MARTIAN MINERS

Number of players: 2
Length: 60 minutes
Equipment Required: 1 piecepack set, 2 icehouse stashes of different colours, 8 six-sided dice and an opaque bag.
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Introduction
Mars 2158. Since long this planet has been inhabited by humans, but only the light side. The dark side has always been considered too dangerous, because of the plundering Martians roaming these badlands. Two mining companies, however, have started a wager: who will be the ultimate Martian Miner?

Goal
To be the first mining company that has constructed two mines on the dark side of Mars.

Summary
The dark side of Mars is not as rich in resources as the light side. It's still profitable terrain just as long as you ignore a raid by the Martians every now and then. On Mars some really useful new types of building resources have been found. The available resources are sunsuit resource for glass, nutritional replenishment (this is the future, right!) and building bricks; armssuit resources for water, oxygen and the mining industry; crownsuit resources for ever-needed warmth and energy and moonsuit resources for metal buildings and spacecraft. By gathering all the necessary resources, players try to build two mines from scratch.

First of all, gameplay for a two-player game is described, after which three and four-player variants are explained along with some other variants. Note that the needed equipment described above is for a two-player game. The needed materials of a three and a four-player game will be described in these variants.

TWO-PLAYER GAME:

Setup
Place the tiles suit-side down, shuffle them thoroughly and form one large pile. Create a 5x5 board leaving a hole (landing platform) in the middle. When placing the tiles, turn them over so the suit is showing. Be sure to keep a fixed placing pattern (for example from left to right) so that complete randomness is guaranteed.
      Next both players take four coins each -one of each suit- and place them suit side up in front of them. These represent your resource storages. Place four six-sided dice per player near the coins. These are used to keep track of the amount of the different resources.
Each player takes an icehouse stash and keeps it within reach. The pyramids represent the different types of constructions you are able to build: small pyramids are scoutships; medium sized pyramids are laboratories and large pyramids are mines. Place the piecepack pawns next to the board. These are resource-traders that come flying in and out every now and then.

Start of the game

Put the piecepack dice in the bag and shake thoroughly. Each player takes out two dice and rolls them. The player with the highest roll is the starting player (null= 0, ace= 1). Reroll in case of a tie.

Apart from this, the result of the roll also determines your starting tiles on the board: find the corresponding tiles on the board and place the dice on them. The four corners of these tiles are the possible starting locations.

Place a scoutship (small pyramid) on one corner on the intersection with the adjacent tiles, so that all these tiles are partly covered. There is no restriction in minimum distance between (different) pyramids. If, however, two dice of both players are right next to each other on the board (horizontally, vertically or diagonally) the starting player has first choice. If because of this rule the second player is forced to choose a location that has fewer tiles around it than the first player's choice, the second player is allowed to reroll the affected die. When the two remaining dice are next to each other as well, the second player has priority of placement. The same reroll rule can apply here. Remove the dice from the board and the game starts with the second player. After this both players take turns.

Turns

A turn consists of the following steps:

A. Mandatory actions:
1. Satellite Scan
2. Scan Results
    a. Place/Remove Trader(s)
    b. Martian Plunder Party
    c. Collect Resource(s)

B. Optional actions:
- Trade Resource(s)
- Build Construction(s)
- Move Scoutship(s)
- Attack Construction(s)

Important! Mandatory actions have to be performed in the given order, while optional actions can be executed in the order of your choice, after the mandatory actions.

A. Mandatory actions:
1. Satellite scan

The mining companies use a satellite to find the resources they need to construct their mines. This is done by rolling all four piecepack dice. Place them on the corresponding tiles of the board just like during game-setup. This way it's easier to see the consequences for resource collection.

Hint: divide the dice among the players to place them on the board. This saves time and involves the inactive players.

2. Scan results

After the results of the scans are in, see if this has any consequences.

2a. Place/Remove Trader(s): when a die is showing an ace or a null, you have to move the trader (pawn) of the corresponding suit. If the pawn is standing next to the board, place it onto the landing platform. At this moment you have access to goods that you are (partially) missing.

When the pawn is already on the landing platform, this means the trader is leaving. Move it to the side of the board. In this case you'll have to wait until the trader returns to get the needed resource. *See also Trade Resources.*

2b. Martian Plunder Party: as told before, Martians are roaming the badlands of the dark side of Mars. They are not the most intelligent beings in the galaxy, but they sure know how to rob you of your riches. Every now and then, they check to see if there's anything for them to steal. This happens when the roll of the dice shows **at least** a pair of nulls or a pair of aces. Because of their lack of intelligence, the Martians will only rob the player with the most valuable constructions. This is calculated by counting the pips on the pyramids you have placed: scoutships are worth one pip, laboratories are worth two pips and mines are worth three pips. The player that counted the most pips loses all his armssuit resources and all his crownsuit resources (if available). If both players have an equal number of pips on the board, nothing happens.

Hint: for easier comparing of pips, players can write down the number of pips they have built. They can also all place their unbuilt pyramids in the same fashion next to the board. This way it's easier to see the number of unbuilt pyramids for each player.

2c. Collect Resources: the next step is to see if resources can be collected. This is done by both players (both companies have access to the same satellite). If your construction(s) is (are) stationed partly on a tile with a die on it, you collect one resource for every building that is touching the tile, regardless of construction size. This is the resource that is depicted on the tile. To collect a resource for the first time, take one of your dice and place it next to the coin that depicts the resource you've just gathered. The number on the die indicates the number of resources you have collected. If you already have a die next to the gathered resource, just turn it as many numbers up as necessary.

Important! Because of the nature of a die, you're only able to have six units per resource.

B. Optional actions:
● ***Trade Resources:*** if you don't have the available resources to build a construction, you can always try to trade with a trader (if located on the landing platform). The suit on the pawn is the resource the trader has to offer. This means that you can offer any of the three other resources to collect the resource on the pawn. You can trade as many times as you like, just as long as you have other resources to trade with. Trading is done 1:1. This means that you get one resource from the trader for any other resource.
!!! Important: you are only allowed to trade when you are able to build a construction.

● ***Build Constructions:*** in order to build a mine, you have to control a tile. This is done by placing constructions (partially) around the tile. You start by ***upgrading*** your ship to a laboratory. This construction can build new scoutships. Scoutships can then fly to another location on the board.

Once you have constructions worth of **at least** five pips around a tile, you have the capacity to build a mine. These five pips have to be touching the board. Because of this rule, two players can share a tile that later on becomes a mine. If this happens, the player that does not own the mine will not be able to use the resources gathered from this tile anymore.

When building a new construction, pay the corresponding resources by turning their dice one or more numbers down according to their building costs. Then place the matching pyramid. Building a laboratory is done on the intersection of tiles by replacing a scoutship. Building a scoutship is done by placing it on top of a laboratory. A laboratory can only hold one scoutship at a time. Building a mine is done on the controlled tile itself. Once a mine has been placed, the corresponding tile itself will no longer generate resources when a satellite scan has been performed.

Once you have built a mine, you take a corresponding piecepack coin and place it near the unbuilt pyramids. This is to indicate the type of mine you have established. From now on, you may choose to receive one resource extra of this type for every satellite scan. Likewise, from now on you will be able to convert any kind of resource into any other one. You pay four resources of the same type and get back one resource of your choice.

Building restriction! You are not allowed to build two of your mines right next to each other. This goes for all directions: horizontally, vertically and diagonally.

Building costs:
- Building a scoutship costs 1 sunsuit resource, 2 moonsuit resources and 2 crownsuit resources.
- Building a laboratory costs 2 sunsuit resources, 1 moonsuit resource and 2 crownsuit resources.
- Building a mine costs 1 sunsuit resource, 1 moonsuit resource, 3 crownsuit resources and 3 armssuit resources.
All costs are shown in a table at the end of the rules for faster play.

● *Move Scoutships:* a ship is launched from the top of the lab. It only flies in horizontal or vertical directions. Once it has touched the surface of Mars, it is not able to fly again: it only carries the needed amount of fuel to reach its destiny. This means you have to choose your destination carefully!

- To make a scoutship flight worthy, you need 2 sunsuit resources and 2 moonsuit resources. Additional fuel costs 1 armssuit resource for every step to the next intersection of tiles.

● *Attack constructions:* this competition is a vicious one. Miners stop at nothing to reach their goal and be the winner of this bet. This means that they have found a way for their simple scoutships to attack other constructions. Scoutships can attack constructions up to 2 pips. This means that mines or laboratories with a scoutship on top are too well protected. The defending player can protect his constructions from being attacked, though.

Costs and outcome of an attack:
- Attacking a construction: the costs for flying to the construction you want to attack plus an additional amount of armssuit resources.
- Attacking a construction is only possible when you have more armssuit resources left after flying to the opponent's construction you want to attack.

- When the attacker is able to pay more armssuit resources than the defender, he pays at least one resource more than the defender has and the attack is successful.
- Outcome of an attack:
  o When a scoutship has been attacked and defeated, it is removed from the board and <u>replaced by</u> the attacking scoutship.
  o When a laboratory has been attacked and defeated, it is removed from the board <u>along with</u> the attacking scoutship (it took too much energy for the scoutship to survive).

Game End
The game is finished when one of the players has been able to build a second mine. He or she is the winner of the game.

Variants

THREE-PLAYER GAME:

When using two similar piecepack sets
Same rules as a two-player game except:
- Use 36 tiles to form a 6x6 board. Designate a space for the traders, so that everyone knows which traders are on the landing platform and which are off. You can use the grid side of one or two tiles, placed next to the board.
- To form the board, don't use the null tiles from one set and the ace tiles from the other one. Roll four different piecepack dice: the tiles with the values that are showing have to be left out once as well.
- When a satellite scan has been performed, tiles with the same value both generate resources. Use only one set of piecepack dice.
- In setup phase, place three scoutships: two by rolling random dice and one by choice. Starting player has first choice, continuing clockwise.
- A Martian Plunder Party occurs when **at least** three traders have to be moved: when a three-of-a-kind is rolled (nulls or aces), or a pair and one other trader result occurs (pair of aces and a null or a pair of nulls and an ace).
- When a Martian Plunder Party occurs and two players are together in the lead, they both loose all of their armssuit resources and all crownsuit resources.
- Use 12 six-sided dice and 3 icehouse stashes of different colours.

When using two different piecepack sets (gems & gold)
Same rules as a three-player game with two similar piecepack sets except:
- Use six different suits: the two extra suits represent gems & gold. They can not be used in construction, but can be traded in for building resources.
- For each roll of a null or an ace of gems and/or gold, the active player may choose one of the resource traders to enter or leave the platform. There are no gems or gold traders.

FOUR-PLAYER GAME:

When using two similar piecepack sets
Same rules as a two-player game except:
- Create a 7x7 board leaving a gap in the middle.
- In setup phase, place three scoutships and one laboratory: the scoutships by rolling random dice and the laboratory by choice. Starting player has first choice, continuing clockwise.
- When a satellite scan has been performed, tiles with the same value both generate resources. Use only one set of piecepack dice to roll. The second set can be used to copy the result of the roll.
- A Martian Plunder Party occurs when **at least** either a three-of-a-kind or two pairs of nulls and/or aces have been rolled.
- When a Martian Plunder Party occurs and more players are together in the lead, they all loose all of their armssuit resources and crownsuit resources.
- Use 16 six-sided dice and 4 icehouse stashes of different colours.

When using two different piecepack sets
Same rules as a four-player game with similar piecepack sets except:
- Place the coins of the suits that have the same "value" together (see table in the players' reference). For example: place a sun coin above a fish coin. This way you don't have to think about what combinations you have to make when you want to build a construction.
- For two similar suits use one six-sided die. This way each player only needs four dice in total. Place the die underneath the two similar coins.

OTHER VARIANTS:

- *Monopoly version:* for a more aggressive game, only the first player to have finished a certain type of mine receives the corresponding coin. You can choose to either go for two mines (coins), or choose *Total monopoly*: be the first to collect three coins.

- *Total control*: in order to build a mine you have to build constructions all around the tile you want to control.

- *Faster version:* if players feel that the game is taking too long to finish, they can agree upon two different ending scenarios: pip victory or time victory. In a pip victory scenario, players agree to end the game when the first player has built constructions worth a certain amount of pips. In a time victory scenario, players agree to end the game when they have played a certain amount of time. The player that is closest to constructing two mines is the winner. In case of a tie, victory is determined by the amount of resources left in the storages.

- *Quicker start:* players can decide to start with one laboratory, or even two.

- *Fair trade version:* in this version players are allowed to trade even when they are not able to construct a building. The active player has to announce the type of construction he wants to save for.

The needed amount of resources of a particular kind is the maximum he can have for this resource. If possibile the player first has to use his moonsuit or sunsuit resources in the trade. A minimum reserve of 1 resource for both armssuit and crownsuit resource is required.

- *Teamwork version:* in this version players play in teams. Two-against-two or one-against-two. The active player can either propose a trade with his team-mate or ask for a gift from his team-mate. In the one-against-two version the single player gets double resources during resource collection.

- *Space Police scenario*: The Martians are angry you are building on their land. They are gathering to destroy your constructions: place three piecepack coins next to the board, number side up, null, ace and two. Every time a Martian Plunder Party would occur, move one coin away from the board (in this version you will not lose resources). Starting with two going down to null. The Martians attack the first time after the null coin is removed when a normal Plunder Party would have occurred. To protect yourself, you have to hire Space Police.
  Up to every three pips worth of buildings (scoutships on top of labs count as well), you have to hire one policeman: 1-3 pips mean one policeman, 4-6 pips mean two policemen, etc. A policeman can be hired for one of the four resources each.
  To indicate how many policemen you have hired, you can use the coins as well (ace=1 and null=6): place them in front of you.
  Coins can be combined if you are not able to indicate your protection with (just) one coin. Or use another die to indicate your police force. Remove the coins after an attack. The policemen have done their job, but they are tired.
  You will have to hire fresh ones to ensure your safety for the next attack. Nothing happens with enough policemen. If however, you were not able to hire enough protection, you will have to suffer the consequences: remove buildings worth of the pips that weren't protected. If, for example, you had 7 pips worth of buildings, but you only managed to hire 2 policemen, you have to remove a one-pip building. The player can decide which building(s) have to be removed from the board.
  For a more challenging game you can: lower the number of "raids" that can happen before the Martians really attack; increase the costs for hiring a policeman; hire one policeman for every pip you have on the board. Maybe you can think of another way to increase the tension.

- *Free board form:* try another form for the board, be creative! You can form a board of 3x8, 4x6, try a cross, or whatever form you can think of... You can also form boards with more holes. For example: for a two player game, form a 4x7 board without placing tiles in the four corners. One by one randomly select a die and roll it. The tile matching the first result will be placed in the upper left corner. The second result will be placed in the upper right corner. The third result will be placed in the lower left corner. Finally the last result will be placed in the lower right corner. The same can be done with a three player game: form a 5x8 board without the corners and randomly choose four dice.

- *Variants mix:* players can choose to combine two or more of these variants. It's up to them to create their own game with these possibilities for other ways of playing Martian Miners. You can even create your own variant or scenario.

Players' reference: summary of turns and table of costs

A. Mandatory actions:
    1. Satellite Scan
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        a. Place/Remove Trader(s)
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B. Optional actions:
- Trade Resource(s)
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Important! Mandatory actions have to be performed in the given order, while optional actions can be executed in the order of your choice, after the mandatory actions.

All costs:

	Sunsuit	Moonsuit	Crownsuit	Armssuit
	Sun	Moon	Crown	Arms
	Fish	Snowflake	Leaf	Flower
	Hearts	Spades	Clubs	Diamonds
Scoutship	1	2	2	
Laboratory	2	1	2	
Mine	1	1	3	3
Move Scoutship	2	2		1 per intersection
Attack Construction	2	2		1 per intersection + ?
Defend Construction				?
Space Police	1	1	1	1

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Attack Construction	2	2		1 per intersection + ?
Defend Construction				?
Space Police	1	1	1	1