

It is 2113.

Mankind is able to control fusion power and reach space - to reach the Moon to be more precise.
The Moon - nobody was interested about the Moon just century ago with the exception of dreamers and poets. The Moon - a huge reserve of Helium-3 - new source of energy.

Four nations have sent their colonization ships to the Moon to get all those resources. Who will manage to conquer the Moon and to enter new age of mankind as a winner?

Moonriser is a strategic board game for 2-4 players with a playing time from 60 to 90 minutes. The theme of the game is near-future Moon colonization. Players colonize the modular board, which represents a resource rich area on the Moon, by tile placement where tiles represent colony parts. The player whose colony has the highest value will become the winner.

The colony value consists of individual tile values and the values of Bonus relationships and Productive neighborhood between individual tiles created by the tile's positions and rotations + victory points gained by trade with mother Earth.

The game contains:

- 121 playing tiles
- 40 blue tokens
- 40 green tokens
- 15 big green tokens
- 40 red tokens
- 40 yellow tokens
- 20 black tokens

- 4 player boards
- 6 pieces of game board


## Game preparation

Game preparation starts with game board setup.

## Game board

Let us setup game board from game board pieces. We randomly choose [number of players] + 2 pieces of the game board and we place those into the playing area (playing table or floor). Every piece has to connect with at least 2 other pieces.

We can see examples of game board setup for two players on the following picture.



## The main base

Every player randomly gets one of four starting tiles - Main base.


Players place their starting tiles in the order that is set by number of each starting tile (numbers $1-4$ in the left-upper corner of starting tile Main base) - player with highest number starts.

Starting tile placement has following rules:

1. There can't be placed 2 starting tiles on one single game board piece.
2. Starting tile can be placed only on empty field without any sign.



Every player chooses one color (red/green/blue/yellow). Token of chosen color is then placed on player's starting tile and also on all his/her tiles that are placed by given player during the game.

Every player gets 5 basic playing tiles. Every player keeps 3 tiles of his/her choice from those five and remaining 2 tiles are discarded. Every player gets 3 green tokens and 1 blue token. Those tokens are placed on Player board (see chapter Player board). This is the base equipment that comes with each player from the Earth.

## Draw piles

There are two kinds of playing tiles in a game - Basic and Advanced. Basic tiles are cheaper to place but their bonus is weaker in comparison with bonus of Advanced tiles.

Basic and Advanced playing tiles can be distinguished by the color of their backside (Basic - grey, Advanced - golden).

There will be two Draw piles in a game - Basic Draw pile and Advanced draw pile.


## Common supply of playing tiles

We place [number of players] + 2 Basic playing tiles - face side up. Those playing tiles will create common supply.


Left most tile from the draw pile is discarded at the end of each round. All remaining tiles in the common supply move left and a new tile from draw pile is introduced into the common supply.

A common supply is composed only from Basic playing tiles.


When one of the playing tiles from common supply is used in Phase II - Development (see Game flow chapter) then all playing tiles that are on the right side from the removed tile are moved left and a new tile from Basic draw pile is introduced into the common supply.


Setup of the game for 2 players:


## Game flow

The game is round based. Every round has three phases:

1. Planning
2. Development
3. Production and trade

Starting player is the player who has the lowest number of the Main base tile:


Player performs all those three phases and once done - next player clockwise plays.

## Phase I: Planning

Planning phase is used to draw new playing tiles into the hand. One needs to pay with blue tokens for drawing - every 1 blue token 3 playing tiles. One can spend as many blue tokens as desired.

Player draws [number of paid blue tokens] x 3 playing tiles and he/she keeps $1 / 3$ from those (number of paid blue tokens). The remaining tiles ( $2 / 3$ ) are discarded.

## $\left\{\begin{array}{l}\text { Player has to decide how many blue } \\ \text { tokens he/she wants to pay first. Then } \\ \text { he/she can draw. }\end{array}\right\}$

Player can draw either from Basic draw pile or Advanced draw pile. If the player draws more than one tile then he/she can choose from which Draw pile to draw for each tile being draw. (Player can draw one Basic tile and one Advanced tile.)

Example: John pays 3 blue tokens. He draws 4 playing tiles from the Advanced draw pile and 5 playing tiles from Basic draw pile. He keeps 3 playing tiles of his choice from those 9 and discards the rest. George does not pay any blue token and therefore he does not draw at all.


## Phase II: Development

Players can place new tiles into the game board or upgrade their own already placed tile (both those actions are different kinds of development action).

One has to pay given tile price to be allowed to place a tile into the game board. Price of the tile is shown in the left-upper corner of playing tile and represents particular amounts of red, green or blue tokens.

Player can place playing tile from his/her hand or from common supply.
Example: John wants to place the He 3 harvester tile into the game board.


John has to pay tile's price - one green token.
One needs to pay 2 extra red tokens (against tile price) for every further development action in the same turn.

Example: John wants to place second He 3 harvester tile in the same turn - he must pay 2 red tokens for the further development action in the same turn and 1 green token (tile's price).

Player places token with his/her chosen color to mark that placed tiles belongs to him/her.
Instead of a placing new tile into the game board - player can upgrade his/her already placed tile by paying its price again. Bonuses and victory points that player gains from such upgraded tile (including victory points from Productive neighborhoods and Bonus relationships) doubles. Upgraded tile is marked with second player's token.

Already upgraded tile can't be upgraded again.
Example: John already placed two He3 harvester tiles in this turn. John has decided, that he will also upgrade one those tiles in the same turn - he must pay 2 red tokens for further development action in one turn and 1 green token (price of upgraded tile). John

places second yellow token on He 3 harvester tile to mark that given tile is upgraded. John will gain from this tile 2 victory points (instead of 1 ) at the end of the game. Also bonus of this tile doubles ( +2 instead of +1 ) and also victory points from Productive neighborhoods and Bonus relationships doubles (see End of the game and classification).

## The main base upgrade

The main base tile can be upgraded multiple times. The price for each individual upgrade is equal to tile's actual production Bonus (e.g. first upgrade costs 1 blue and 1 green token, second upgrade costs 2 blue and 2 green tokens, third upgrade costs 3 blue and 3 green tokens, etc.).

## Phase III: Production and trade

New tokens are being produced in Production and trade phase on those placed player's tiles that has production bonuses (+[number] [token]).

Every player can transform his tokens into the tokens of the other kind. Standard exchange rate is $4: 1$ (exchange 4 tokens of one kind into 1 token of the other kind).

It is also possible to exchange 4 tiles from the hand into 1 token of any kind.
It is also possible to gain yellow tokens (victory points) by this exchange. (Yellow tokens are stored on Player board - see next chapter).

Every player can have at maximum five tiles in the hand - remaining tiles are discarded.

## Player board

Every player tracks his/her production power per round on Player board (see following picture):

1) Current blue token production per round - counter +1 .. +7
2) Current red token production per round - counter +1 .. +7
3) Current green token production per round - counter +1 .. +10

Tokens of appropriate colors are used as trackers. When current production breach +10 (or +7 ), another token can be used. Following picture shows current production +14 green tokens per round:

Produced tokens are placed into the Token reserve area.


## End of the game and classification

The game ends when it is not possible to place another new tile into the game board. The player who placed last tile finishes his/her whole turn - including Phase III: Production and trade. The other players can perform only trade and exchange their remaining tokens for victory points (only in standard exchange rate 1:4).

Every tile (except Main base tile) has its value (number 1-6).
Every Bonus relationship has value of 2 victory points (each tile that forms Bonus relationship gains 1 victory point). Every Productive neighborhood has value of 3 victory points (each tile that forms Productive neighborhood gains 1 victory point).

Number of victory point gained by Bonus relationships and Productive neighborhoods are increased by tile upgrades. If tile is upgraded then it gains 2 victory points for participation on Bonus relationships and Productive neighborhood (not just 1 victory point).

Example: Playing tile A and playing tile B together form Bonus relationships. Standardly - such a Bonus relationship gains 2 WP (each tile 1 WP). But when the tile $A$ is upgraded then such a Bonus relationship gains 3 WP (tile A gains 2 WP, tile B gains 1 WP). If both tiles are upgraded then such a Bonus relationship gains 4 WP (tile A gains 2 WP, tile B gains 2 WP). Similar principle can be found in case of the Productive neighborhoods.

Player whose colony has the highest value become a winner (sum of values of individual tiles that has been placed by given player + victory points from Bonus relationships and Productive neighborhoods + victory points exchanged in trade with the Earth).


## Game elements

## Playing tiles

Playing tiles represent buildings and units that form player's colony.

Every playing tile has its name, value, price, picture, bonus which comes when tile is placed, condition that has to be fulfilled to enable corresponding bonus, optionally symbol(-s) of Productive neighborhood, symbol(-s) of Bonus relationship and symbols of Empty space.


## Plying tiles placement

Moon base development is organic - new buildings are built at the border of existing colony to be connected directly with the rest of the colony. Thanks this - logistics works smoothly inside the colony.

When the new building is being built far from the existing colony then such development costs more resources.

When the new tile is placed to be directly connected with already placed tiles of given player then one has to pay only tile's price.

When the new tile is placed separately from player's colony then one has to pay tile's price +2 red tokens for every skipped tile.

Examples - green tile is being placed currently, grey tiles represent players colony:


## Empty space

Some buildings requires more space. He3 harvester needs space for harvesting, mine needs space for mined material, some buildings are simply bigger etc. If a building or unit requires empty space then symbol specifies, which direction from the tile needs to be Empty space.


## Bonus relationship

There is a power in cooperation and the whole is more than just sum of its parts. Helium 3 harvester mines Helium 3. Harvested Helium 3 is then used in Fusion power plant to gain energy. Robot factory builds and maintain units of robots and probes. Scientific center can analyze and use specimen obtained by probes. Metal refinery can get metal from ore mined in mines.


Those and other similar functional relationships are implemented in the game as Bonus relationships.
Two connected symbols of Bonus relationship of specific kind give some bonus to its owner and create the Bonus relationship.

We can see three playing tiles in the following example:

- He3 harvester
- Fusion power plant
- Energy lab


He3 harvester tile has two symbols of Bonus relationship and a condition, which says that if given tile is placed next to other tile the way in which Bonus relationship $\square$ is created (white and black radiation symbols of Bonus relationship connects), then the tile He 3 harvester will produce +1 green token per round. Fusion power plant tile has symbol that needs to be connected (white radiation). Mentioned Bonus relationship represents synergy He3 harvester - Fusion power plant, where added value is created by cooperation: He3 harvester mines Helium 3 and the Fusion power plant gains energy from mined Helium 3.


Fusion power plant has three symbols of Bonus relationship and a condition, which says that if given tile is placed next to other tile the way in which Bonus relationship radiation symbols of Bonus relationship connects), then the tile Fusion power plant will produce +1 green token per round. It is again the same synergy He3 harvester - Fusion power plant.

Energy lab tile has two symbols of Bonus relationship 4 and more complex condition 48. Condition says that bonus +1 green production takes effect only if we connect this Energy lab with the other tile the way Bonus relationship 40 is created. In the same time - connected tile with symbol has to form Bonus relationship with at least one other tile. We can explain this condition ( 48 ) in the following way. Energy lab ( ) optimizes production in Fusion power plant ( and more energy can be gained from the same amount of Helium 3 ( it means +1 green production.

Let us summarize our example. The tile He3 harvester produces 1 green token per round because condition of Bonus relationship is fulfilled. The tile Fusion power plant also produces 1 green token per round because condition $\$$ is fulfilled. The tile Energy lab produces 1 blue token (bonus without condition) and 1 green token per round because condition 4 is also fulfilled.

Our example represents effective fusion fellowship. He3 harvester mines Helium 3 and brings it into the Fusion power plant. Fusion power plant gains energy from harvested Helium 3 and Energy lab optimizes and increases this production. But in the same time we can see three un-used symbols of Bonus relationship - one symbol on the tile He 3 harvester, one symbol on the tile Fusion power plant and one symbol on the tile Energy lab.

Let us see how those un-used symbols of Bonus relationship can be used in the game. We will place another tile He3 harvester into our colony and we will create Bonus relationship with already placed tile Fusion power plant (see following picture). Fusion power plant is connected with two He3 harvester tiles and two Bonus relationships are created. The condition is fulfilled twice and also bonus related to this condition - +1 - will take effect twice. Fusion power plant tile will produce 2 green tokens (1 for each connected He3 harvester by Bonus relationship



The following colony part is perfectly valid.


## Bonus relationship created by two players

It can happen that Bonus relationship is created by two players. In this case - bonus gets player whose tile contains bonus with condition. Victory points gained from such Bonus relationship are shared.

Example: John marks his tiles with green tokens, George marks his tiles with red tokens.


George's tile He3 harvester and John's tile Fusion power plant forms Bonus relationship. John and George gains +1 green production per round (bonus with condition is on both tiles). Also, both players gain 1 WP at the end of the game for given Bonus relationship.

## Productive neighborhood

There can exist another - looser - relationships between colony buildings and units. Mine that is placed nearby another mine can operate more effectively because miners can be shared.

Metal refinery that is placed nearby Water refinery can operate more effectively because Metal refinery can directly use water gained in Water refinery. Those looser relationships are represented by Productive neighborhoods.

Playing tiles can have in the corners symbol(-s) of Productive neighborhood. Symbols of Productive neighborhood may or may not connect - following tile placement is perfectly valid.


When 3 symbols of Productive neighborhood of the same color are connected then Productive neighborhood is created. Following picture shows green Productive neighborhood.


Productive neighborhood brings following advantages to its owner.
Every Productive neighborhood produce in the Phase III: Production and trade 1 token of given kind.

## Productive neighborhood created by multiple players

When the Productive neighborhood is created by tiles that belongs to different players then such a Productive neighborhood does not produce any token. Points that are gained from this Productive neighborhood are shared - every tile gains 1WP.

Playing tile's condition types
One can find multiple types of conditions in the game.


## Simple bonus relationship

Simple Bonus relationship condition is most common in the game - example:
 condition can be found on tiles that have also one of required symbols of given Bonus relationship. Condition from our example has a tile He 3 harvester that also has a symbol of Bonus relationship


If we place this tile next to the other tile with symbol of Bonus relationship and both symbols are connected then the condition $\theta$ is fulfilled.

## Complex bonus relationship

Complex Bonus relationship condition is Simple Bonus relationship condition plus something extra. We need again to place 2 playing tiles next to each other the way in which both desired symbols are connected in a Bonus relationship. One of these two tiles needs to be in addition in another Simple Bonus relationship with the additional third tile - example: 4 relationship condition can be found on Energy Lab Advanced playing tile.

Energy Lab has two Bonus relationship symbols 4 . Given Bonus relationship condition will be fulfilled only when we connect our Energy Lab tile with another tile the way in which Bonus relationship is created. Connected tile with the symbol then needs to be in a Bonus relationship with at least one another tile.

## Tokens

There are 5 kinds of tokens in the game:

- blue - planning
- green - development
- There are two kinds of green tokens in the game - small (their size is the same as the size of other tokens of different colors) and big. Big green token stands for 4 small green tokens (it means that one big green token = OOO)
- red - expansion
- A yellow - victory points
- black - tokens for marking of Empty space on the game board (see Empty space)


## Game board symbols

One can find the following symbols on the game board:
$\square$

- player must discard one green token before he/she pays the price of placed tile

- player gains one green token before he/she pays the price of placed tile 1 - player gains one victory point before he/she pays the price of placed tile
- player can perform one extra development action in this turn without paying extra red tokens

 player gains one blue token before he/she pays the price of placed tile
-     - player gains one red token before he/she pays the price of placed tile


## Playing tiles symbols

One can find the following symbols on the playing tiles:


- player pays one blue token less in Phase I: Planning - but he/she has to pay at least 1 blue token to draw. Example: Player pays 1 blue token in Phase I: Planning. He/she draws 6 playing tiles and he/she keeps 2 from those (instead of standard - he/she draws 3 playing tiles and he/she keeps 1 from those). Example: Player pays 2 blue tokens in Phase I: Planning. He/she draws 9 playing tiles and he/she keeps 3 from those (instead of standard - he/she draws 6 playing tiles and he/she keeps 2 from those).
- trade advantage

