the game. You need it to perform most of the actions. You mostly gain energy from radioactive spaces. We described how to create them above in the Impulse section. The number of radiation cubes that the radioactive space is made of shows its power. The more powerful the radioactive space is, the bigger the population token groups it can charge. Only power 3 (or higher) radioactive spaces can charge level 3 population token groups, power 2 radioactive spaces will charge level 2 groups and smaller, power 1 spaces can only charge level 1 population token groups.

Unfortunately using radioactive spaces can be risky. Having population tokens adjacent to radioactive spaces will force you to perform a resilience test in phase 3 of every round. This might lead to an increase of your irradiation level and if it goes above 7 and cannot be reduced – you lose (see page 13).

PASS

Players pass when they don't want to or can't take another action this round. Passing player will be able to return to the game next round. They will play no further part in this round unless their microbes are attacked – then they can defend normally, including using fighting genes and fortune. However, they cannot, for example, use black genes to decrease their irradiation level. Once all players have passed – the Player Turns Phase is finished. Note: Passing is an action so you can make one movement before or after passing.

SPECIAL ACTIONS

In place of main actions you can also use one of the 4 special, unique actions of your species. Some of them are described below:

ALIUM

Super-gene

Simply take one of your genes that is on a passive space and return it to an active space on your player board. You can then take another action, but without additional movement! This additional action doesn't have to use the gene just re-activated.

Change

If you change the gene from your active space, the new gene comes also to an active space. If from a passive space – the new genes come to your board on the passive space.

Takenver

You take the enemy token as a trophy and in its place you put a population token from your supply.

FEROX

Bond

Attacking group also counts as adjacent to the target!

Domination

If Domination was used to initiate an attack and there is a draw, your opponent still gives you one token from his group as a trophy but you don't give him yours.

Fusion

Can be done with enemy or friendly tokens.

CADUM

Concentration

Use normal rules for creating radioactive spaces.

Saturation

Increases irradiation level of ALL microbes in the game — including Cadum.

Power

"?" means any gene.

Outbreak

You can use this to move a radioactive space into a different room and immediately initiate a resilience test with the power of the moved radioactive space. If any population tokens have to be sacrificed as a result of Outbreak, Cadum player receives them as trophies.

PARS

Teleportation

This can be done between tokens of ANY players. Sterility level rules don't apply when teleportation is used. You can, for example, teleport a level 2 population token group into a room with sterility level 3.

FOCUS

Sterility level rules do still apply when using Focus! You cannot create a level 1 population token group in a room with sterility level 2.

Giant

This population token group must be placed on a room adjacent to at least one of your existing population token groups.

III. RADIATION PHASE

After all players pass, the next Phase begins the Radiation Phase. Take the following steps, in order:

- III.1. Resilience test
- III.2. Energy absorption
- III.3. Energy sources decline

III.1. RESILIENCE TEST

All population token groups that are adjacent to any radioactive spaces must now perform a resilience test, starting with those that are adjacent to the highest power space. In the case of a tie , the starting player chooses where to perform the first test. Perform the following instructions in order:

- 1. Determine the power of the radioactive space (the number of radioactive cubes that it consists of).
- 2. Count the number of your population token groups that are in or adjacent to the room containing this radioactive space. **Note:** it is the number of population token groups, not the number of population tokens.
- Add both values and you will have a radiation threat value.
- 4. Then roll a die. Other players can force you to re-roll it using their fortune. Subtract the result of the roll from the radiation threat value to get the level of irradiation that your microbe will receive.
- 5. If the result is above 0, move your irradiation token as many spaces up the irradiation track on your player board.

Repeat for all radioactive spaces on the board.

EXAMPLE: There are 2 radioactive spaces on the board. One power 2 radioactive space and one power 4 radioactive space. Przemo has 2 population token groups adjacent to the bigger space. His radiation threat value is then 6 (power 4 space + 2 groups). Przemo rolls a die and the result is 1, which means that his irradiation level would increase by 5 and this would end his game. He decides to use his fortune and re-roll. Now it's 4 and his irradiation level goes up just by 2. Other players might have used their fortune to force him to reroll again but they didn't. There are 2 of Tomek's population token groups adjacent to the smaller space and one of Magda's. The radiation threat value for Tomek is 4 (2+2) and for Magda 3 (2+1). Tomek rolls and his result is 3 so he increases his irradiation level by 1 (4-3=1) moving the irradiation token on his irradiation track 1 space up. Magda rolls 4 so nothing happens (3-4=not above 0).

12



IRRADIATION AND THE END OF THE GAME

Irradiation is very dangerous because if it goes above 7, you are immediately eliminated from the game.

There is a way to prevent this: If at any time you would receive irradiation that would increase your level beyond 7, you can remove from the board any number of your population tokens and return them to your supply. For every token removed in this way, you decrease your irradiation level by 1. If you manage to keep your irradiation level at 7 you stay in the game.

EXAMPLE: Przemo receives 5 irradiation points when his irradiation level is 5. He moves the token up 2 spaces and then needs to remove 3 tokens from the board. He does so and can continue playing normally in the next round.

You can also decrease your irradiation level during your turn by removing black gene cubes. See page 9 - GENE TYPES.

III.2. ENERGY ABSORPTION

After the resilience test, radioactive spaces release precious energy. Charge all population token groups that are in or adjacent to a room containing a radioactive space with power equal to or greater than their level.

III.3. ENERGY SOURCES DECLINE

Now all radioactive spaces' power decreases. Remove 1 radioactive cube from every radioactive space on the board.

END OF THE ROUND_

The round ends after the Radiation Phase.
The new round begins with a Preparation Phase.

GAME END

The game ends when either:

OFFICE I. Depending on number of players there are no more rounds to be played (4 player game takes 4 rounds).

OFFION 2. One of the players is eliminated.

OPTION 1_

The game ends with all players in game. Now you need to count up your total victory points. Each player receives:

- a) 1 victory point for each population token on the board (not each group!)
- b) plus 1 victory point for each trophy (see page 14)
- c) plus 2 victory points for each unspent fortune (see page 14)

minus their final irradiation level.

The player with the most victory points is the winner! In the case of a tie, all tied players are winners!

OPTION 2_

The game can also end when one or more players are eliminated. The player(s) are eliminated if they lose all of their population tokens from the board or if their irradiation level goes above 7 and cannot be decreased.

If this happens, all other players that haven't yet passed, can take one more turn (going clockwise) and then the game ends. Count up your victory points according to the method above. The eliminated player(s) loses automatically so their victory points don't matter.

TROPHIES

Trophies are enemy population tokens that you receive mostly as a result of battles won but sometimes also as a result of using special actions (Cadum's Outbreak).

You can use trophies in two different ways:

- 1. On your turn you can remove a trophy from your supply and return it to its owner's supply. You gain 2 energy for every trophy returned this way.
- 2. Each trophy not returned in this way counts as 1 victory point at the end of the game. Use them wisely!

FORTUNE_

Fortune is a very important part of the game. Each player starts the game with 4 fortune. You can use it in many different ways:

- 1. Using 1 fortune you can force any player (including yourself) to re-roll a die during fights or resilience tests.
- During a fight, for every fortune you use you can increase your strength by 1.
 (See page 9 ATTACK)
- 3. ONCE PER ROUND you can also use 1 fortune as any type of genes. You decrease your fortune level on the fortune track and "virtually" add 1 gene in order to perform an action. You can not do so during a fight you can before or after.

Note: Remember that you can do it ONCE per ROUND – not per turn! To remember simply flip over your fortune token to the exhausted side.

4. At the end of the game, each unspent fortune counts as 2 victory points.

Fortune is a very important part of the game and it can give you victory if managed wisely. You can increase your fortune during your turn, ONCE per turn, by discharging 3 energy to increase your fortune by 1.

EMPTY SPACES

If any room tiles are removed from play as a result of event cards, those spaces remain empty. Players cannot move and attack through empty spaces.

Remember: playing area can never be split into two or more separate parts.

If this would happen, simply ignore the effect of that event card.

NO EVENTS VARIANT

If you would like to have less randomness in the game, simply return all event cards to the box. Don't place them during the setup and skip the "Events" section of every Preparation Phase.

INDEX

```
action cost - 7
action gene - 9
actions - 7
active gene - 5,7,8
attack - 9
charged - 4
discharged - 4
end of the game - 13
end of the round - 14
energy - 7,11
energy absorption - 13
energy cost - 7
energy sources decline - 13
event - 5
exhaust - 7
figthing gene - 9
fortune - 14
fortune track - 3
genes refresh - 5
genes supply - 3
group level - 4
growth - 8
impulse - 10
irradiation - 11,13
irradiation level - 12,13
irradiation track - 3
main actions - 8
movement - 6
mutation - 8
pass - 11
passive gene - 5,7
player elimination - 13
player turns phase - 5
population token - 4
population token group - 4
power of the radioactive space - 10,11
preparation phase - 5
radiation phase - 12
radiation threat value - 12
radioactive space - 11
resilience test - 12
round - 5
spark - 9
special actions - 11
starting player - 5
starting room - 4
sterility level - 6
strength - 9
structure gene - 9
telepathy gene - 9
time passes - 5
trophies - 14
```

turn- 5



