

1-5 players, ages 12+, 90-120 minutes

Summary

Since the day you arrived on Europa, you've been awaiting the tell-tale tremors that precede the formation of a new *linea*, or break in the moon's icy surface. Now that day has finally come, and the mineral-laden ocean is exposed to the elements for just a few days. You and the other colonists will compete to extract the moon's natural resources, excavate mineral deposits along the ocean floor, and launch rockets to ship those extracted minerals back to Earth before the surface refreezes.

Components

- 18" x 18" bifold board with an optional acrylic overlay
- 25 resource cubes in each of 5 colors (silica, sulfur, salt, iron, hydrocarbon)
- 5 mineral deposit tiles (double-sided)
- 5 player boards
- Wooden player pieces in 5 colors:
 - 8 worker tokens (octagons)
 - 1 victory point token (star)
 - 1 electricity token (lightning bolt)
 - 1 surface vessel token (container ship)
- 6 white submersible tokens labelled with letters A–F
- 11 acrylic water tokens, 4 acrylic lock tokens, and 1 acrylic Jupiter token
- 35 money tokens (20 x \$1, 10 x \$5, 5 x \$10)
- 10 mini Rocket cards
- 10 mini Technology cards
- 10 mini Colony cards
- a starting player marker

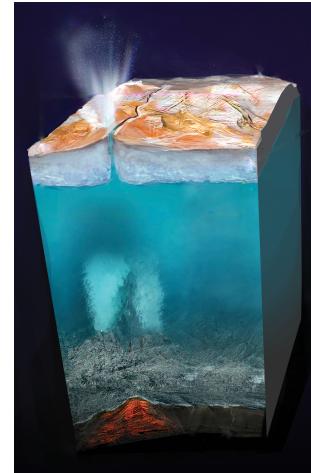
Overview

The main gameboard depicts a cross-section of the moon Europa, which is covered by an ocean of liquid water under a frozen crust. Near the bottom of the board there are a series of mineral deposit tiles, which serve as a source of mineral cubes during the game. The ocean contains squares that will fill up with mineral cubes over the course of the game. Near the surface of the ocean there are movable water tiles which can also contain and transport mineral cubes.

In this game, water tiles always flow from left to right. There are 4 locks distributed horizontally which can be opened or closed to allow or restrict the flow of water. The top left of the ocean is a source where new water tiles flow in to fill in any empty spaces, and water tiles flow out through the lower right of the ocean.

Each of you has a small player board that represents the interior of your surface vessels. The location of your vessel on the main board is indicated by your vessel token. Surface vessels always move left or right across the surface of the water but can only move between adjacent spaces when the surface of the water is at the same level. For this reason, opening and closing locks to manipulate the water level is necessary to navigate your vessel from one side of the board to the other.

There are 6 shared submersible vehicles which can be moved around under the surface of the water and which can pick-up and carry around mineral cubes. Submersibles at the bottom of the ocean can excavate mineral deposits, which advance you on one of the excavation tracks. Submersibles at the surface of the ocean can dock with a surface vessel to unload their mineral cubes.



There are rockets along the surface of the ocean that must be filled up with specific resource cubes. Loading resource cubes into rockets earns victory points, and being the one to complete a rocket provides a technology upgrade for future turns. Launching rockets also reveals buildings as the colony begins to take shape. These buildings allow additional actions or benefits to the players who visit them.



The game lasts 7 rounds as Jupiter moves across the surface of the sky, or until all 8 rockets have launched.

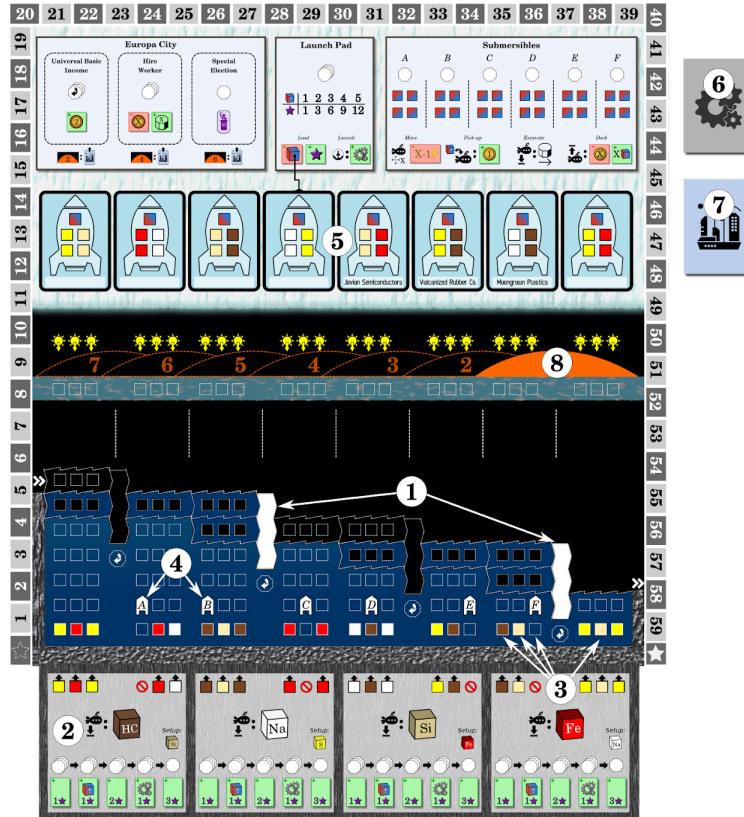
Image Credit: NASA/JPL-Caltech

Setup

First decide if you're playing the Starter Game. If so, you can leave the colony cards in the box and skip any rules that refer to colony cards.

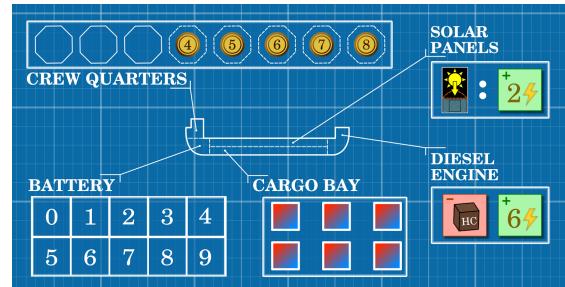
Board setup

1. Locate the acrylic water and lock tokens. Place lock tokens in the 2nd and 4th slot. Place water tokens in all empty water slots to the left of a lock token, as indicated. Place the remaining water and lock tokens in a pile to the left of the board.
2. Randomly select 4 of the 5 deposit tiles, choose a random side for each, and place them in a random order along the bottom of the board.
3. For each cube shown along the top of the chosen mineral deposit tiles, place a cube of that type in the bottom-most ocean space directly above that cube.
4. Place the 6 submersible tokens on the ocean spaces marked with the corresponding letter (A–F).
5. Shuffle the rocket deck and deal 1 card face-up on each of the 8 rocket spaces on the top half of the board. Place the remaining rocket cards back in the box.
6. Place the technology cards in a pile near the board to form the Technology Deck.
7. (*Optional: skip for Starter Game*) Remove the Hydrodynamic Generator and Water Treatment Plant colony cards and place them under the left-most and right-most rocket card. Shuffle the rest and place them in a pile near the board to form the Colony Deck.
8. Place the Jupiter token on the right-most space of the Jupiter track (on #1).



Player setup

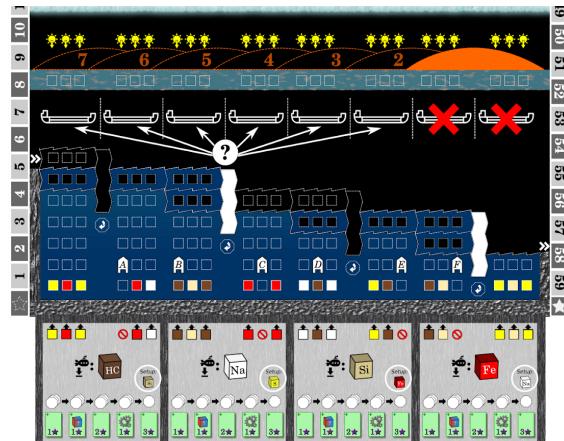
1. Each player should choose a color and take all of the player pieces matching that color.
2. Place 4 worker tokens in your Crew Quarters (or 3 tokens for a 4- or 5-player game). Place the other worker tokens near the main board.
3. Place your electricity token on space 0 of your battery track.
4. Place your VP token on space 0 of the VP track on the main board.
5. Take \$3 in money tokens.



To determine the starting player: everyone shout out the names of planets and moons in our solar system. The last player to think of a planet or moon that hasn't already been said becomes the starting player.

In reverse turn order (counter-clockwise), take turns placing your surface vessels on any unoccupied space at the surface of the ocean on the board, and then take a resource cube of the type marked "Setup" on the deposit tile below them.

You will probably want to **avoid the right-most 2 spaces**, as those spaces are currently blocked by Jupiter and will not receive any sunlight during the first round.



Gameplay

The game proceeds for up to 7 rounds. The Jupiter token serves as a round marker. It begins on the right edge of the board and moves 1 space to the left each round.

Each round proceeds through 3 phases: Sunlight Phase, Action Phase, and Cleanup Phase.

Sunlight Phase

During the sunlight phase, each sunlight icon shines on any surface vessels immediately below it, unless it is blocked by either: a) the Jupiter token, or b) a



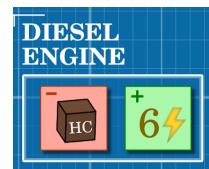
resource cube in the atmosphere layer. Surface vessels do not block sunlight from other surface vessels.

Follow any directions on your mat, technology, or colony cards denoted with a sunlight icon for each of the 3 columns (except for any that are blocked). This generally means you will receive 6 electricity during this phase, and would advance your electricity token 6 spaces on your battery track (up to a maximum of 9).

Diesel Engine

After receiving sunlight, you may spend a hydrocarbon cube to generate 6 additional electricity (up to a maximum of 9).

Instead of placing the hydrocarbon cube back in the supply, add it to the atmosphere track in your vessel's current location. If there are no such spots available, you cannot use the Diesel Engine action.



Action Phase

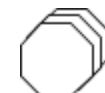
This is the phase where all player actions are taken. Beginning with the player who has the first-player marker, the round proceeds clockwise in turns. On your turn, you may either place a worker or group of workers on a single action space, or pass. Once you pass, your turns are skipped for the rest of the round.

Placing workers

A worker can be placed on any octagon space. These will typically be action spaces on the main board or colony cards.

Placing a worker has an immediate effect. A red box (-) indicates a cost to place and a green box (+) indicates the benefit of placing. You must be able to pay the cost to place the worker. Workers are reclaimed at the end of each round (unless otherwise noted).

Spaces marked with a multiple-octagon icon mean that any number of workers can be placed there over the course of a round. You can place 1 worker per turn, and each worker placed performs the action.



Spaces marked with a single octagon icon can only hold workers from a single player at once. If another player has already performed this action during this round, you must place 1 more worker than them to bump them and perform the action. Remove the other player's worker(s) and return them to their player board. Their workers can be used again during subsequent turns in this round. You may bump your own pieces following these same rules to reuse an action space during the same round.



If an action space has an arrow inside it, you may immediately take another turn after completing this action.

The board action spaces are described in more detail in the *Board actions* section.

Moving your surface vessel

At any time during your turn, you may move your surface vessel any number of spaces horizontally. However, the surface of the water must be at the same level to move between adjacent spaces.

2 or more surface vehicles can occupy the same space.

Using Colony Cards

There are three basic actions printed on the game board: Basic Income, Hire a Worker, and Special Election. Lineae also contains an optional deck of colony cards which provide additional actions that become available throughout the game. After each rocket launches, it may be replaced with a colony card which can be used or which grants additional benefits to the player or players whose surface vessel is located below each card.

Each colony card has a priority number and at the end of the 2nd, 4th, and 6th round the lowest numbered cards will be “promoted” from the rocket row -- where they can only be used by players in a specific location -- up to the Europa City row to replace one of the basic actions. Colony cards that have been promoted in this way can be used regardless of the player’s location.

Cleanup Phase

After all players have passed, check the game end conditions:

- Have all 8 rockets have been launched?
- Was this the 7th round (i.e. Jupiter was on the leftmost space during this round)?

If either condition is true, the game is over. Proceed with the *Game End* section for details. Otherwise, the cleanup phase is performed to get the board ready for the next round.

During the cleanup phase, perform these tasks in order:

1. **Advance Jupiter:** Slide the Jupiter marker 1 space to the left.
2. **Dissolve Minerals:** For every mineral column above a mineral deposit tile, place a resource cube of the specified type on the first empty space above the deposit

tile. Skip past spaces that already have a resource cube or that contain a submersible (i.e. place the cube on the space above them). If all spaces in a column are full, no cubes are placed for that column.

3. **Reset Workers:** All players retrieve their workers from the board and place them back on their player boards.
4. **Promote Colony Building** (rounds 2/4/6 only): Move the revealed colony card with the lowest number over the basic action in Europa City that matches the round indicated. That basic action is no longer available. Replace that colony card with a new one from the Colony Deck. If no colony cards had been revealed, promote the top card of the Colony Deck.

Game End

The game ends at the end of the 7th round, or at the end of a round where all 8 rockets have been launched. Add up the VP from each of your technology cards (denoted with a purple star) and add them to your score.

Finally, you may convert your remaining resources to VP as follows:

- Each \$5 is worth 1 VP.
- Each pair of resource cubes of the same type is worth 1 VP. You may use immediate effects from your technology cards when converting resources to VP.

The player with the most VP wins! In the event of a tie, the player who launched the most rockets is the winner.

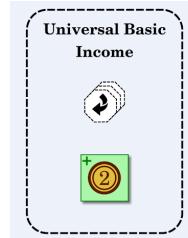
Solo variant

Play as usual, but try to launch all 8 rockets by yourself before the 7th round ends. Keep track of your score and try to beat it next time you play.

Board actions

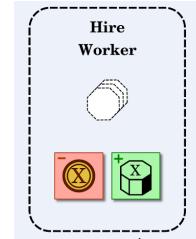
Universal Basic Income

Place a worker here and take \$2. Any number of tokens can be placed in this spot each round. Players may immediately place another worker after placing a worker in this spot.



Hire a Worker

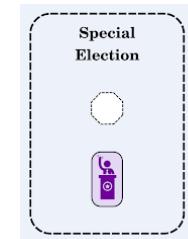
Place a worker here to recruit another worker. Pay \$4 to recruit your 4th worker, \$5 to recruit your 5th worker, \$6 for your 6th worker, etc. Take a new worker from the supply and place it on this spot. Retrieve it along with your other workers at the end of the round.



If you have no more workers in the supply, you may remove a worker from one of the excavation tracks. Recruited workers can no longer be placed on excavation tracks.

Special Election

Place a worker here to take the First Player marker. If another player has already placed a worker in this spot during this round, you can bump them by placing 1 more worker than they did. If you do, take the First Player marker from them.



Launch Pad

Place a worker here to load 1 or more resource cubes from your cargo bay onto the rocket card at the same location as your surface vessel. Each cube placed on the card must match the spot that it covers. Earn 1 VP for the first cube, 2 VP for the second cube, and 3 VP for each subsequent cube loaded in the same turn. Loaded cubes stay on the rocket card until all spaces have been filled.



Launching a Rocket

If you loaded a cube onto the last spot on a card, you have launched the rocket. Return its cubes to the supply and keep the card (it is a tiebreaker).

As a bonus for launching the rocket, choose any remaining card from the Technology Deck. Players are limited to 2 technology cards. If you already have 2 technology cards, you may take a new one but must put one back in the deck.

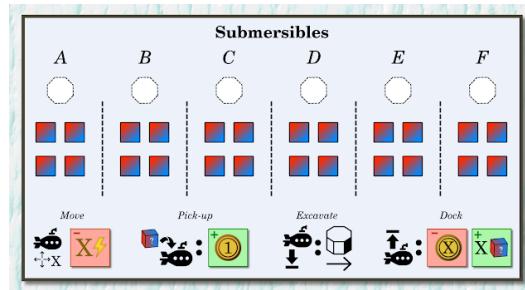
Unless you are playing the Starter Game, replace the rocket card with the top card off of the Colony Deck. This colony card is now available for use by any player whose surface vessel is at the space below it. If there are no cards remaining in the Colony Deck, simply leave the rocket space empty.

Submersibles

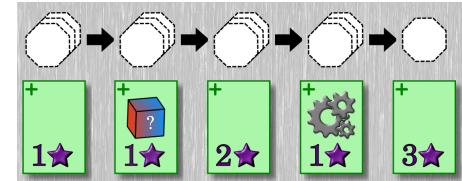
There are 6 shared submersible vehicles which can be moved around under the surface of the water and which can pick-up and carry around mineral cubes. Players can move a submersible by placing a worker on the submersible action space. You may move the submersible 1 space for free, but must then pay 1 electricity per additional space moved. Submersibles cannot move diagonally, but can move through locks and across gaps.

Every time a submersible moves into a space containing a resource cube and if there is room in the submersible's hold, you may move the cube to its hold and take \$1. A submersible cannot end its movement on a space occupied by a cube or another submersible.

If a submersible is at the surface of the water and your surface vessel is above it, you may dock with the submersible. Pay \$1 per cube to remove any number of resource cubes from the submersible and move them to your own cargo bay. Docking with a submersible ends your turn. You cannot move the submersible additional spaces after docking during this turn (but may bump your worker to move the same submersible again during your next turn).



If a submersible is at the ocean floor, you may excavate the mineral deposit below it. Move a resource cube of the type indicated on the mineral deposit tile onto the submersible's hold. You may not excavate the same tile more than once per turn. If you have a worker on this deposit's excavation track already, advance it 1 space and take the bonus specified (1 VP; 1 VP and move a cube of your choice from the supply to your cargo bay; 2 VP; 1 VP and a technology card; and finally 3 VP). If not, place 1 of your workers **from the supply** on the leftmost space on the track and earn 1 VP. If you have no more workers in the supply, you can still perform the excavation but do not receive the bonus. The last space on each track can only be occupied by one player.



Locks

There are 4 locks distributed through the ocean. Each has an action space.

Place a worker in one of these spaces to toggle the lock (i.e. open if it is closed, close if it is open). Then perform the following procedures:

- First, all other players have an opportunity to move their surface vessel as described in *Moving your surface vessel*. However, each player that chooses to move at this time must pay you \$1 to do so (as a toll).
- Now, add or remove the lock token to toggle the lock's state.
- If the lock was opened during this phase, some water tiles will now be able to slide to the right. If there is a water-tile-sized hole, this tile will drop into it (along with any resource cubes on that tile). Water that reaches the right side of the board flows out of the board and is placed back on the stack on the left side. If any submersible tokens flowed off the board, place them back on their starting location (and remove any cube that was already present in that space).
- If the lock was closed during this phase, place a new water tile on the left side of the board and slide it along the top of the ocean surface to the right. Again, it will drop into any empty holes. Continue until no holes remain.



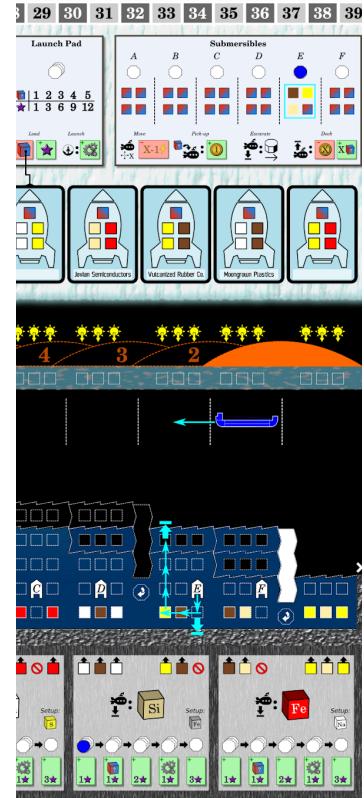
You may immediately place another worker after placing a worker in this spot.

Sample Turn #1

It is the blue player's turn in round 1. They place 1 of their workers on the action space to take control of the E submersible, which begins at the ocean floor above the silica deposit tile.

They then spend 5 electricity to move the submersible as follows:

1. Down one space. This movement is free and does not cost electricity.
2. Excavates the silica deposit tile, which moves a silica cube into submersible E's hold. This also places a worker token from the supply onto the first space on the excavation track and gives them 1 VP.
3. Moves the submersible 1 space to the left, onto a space occupied by a hydrocarbon cube. This hydrocarbon cube moves to E's hold and gives the player \$1.
4. Moves the submersible another space to the left, onto a space occupied by a sulfur cube. This sulfur cube moves to E's hold and gives the player another \$1.
5. Moves the submersible up 3 spaces, until it reaches the surface of the water.
6. Docks with the player's surface vessel, which needs to move left to be above the submersible. This movement is allowed because the water is at the same level.

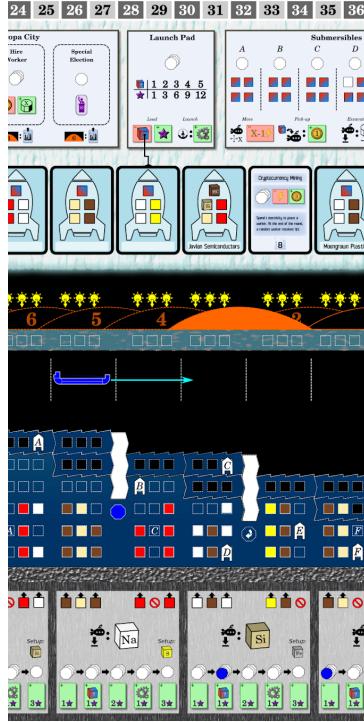


During docking, the blue player decides to purchase the hydrocarbon and sulfur cubes from submersible E's hold for \$1 each. These are removed from E's hold and moved to their cargo bay. The silica cube is left on the submersible.

The blue player spent 1 worker and 5 electricity and earned 1 VP, a sulfur and a hydrocarbon cube. Docking with the submersible ends the player's turn even if they had additional electricity they wanted to spend.

Another player may take control of submersible E during this round by placing 2 of their workers to bump the blue player's 1 worker. That player could dock with E to purchase any remaining cubes and/or move it to pick up more cubes. Workers reset between rounds, so control of submersible E will be up for grabs by any player next round.

Sample Turn #2



It is the blue player's turn again in round 3. They have the 2 iron cubes and 1 silica cube that are necessary to complete the "Jovian Semiconductor" rocket and would like to do so.

Unfortunately they cannot move from their current location to the location of that rocket as the water's surface is not at the same level.

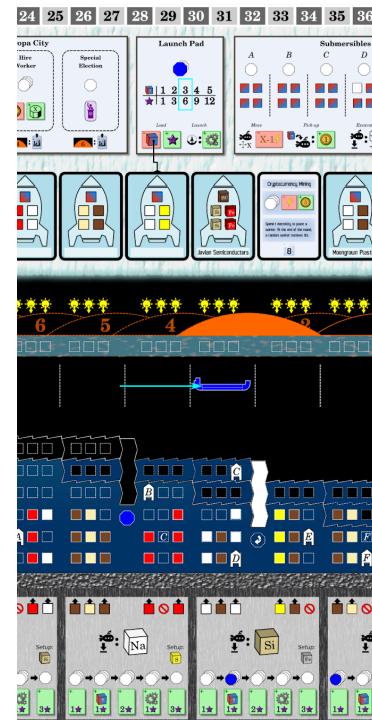
To get there, they first place 1 of their workers on the action space below the lock immediately to their right. After offering other players a chance to move, they remove this lock token and slide all of the water tiles that are no longer locked in place to the right. In this case they will flow off the board on the far right side. The A submersible will also flow off the board and be placed back in its original location as marked on the board.

Because the lock action spaces have an arrow on them, this indicates that the blue player can immediately take a second turn.

For their second turn, the blue player moves their surface vessel to the location of the Jovian Semiconductors rocket and places 1 worker token on the Launch Pad. They place 2 iron and 1 silica cube from their cargo hold on the rocket, and earn 6 VP for placing 3 cubes as indicated on the Launch Pad space.

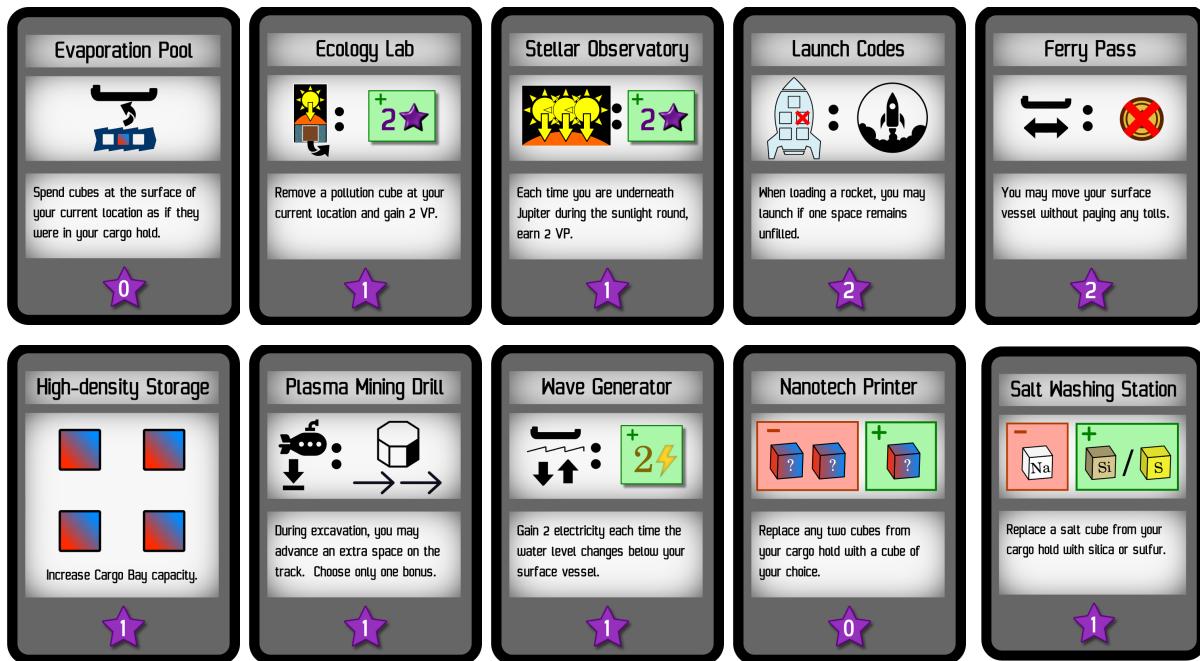
Because the rocket is now filled, they will remove the cubes from it and place them back in the supply. They keep the rocket card (face down) as a tiebreaker. As a bonus for launching the rocket, they can choose any card from the Technology Deck.

Finally, since we are not playing the Starter Game, the player will take the top card off the Colony Deck and place it in the space left behind by the rocket.

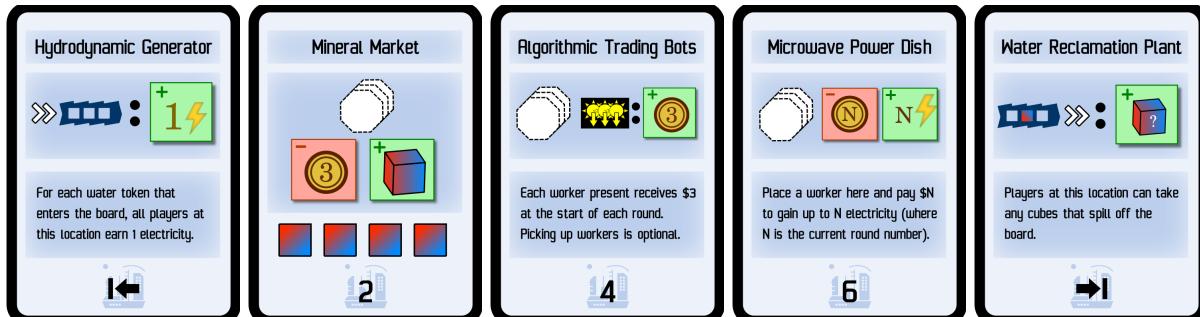


Reference

Technology Cards



Colony Cards



Optional Modules

- **Biogenesis**: adds a sixth resource cube type representing algae, which spawn at the surface during the Sunlight Phase. Additional cards are provided to breed algae, convert it into hydrocarbon, and mix it with salt to super-charge workers.
- **Reactor Core**: includes a rondel with resource cubes which can be used to borrow resources and convert resources into other resources using electricity.