

Artaios, the First Father, had six children with his wife, Branwen, the First Mother. They grew up to be gods and guardians of the biosphere. The siblings loved each other very much. They were strong of build and sharp of mind. Whatever they attempted, they succeeded with ease, and faultlessly.

When the young gods had grown to adulthood, Artaois and Branwen bade them each create something to add it to their creation, so that it would enrich the world and populate it. And thus, the gods created six very different types.

Time passed and the creations of the gods multiplied and spread without restraint across the biosphere. And so it came to pass that Artaios and Branwen bade their children bring order to their creation. Whoever would be the first to bring their population into accord with the biological order would be called "Lord of Creation" from thereon.

GAME COMPONENTS

• 300 dice (50 each of the six colors) – with numbers from 1 to 5 and a blank sixth face



Each player represents one type. We use the word "type" as a cover term for all populations controlled by one player. The number of types is equal to the maximum number of players, i.e., 6. Each type is made up of 50 different populations (dice). These are placed into the biosphere by the players, with the numbers on the dice symbolizing the lifespan of each population.

• 48 environment/territory tiles (8 each of desert, savannah, grassland, forest, mountain range, and polar region)













The game map of the biosphere: This is composed of various environments on which you place your populations. How many population may be placed onto one environment is determined by the number of population spaces. These are marked by white circles and vary from environment to environment. Regions that have good living conditions (such as forest -7) have more population spaces that uninhabitable ones (such as desert -3). Environments have a direct effect on the lifespan of the populations placed there.

• 1 rotary disc (wheel of life)



Age display: This disc is used to represent the lifespan of the various populations. It tells you which populations are going to die this round, as well as the (dice) numbers of new populations being placed. Each turn, the inner ring of the disk is advanced by 1 section – **counter-clockwise** (i.e., in the direction of the arrow).

1 special cards display



The traits of this split display are accessible to all players, as long as the necessary requirements are fulfilled (as opposed to the use of development cards, which are not open to all). Traits include the four evolutionary cornerstones of "specific" and "small" as well as "large" and "small", and also bonuses for the development of each of the six various environments. The rim of the display holds the tie breaker band, where players can advance their markers by spending evolutionary points.

SETTING UP (FO

Each player chooses a color and takes all 2. 50 dice of this color. Unused dice are re-Depending on the number of players, you are going to need moved from play. different amounts of environment tiles. These you place on the table in any way you like, to create one large, **connected** environment (see page 12). 2 players: 16 environment tiles (3× mountain range, 3× grassland, 3× savannah, 2× polar region, 3× forest and 2× desert) 3 players: 24 environment tiles (4× mountain range, 5× grassland, 4× savannah, 3× polar region, 5× forest and 3× desert) row 2 row 1 4 players: 32 environment tiles (5× mountain range, 6× grassland, 5× savannah, 5× polar region, 6× forest and 5× desert) 5 players: 40 environment tiles (7× mountain range, 7× grassland, 7× savannah, 6× polar region, 7× forest and 6× desert) 6 players: all 48 environment tiles As an example, we have provided a 3-player set-up to the right.

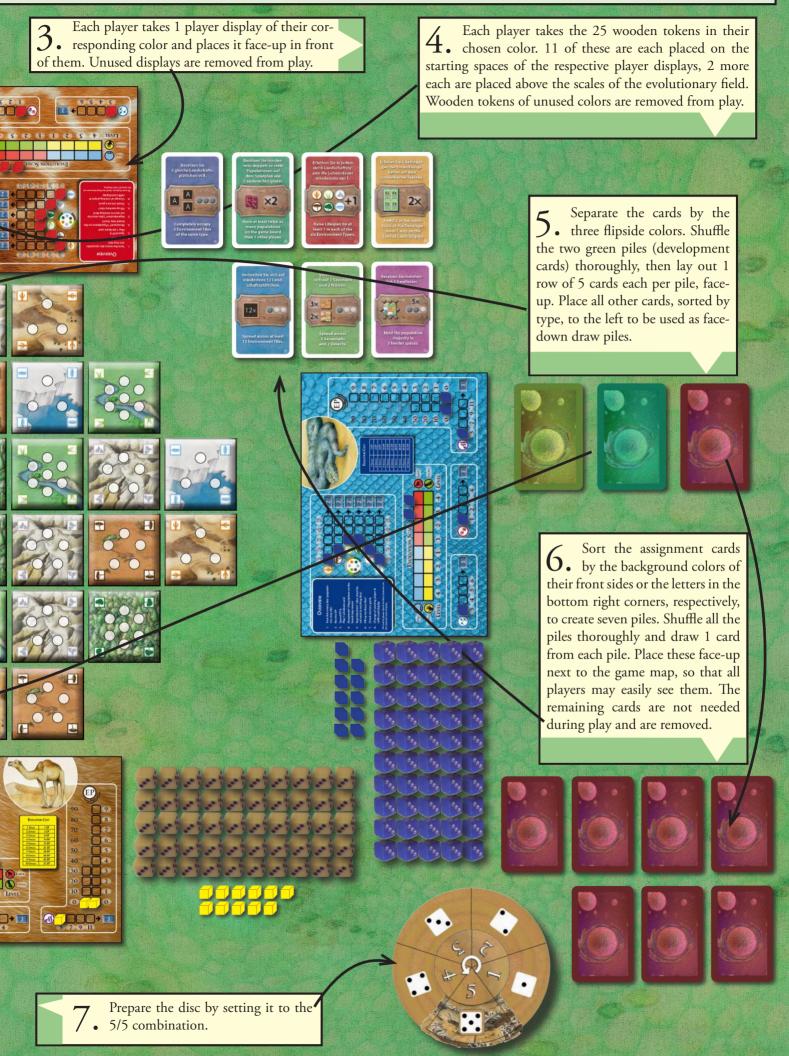
discard pile

discard pile

Place the special cards display in a location where all players can easily access it. Put one wooden token of each player on the tie breaker band of the special cards display. The player to the right of the starting player places their marker on the starting space appropriate to the number of players (in our example 88). Their right neighbor then places their marker on the next space, and so on.

Determine a starting player (in the example: red). They take the violet starting player marker and place it in front of them.

FOR 3 PLAYERS)



• 6 player displays (one in each color)



→ These displays show the state of development of a type.

Evolutionary space/Evolution scale: To gain new abilities for their types, the players need to develop them. This happens on the evolutionary space. By using the two markers, the players develop their types in the areas of "specific" and "seneral" as well as "large" and "small". Development requires a certain amount of evolutionary points. The more advanced the development is supposed to be, the



more evolutionary points do you need. Development is tracked by the stages 1 through 4. It is also possible to "de-evolve" a type by taking steps in the opposite direction.

» <u>Lifespan survey</u>: In each of these six lines, a marker shows the lifespan of this type in the respective environment. Lifespan ranges from 1 through 5. If the lifespan of a type changes (e.g., by playing a development card), the player needs to immediately move the marker to the new value. Should this result in a lifespan of longer than 5, the marker remains at 5 and the player moves 2 spaces ahead on the tie breaker band instead.



» Reproduction: This ability shows how many new populations of this type are created per turn, i.e., how many new dice a player may put into the biosphere. Starting value is 3. During a game, it may be raised to up to 6. Should some event cause the value to go beyond 6, the marker remains at 6 and the player moves 3 spaces ahead on the tie breaker band instead.



» <u>Movement</u>: This ability shows how many moves are available to a player's populations. Starting value is 1. During a game, it may be raised to up to 4. Should some event cause the value to go beyond 4, the marker remains at 4 and the player moves 3 spaces ahead on the tie breaker band instead.



» Evolutionary points (EP): This is the currency for all movement along the evolutionary space, the tie breaker band, and the purchase of development cards. Each player gains 5 EP per turn, which they may either spend immediately or save up for later turns. This value may be raised to up to 11. Should some event cause the value to go beyond 11, the marker remains at 11 and the player moves 3 spaces ahead on the tie breaker band instead.



» <u>Evolutionary points counter</u>: Players record the current state of their evolutionary points by means of these two markers. One of the markers represents the one-digit figure, the other one the two-digit figure. Since players rarely amass more then 30 EP, we have grayed out the higher-numbered spaces.



150 wooden tokens (25 per color)



Players use these as markers to record the state of development of their respective type on the player display. They are also used to cover the spaces on the special cards display, as well as fulfilled assignment cards.

• 80 cards

56 development cards/attribute cards: Players may buy these cards by spending evolutionary points. They change the abilities of a player's type. The small number in the top left corner represents the cost in evolutionary points that need to be spent to take that card into your hand. The highlighted sections list the requirements regarding size and specialization that need to be met **exactly** to play that card. The lower section of each card shows its effect on a type (bonuses). These usually affect one



or more abilities: **Important:** Once you have played a card and then lose the requirements for it (e.g., because you have moved into a different direction on the evolutionary space), you may still keep the card and continue to use its bonuses.

» 24 assignment cards/mission goals: These cards show the assignments players need to fulfill to win the game. There are seven different categories. Only one assignment per category is used in play.

1 starting player marker
This violet token identifies the player who goes first in each phase of a given turn. At the end of each turn, it is passed on in a **clockwise** direction.



24×

THE "BASIC RHYTHM" OF THE GAME

The basic rhythm of *Biosphere* is rather straightforward. Play lasts for several turns. Each turn consists of 8 phases which are treated in succession:

- 1. Turn the disc and remove populations
- 2. Gain EP
- 3. Spend EP and play 1 development card
- 4. Movement (move populations already in play)
- 5. Reproduction (place new dice in adjacent positions)
- 6. Fill up environments
- 7. Check assignments
- 8. Change starting player and replenish face-up cards

The starting player begins each turn and performs his actions in any phase. The other players follow, until everybody has acted during that phase. Play then moves on to the next phase. A turn is over once all eight phases have been played through by all players.

The next turn then begins again with phase 1. As soon as any player(s) has fulfilled at least **five assignments** in phase 7, the game ends.

PLAYING THE GAME

1. TURN THE DISC AND REMOVE POPULATIONS

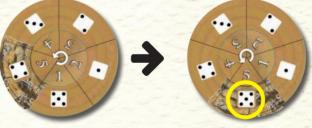
- OLD POPULATIONS BECOME EXTINCT AND ARE TAKEN OFF THE GAME MAP

Note: If you are reading the rules for the first time, we suggest you skip this section and read the others first, up to the section on Reproduction, and then return here.

In this phase, the wheel of life is turned **counter-clockwise** (i.e., in the direction the arrow is pointing) by 1 space. The outer ring of the disk shows the die numbers 1 through 5 (see illustration). Moving the wheel causes one of the 5 die numbers to be marked by the illustration of an "elephants' graveyard." The number in this space tells you the type of populations that become extinct in this turn. All dice in the biosphere that show the corresponding number need to be taken off the map and placed back into storage.

Example: The wheel of life is advanced by 1 space and now shows the number "5." All players remove all their dice on the map that show the number "5" and place them back into their storage At the end of this phase, no dice with the number "5"

may remain in the biosphere.



Note: At the beginning of the first phase of the first turn, set the disc to 5/5.

2. GAIN EP

- PLAYERS GAIN EVOLUTIONARY POINTS DURING THIS PHASE

Evolutionary points (EP) are the game's "currency." Players can use them to move along the evolutionary space as well as the tie breaker band, as well as buy development cards.

Each player gains as many EP as are listed on the "Evolutionary Points" scale on their player display. Usually, each player gains 5 EP per turn. These are immediately tracked on the evolutionary points counter.

Example: Alex's marker on the "Evolutionary Points" scale is at "9." This means he gains 9 EP in this turn. Since he has 4 EP remaining from his last turn, he moves the marker on his evolutionary points counter to "13" (4+9).

Players may also perform this phase simultaneously.



3. SPEND EP AND PLAY 1 DEVELOPMENT CARD

- DURING THIS PHASE, THE PLAYERS DEVELOP THEIR TYPES IN THEIR RESPECTIVE EVOLUTIONARY SPACE AND PURCHASE DEVEL-OPMENT CARDS. PLAYING DEVELOPMENT CARDS INCREASES THE CHANCES OF POPULATIONS SURVIVING IN THE BIOSPHERE.

The starting player goes first and performs their actions. Then the next player does the same. There are five actions to choose from:

- 1. Purchase development card(s)
- Move along the evolutionary space 2.
- Move along the tie breaker band
- Play 1 development card
- Pass

PURCHASE DEVELOPMENT CARDS

Each player may buy as many cards from the face-up display as they can afford. Each card from row 1 costs 2 EP, each card from row 2 costs 5 EP. The cost is also listed in the top left of each card. Newly purchased cards go into the player's hand. The position of the player's evolutionary points counter is reduced by the purchase cost of the card.

Example: Birgit chooses the cards "Small 1 / General 2" and "Small 1 / General 3" from row 1, for a total of 4 EP. From row 2, she also chooses "Small 3 / General 3" at 5 EP. She takes the three cards in her hand and moves her marker on the evolutionary points counter back 9 spaces, from 10 to 1.













The face-up cards up for purchases are not replenished until the end of a player's turn. To do so, move all the remaining cards to the right to close any gaps, then fill the empty slots with cards from the respective draw pile (see illustration).



Cards in row 1 afford a player a lifespan bonus in either one or two environments, depending on the card. The cards in row 2 give the player a bonus to reproduction, movement, evolution, or lifespan (depending on the card) in any environment.

MOVE ALONG THE EVOLUTIONARY SPACE

A player may move as many spaces along the evolutionary space as they are able to pay for in EP. Players may move at will in both directions on the two scales. The total of the spaces moved on **both scales** determines the final EP cost. We have listed these costs on the player display (see illustration). The basis principle is that the cost increases exponentially per number of spaces moved.

Example: Philipp wants to move from "Large 1" to "Small 2" on the upper scale. He moves his marker to the position "Small 2." In addition, he moves his marker on the lower scale from "Specific 3" by 1 square to "Specific 4." All in all, Philipp has moved/developed his type by 3 spaces during this turn, for a total cost of 6 EP. He moves the marker of his evolutionary points counter from 10 to 4.









Whenever a player reaches the value of "4" on both scales simultaneously, they may **immediately** place one of their markers onto the respective space on the special cards display to gain the bonus listed there.

Important: To place a marker, a player needs to end his movement on that evolutionary space.

There is a total of four different combinations:

- "Small 4 / General 4"
- "Small 4 / Specific 4"
- "Large 4 / Specific 4"
 "Large 4 / General 4"

Each player may gain each of these bonuses only once per game, i.e., they may only place a marker on a space on the special cards display once. If a player reached one of these combinations a second time during the game (meaning their marker is already on that particular space), they do not gain the listed bonus again.

Example: In this turn, Alex moves 2 spaces, from "Small 2" to "Small 4." Since his second marker is already at "General 4," he ends this turn's movement on the evolutionary space. He now places one of his markers on the space "Small 4 / General 4" and decides to move his marker on the Reproduction scale by 1 space to the right (from 3 to 4). He could still buy cards from the face-up display or move along the tie breaker band.



Note: At the beginning of the game, each player, at the start of their turn, puts their markers on a 1/1 combination of their choice (e.g., "Small 1 / Specific 1") and goes on to develop from there.



MOVE ALONG THE TIE BREAKER BAND

A player may move as many spaces along the tie breaker band as they are able to pay for in EP. We have listed the cost on the player display (see illustration). The basis principle is that the cost increases exponentially per number of spaces moved. Spaces occupied by other players are skipped and do not count against the total cost.

Note: Costs for movement along the evolutionary space and on the tie breaker band are calculated separately.

Example: After having moved 3 spaces on the evolutionary space this turn, Philipp now decides to also move 2 spaces on the tie breaker band. This costs him 3 EP. Thus, he moves his marker on the evolutionary points counter from 4 to 1. While moving, he skips Birgit (red) and Alex's (yellow) markers at no cost, so that he effectively moves 4 spaces (see illustration).



Whenever a player reaches or skips one of the green corner spaces, they **immediately** gain the bonus depicted there (1 lifespan of their choice / 1 point reproduction or movement or evolution / 1 lifespan of their choice plus 1 point reproduction, movement, and evolution).

Once the first player reaches or skips the first green corner space, the following rule 2 applies from then on: If a player whose turn it is has their marker on one of the specially marked spaces on the tie breaker band at the end of phase 3 (after playing a development card), they need to reduce the lifespan of their type on the lifespan survey once by 2 points (in the first section), or once by 1 in the second section. Should this cause the marker in one environment to move below the starting value (the marker may only drop one space below starting value!), this type becomes unable to reproduce in that environment. The marker will then be placed on the symbol of this environment. Until the player receives another bonus for this environment, they may not place new populations into this environment during phases 5 or 6, but may still move populations into or through that environment during phase 4.



Example: As per the illustration to the left, the red player would need to reduce lifespan in 2 environments by a total of 2 points. Player red does not loose another lifespan if they are still in this regions in following rounds (it's a onetime loss!).



PLAY 1 DEVELOPMENT CARD

At the end of phase 3, each player may play exactly 1 development card from their hand, as long as they are able to fulfill the requirements listed on the card exactly. There are two values on each card. To play a card, a player needs to have their markers on the evolutionary space at exactly the values listed. Is this the case, the player places the card face-up in front of them and collects the bonus listed on the card.

Example: Birgit wants to play the card "Small 3 / General 4" (Bonus: +1 on evolutionary points and +1 on a lifespan of her choice). Birgit's markers are exactly in the needed positions on the evolutionary space. She places the card in front of her and moves her marker on the Evolutionary Points scale one position to the right $(9 \rightarrow 11)$. As for lifespan, she chooses to add 1 point in mountain ranges $(3 \rightarrow 4)$.



Example: Philipp wants to play the card "Small 2 / General 2." However, his markers' positions on the evolutionary space are in the positions "Small 2 / General 4." Since he does not fulfill the listed requirements, he may not play this card in that turn.



Note: Since there is only 1 card per combination on the evolutionary space, a player may play no more than 1 card per turn. Players who move to one of the "4/4" combinations during their turn may not play a card either, since there are no cards associated with these four combinations.

PASS

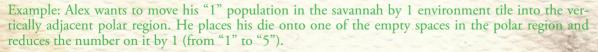
A player who cannot or does not want to perform an action has to pass. Play proceeds with the next player.

4. MOVEMENT (MOVE POPULATIONS ALREADY IN PLAY)

- A CHANCE TO ENTER NEW REGIONS ON THE MAP

This phase allows players to have populations that are already in play move to adjacent environments. Each player has a base movement of 1. This means that each player may move 1 population (1 die) by 1 environment tile, either vertically or horizontally. Since changing your living conditions expends energy, they player needs to reduced the lifespan of the population moved by 1 (by 1 number into the direction of the elephants' graveyard on the wheel of life). Should this happen to be the number currently associated with the elephants' graveyard, the die is taken off the map. If the die shows a "1," it is turned to "5."

Note: Movement may cause a population to have a higher lifespan than possible according to the player display.



Example: Philipp wants to move 1 population with the die number "4" into an adjacent environment tile. To do so, he needs to reduce the number on the die by 1, from "4" to "3." Since the "3" is associated with the elephants' graveyard in this turn, the population becomes extinct right after its migration and is taken off the map.

Note: It does make sense to have populations die by migration, to make space for new populations (see Fill Up Environments).

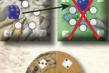
Movement may be increased to a maximum of "4." A player who has, say, a movement of "3" may either:

- Move 1 population by 3 environment tiles (horizontally as well as vertically). It is possible to move through environments that are fully populated, as long as there is still an empty space on your target environment tile.
- Move 1 population by 2 environment tiles and move another one by 1 environment tile.
- Move 3 populations by 1 environment tile each.











Each population that has been moved reduces its die number by 1. It does not matter how many environment tiles it has actually moved.

Note: Skip this phase on the very first turn of the game, since there are no populations in the biosphere yet.

Important: If a player holds the majority of at least two of the same environment tiles at the end of this phase, they place one of their markers on the corresponding space on the special cards display and adds the bonus listed there. Each player may get this bonus only once per game. If a player holds the majority on two environment tiles of this type again during the game (i.e., their marker occupies that space on the special cards display), they do **not** get that bonus again.

5. REPRODUCTION (PLACE NEW DICE IN ADJACENT POSITIONS)

- NEW POPULATIONS ARE BORN INTO THE BIOSPHERE.

The number of populations a player may place during this phase depends on the current value of the Reproduction scale. It starts at "3" and may be increased to a maximum of "6." The starting player begins by taking the appropriate number of dice (3 to 6) from their storage.

New populations may by placed

- » on an empty space in an environment tile where the player has already placed populations;
- on an empty space in an environment tile horizontally or vertically adjacent to an environment tile where the player has already placed populations.

Alex places a new population into the savannah. This is possible because he already has one population here.



Since Alex already has one of his populations in the savannah, he may also reproduce in the adjacent mountain range or desert. He may not populate the polar region, since reproduction is not possible along diagonal lines



There are six different types of environment tiles: They vary in population space:

- » Desert and polar region: a maximum of 3 empty spaces
- » Mountain range and savannah: a maximum of 5 empty spaces
- » Grassland and forest: a maximum of 7 empty spaces



3 population spaces



5 population spaces



7 population spaces

An environment tile may hold populations of any number of players. The decisive factor is that you have at least 1 population there, or that there is at least 1 empty space.

All populations placed during this phase are placed with the blank die face showing up. It is not until the player has placed all their populations that the dice are turned to their correct number (see below).

Important: A population may not be placed into an environment tile whose only neighbor is an environment tile which is only populated by dice with a blank face (i.e., dice that have been placed in this very turn). This prevents "chain reproduction."



Once all new populations have been placed, the dice are turned to their correct number, as determined by the lifespan of the population in the environment in question as well as the current position of the wheel of life. First, the player finds the lifespan on their player display for that environment (something between 1 and 5). Then they consult the wheel of life. The inner ring of the wheel shows the numbers 1 through 5. Each of these figures point to a different die number. Use this to adjust the reading of the newly placed dice.



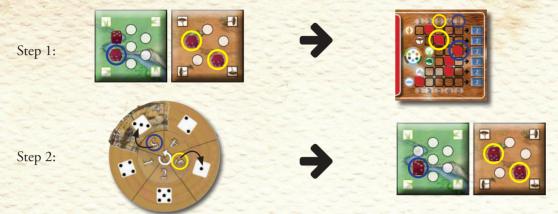
Step 1: Determine the lifespan of the environment where you have put the population by consulting the Lifespan survey.



Step 2: Find the figure on the inner ring of the wheel. This determines the final die number.



Example: During her turn, Birgit has placed 2 populations onto a savannah and 1 population onto grassland. First, she determines the die number for the two savannah dice. Her player display tells her that her populations have a lifespan of "3" (years/rounds) in the savannah. Now she consults the inner ring of the circle of life. This shows her that "3" currently refers to the number "1." Thus she turns both her dice in the savannah to "1." Now she determines the lifespan of her population in the grassland. This is basically "5" (years/rounds). Checking the wheel of life tells her that the current value of "5" is "3," so she turns the die accordingly.



Note: During the very first turn of the game, each player may place 3 populations on empty environment tiles of their choice, adjusting the die numbers accordingly.

Important: If a player holds the majority of at least two of the same environment tiles at the end of this phase, they place one of their markers on the corresponding space on the special cards display and adds the bonus listed there. Each player may get this bonus only once per game. If a player holds the majority on two environment tiles of this type again during the game (i.e., their marker occupies that space on the special cards display), they do **not** get that bonus again.



6. FILL UP ENVIRONMENTS

- DOMINATING PARTS OF THE BIOSPHERE MADE EASY

Whenever a player holds the **majority** of an environment's spaces with their own populations, they may immediately fill the **empty** spaces with populations from their storage. Minority populations of other players remain where they are, so that the active player may only fill the empty spaces. These new populations are then adjusted to their correct die number as described in the Reproduction section of these rules.

Example: Birgit occupies 3 of 5 places in a savannah. She now fills the remaining two spaces with populations of her own. Since her lifespan in a savannah is "3," and the wheel of life refers the "3" to the figure "1," she turns her two new dice to the number "1."



Example: Philipp has 4 populations in a forest (7 space), while Birgit and Alex each have 1. Philipp thus holds the majority and may fill up the tile. However, since there is only one empty space left, he may only place 1 additional population.



Example (without illustration): Alex holds 3 out of 7 grassland spaces. Since this is less than the majority, he may not fill up the tile with additional populations.

Important: If a player holds the majority of at least two of the same environment tiles at the end of this phase, they place one of their markers on the corresponding space on the special cards display and adds the bonus listed there. Each player may get this bonus only once per game. If a player holds the majority on two environment tiles of this type again during the game (i.e., their marker occupies that space on the special cards display), they do **not** get that bonus again.

7. CHECK ASSIGNMENTS

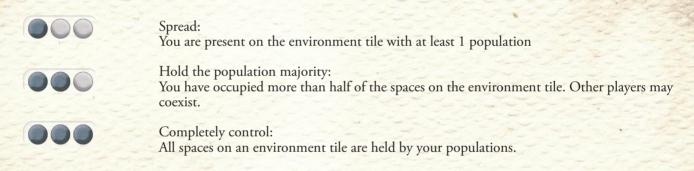
- VICTORY IS NIGH!

During each game of Biosphere, there are always 7 face-up assignments for the players. Each assignment belongs to a particular category (A–G). The categories can be told apart by their background colors, as well as by the code listed in the lower right corner of the card.



Only one assignment per category is in play at any time. Some categories offer three different assignments, others four. Draw one assignment per category (face-down) at the beginning of play. These are used in this game, the others are not needed.

Once a player has fulfilled all the requirements of an assignment, they may place 1 of their markers onto the card to indicate completion of the task. Once an assignment has completed for the first time, other players may still solve it, too, and place their markers on the same card. The following terms are in use:



The first player who has fulfilled at least 5 assignments wins the game. Should more than one player achieve this in the same turn, the player who has fulfilled more assignments wins (e.g., 6 completed assignments beat 5). If there is still a tie, the player who is ahead on the tie breaker band wins.

8. CHANGE STARTING PLAYER AND REPLENISH FACE-UP CARD

At the end of each turn, the violet starting player marker is moved clockwise to the next player. Also, the first card in each row is put onto the discard pile. All remaining cards are moved 1 position to the right, new cards from the respective draw piles fill up the card arrays again.



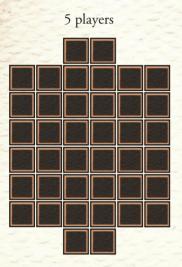
Should a draw pile be exhausted, thoroughly shuffle the cards from the discard pile to create a new draw pile.

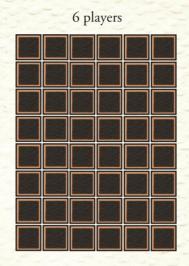
POSSIBLE GAME MAP CONFIGURATIONS











The illustrations to the left show recommendations how to set up your games for the first few times. After that, you might as well vary the configuration. For instance, it is perfectly alright to have "gaps" in the map.

You only need to make certain that the environment tiles are all somehow connected and that all assignments are possible, regardless of configuration.

SUMMARY: WHAT IS DIFFERENT IN THE FIRST TURN?

Phase 1: At the beginning of the very first turn, set the disk to the 5/5 combination.

Phase 3: At the **beginning of their very first turn**, each player sets their markers to a 1/1 combination of their choice (e.g., "Small 1 / Dedicated 1") and develops from there.

Phase 4: You skip this phase on the very first turn, since there aren't any populations on the map yet.

Phase 5: In their very first turn, each player may place 3 populations on any empty environment tiles of their choice, adjusting the die numbers afterwards.

VARIANT

For a faster or smoother game you can skip using the tie breaker band. Beginners should use this variant. In this variant, exceeding the scales has no extra effect. Tie breaker is the number of EP left, in case of a tie in EP also, there are multiple winners.

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