Vincent Verhoeven
Diego Sanchez

Astro Navigators

Rulebook

V.7.1.1

FOLLOW THE STARS AND REACH FOR THE MOON!

Armillary Games 2023

Digsanchez

Tiny Factory Studio

Jeff McDowall Design

Tabletopia, Tabletop Simulator

Oray Studio

Hexy Studio

Gamefound

Big Board Theory

Panda Game Manufacturing

Games/Ship Quest

Game Designer and Developer
Vincent Verhoeven

Graphic Designers
Vincent Verhoeven
Diego Sanchez
Guilhem Bedos

Illustrator
Diego Sanchez

3D-sculpters
Ana Román
Carlos Castaño
Jeff McDowall

Special note on this rulebook version:

This is the **7th version** of the rulebook. ***The new rocket card abilities are added and the rules for the instruments are improved to create a better experience for any player count. In the Solar System mode, the planet card Earth is shuffled into the planet deck***. Although this rulebook is still a prototype, this version should already be able to sufficiently help, blind testers, Tabletop Simulator players, backers and reviewers to understand the base game. Most pictures in this version will still be replaced by renders in the future. Some card designs and backgrounds might still undergo changes after the campaign.

More references and play examples will be added after the campaign.

I use the standard version components to explain the game. In this version no reference images are used to the deluxe version miniatures to avoid confusion for content creators.

This page will later be dedicated to the names of the blind testers, digital testers and other contributors.

A great thank you for the past physical game tests:

Cyril Cousein, Deborah De Hon, Ewout De Leeuw, Marijn Vandermeersch, Matthis Veys, Mike Lasseel, Vicky Vandewiele

A special thanks go to everyone who is following the project. Your ongoing support and interest keeps me going. Keep following on Gamefound, Boardgame Geek and on www.astronavigators.com.

Thank you very much already!

-Vincent-

Transferring

knowledge and courage

by setting an example

For previous generations

For Solange
De Pret

- the sphinx -

For next generations

For Ezio
Verhoeven

-the eagle-

A. Introduction

AstroNavigators is a board game simulating the celestial mechanics within a space race themed worker placement game. During the first (astronomer) part of the game, players will be travelling across the Earth in order to complete celestial observations. This way, navigation knowledge (NK) is gathered for the space race endgame. The second (astronaut) part will use these knowledge points to tackle technical and navigational obstacles. By efficiently using the on-board lunar telescope, sextant and gyroscope, players will push their luck with their newly acquired and cunning abilities. Players will explore different cultural settings and discover anthropological links with astronomy.

1 ASTRONOMER

While time keeps on ticking and the celestial bodies keep on shifting positions, players scan the world for clues and means to finish some objectives in order to be the best prepared astronaut at the space race.

Different scientific discoveries will unlock powers of astronomical instruments to shape time and space to your favour. The evolution of astronomical instruments marks new knowledge to obtain the ultimate skill to reach for the Moon.

During the astronomy part of the game, the best possible and only necessary choices will give you an edge. The optimal strategy with the right cultural ability needs to be exploited to gain the perfect timing to leap ahead.

2 ASTRONAUT

Once players are ready to push their luck, they will rush to a launch pad. Whether it is a space odyssey a half a century ago, or in the near future, the acquired knowledge of the stars will guide each player towards the lunar surface. The investments in past observations and unlocked new abilities before launch, will help to mark your fate as the best astronavigator.

You need ‘eagle eyes’ to anticipate the observations of other players and take the necessary, yet minimal, risk at the right time! The first player able to master all the spaceflight techniques to the Moon and back is likely to be the ultimate winner of the game!

B. Components

Game box (1)

Rulebook (1)

Boards (9)

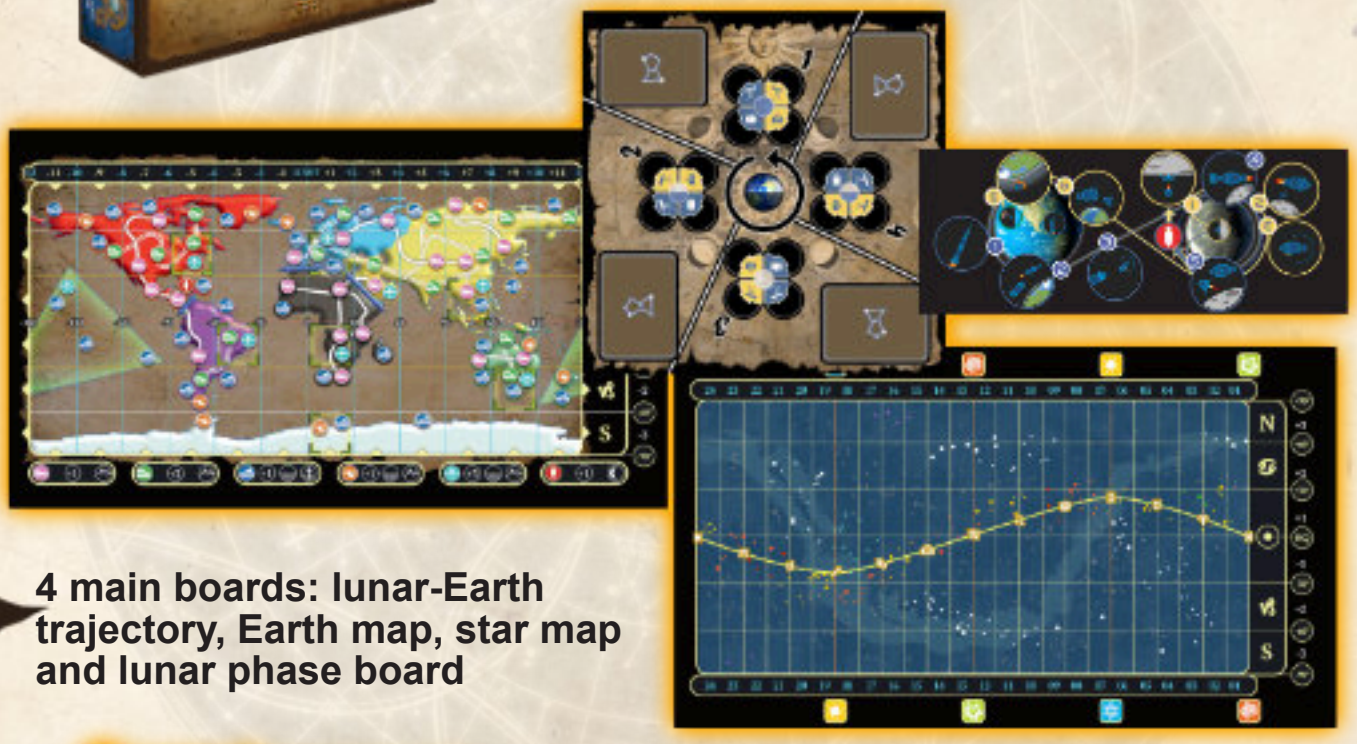
Cards (142)

Punch board tiles (161)

Punch board tokens (10)

wooden tokens (120)

Other (17)



4 main boards: lunar-Earth trajectory, Earth map, star map and lunar phase board

4 player boards

1 orrery board

78 main observation cards

40 planetary observation cards

7 quest cards and instrument tiles

7 character cards

21 hidden agenda cards

8 rocket cards, 8 launch site tokens

61 continent tiles

50 outbound trajectory tiles

50 inbound trajectory tiles

1 first player token, 2 armillary tiles, 1 Sun disc and 2 daylight tiles, 1 time stimulus token

48 set, 16 Luna phase, 8 abort (stage) and 24 vehicle tokens

7 LM & 2 heliport tokens, 7 character discs

4 Player aid cards

8 Planet discs, 1 solar D12 and 5 inv<isibility pillars

7 vehicle dice

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1.0.1 (p13)
1: Star map 03

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Starting at 0

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C. Rules

1. First and Fast

We recommend you to learn and play your first game with this mode. Especially, if you are new to the theme and a casual board gamer. It only takes about 11 pages to learn and only concentrates on the game mechanics.

2. Constellation

We recommend you to play this mode as your next step after the First and Fast, or when you are not new to the theme and a frequent board gamer. It takes an additional 10 pages of game rules. It will be a fuller game experience, because all the abilities and hidden agendas are incorporated in the game.

3. Solar System

We recommend you to only play this mode if you have played a previous mode before and are confident to cover all the aspects of the 3 modes. Requires 8 additional pages to read.

1 First and Fast mode

1.0 PREPARATIONS

1.0.1 Setup

01 Place the main boards (lunar-Earth trajectory, Earth map, star map and lunar phase board) in the middle of the table.

02 Shuffle the lunar trajectory tiles (white numbers with blue background) after sorting them into 5 face down piles according to their stage number.

03 Place the top tiles face down on the lunar trajectory in the corresponding stage slots without peeking at their value.

04 Shuffle the basic observation deck and place it face down near the lunar phase board.

05 Each player chooses and takes a colour of the matching continent.

06 Each player takes their pieces (die and character token) and puts the vehicle die on their home base. This is indicated in a square with green corners. Put the Saturn V rocket card next to the Erath Map.

07 Chronologically place a face-up observation card from the basic observation deck in each week of the lunar phase board and turn the top card of the observation deck face up.

08 The player with the highest starting Navigation Knowledge (NK) is the first player and takes the sextant token. For the starting Navigation Knowledge, look at the value of your starting continent. Ties are first broken by the player who last saw the Big Dipper or Crux constellation. If there is still a tie, the first continent letter in alphabetical order goes. This is only the case for the First and Fast mode.

09 Shuffle the piles of continent tiles after sorting them into 7 piles according to their continent. Then flip the piles so the new top tiles becomes visible. Set the piles aside next to the main board.

10 All players put their **player boards** in front of them and add the corresponding abort, set and lunar phase tokens on their inactive sides on the designated areas on the board. The 6 different vehicle tokens are put on the vehicle area with their coloured side face up.

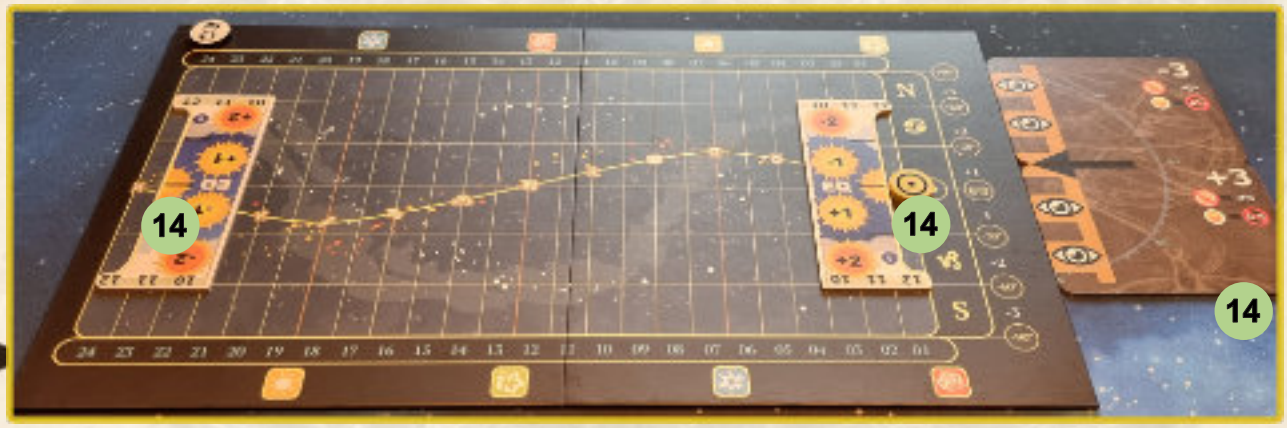
11 Each player takes the topmost corresponding tile of their continent and put it face-up in the designated area on their **player board**. Make sure that each pile of continent tiles has its top tile face up.

12 Players take the player aids near them

13 Each player indicates on their **player board** the starting NK on the NK dial (13a) and set the DV dial at 0 (13b).

14 Put the daylight tiles and Sun disk on the star map and set them on the month of March. Add the armillary tile at the right side of the star map with the arrow pointed to the star map.

15 Add the bonus reward and double quest reward token (time stimulus) at end year cycle.



1.0.2 Game Chapters

Astronomer (gathering Navigation Knowledge)

- In this mode it will be the biggest chapter.
- It plays out on the Earth map and observation area.

Astronaut (confronting Navigation Difficulties)

- It will be shorter than in the other modes, because there is no return track.
- It plays out on the player board and the lunar-Earth trajectory.

1.0.3 Understanding the goals

- Score observations and use vehicles as efficient as possible in the shortest amount of time.
- Keep track of your opponents' progress.
- Be the first to reach the Moon: focus on scoring observation sets for the scanning telescope to go faster and on some lunar phases for the sextant to tackle the heaviest stages.

pitfalls:

- Collecting too many points.
- Forgetting to go to the launch pad.
- Too much short distance travelling, we encourage travel connections in one turn.
- Launching too soon (min 60 NK for the first mode).
- Having no lunar phase tokens (min 1-2).

1.0.4 Gameplay

There are 5 phases in a round. A round is also called a **month** in the game.

- **Action phase (4 options)**
- **Resolution phase**
- **Calibration phase**
- **Planet phase**
- **First player phase**

- Let's have a look at the **Action phase**. The action phase starts with the first player choosing 1 of 4 actions in an available week by placing his astronomer on the designated spot of the chosen week without executing the action just yet. That week becomes unavailable for the next players. Then, the next player clockwise does the same. In a 4 player game, it means that the last player of the month has to choose the remaining available week.

The possible actions are a spontaneous observation, a travelling action, a planning action and a planned observation action.

1. ***A spontaneous observation is scoring a visible celestial object present in the current week in which the astronomer is taking the action. A lunar phase can be scored when it matches with the corresponding week, marked by a phase icon and number of the week in the month. For constellations, visibility ranges should be checked on the star map according to the current position of the astronomer's vehicle die on the Earth map.***
2. ***The travelling action needs a specific vehicle choice as primary travel movement, to be declared and indicated on the vehicle die on the Earth map during a player's action phase. Only the first use of a vehicle is rewarded in the game. Travelling connections in one turn can be activated with continent tiles, only after the primary travel movement.***
3. ***If the card in the present week is not visible, but the astronomer wishes to observe it in another month, the card can be put in the save area of the player board as planning, which can only hold one saved card at a time. Switching a saved card is possible by swapping the card in the week with the one in the saved area.***
4. ***If an astronomer wishes to observe a saved card, he puts the planned card on top of the stack of cards in the current week to indicate his intentions during the action phase.***

- During the **Resolution phase**, players will execute their chosen action in chronological order according to the 4 weeks in the month, starting with the first week, then the second etc.
- The **On-board calibration** phase can only be used by characters that are prepared as astronauts. They will then be able to use any of the on-board instruments, like the sextant, scanner telescope and gyroscope, to enhance their chances of success on the lunar-Earth trajectory.

- After all that, the **Planet movement** phase prepares the astronomers for the next month and shows the calibration results for the next move of the astronauts if they have calibrated their instruments. The first player shifts the Sun disk on the star map to the next zodiac on the ecliptic and refreshes the weeks with new observation cards from the draw deck. The top card of the deck is revealed to have a peek in the future.

- Finally the **first player** passes the first player token to the next player to the left.

1.0.5 Constellation sets

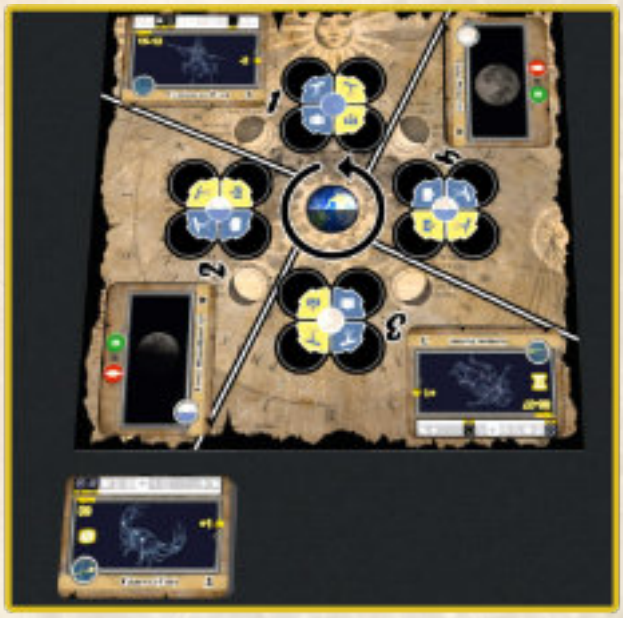
- Whenever you score an observation card and you have collected a certain amount of symbols you score an additional amount of 10 NK. In the example, the Milky Way set has been scored. A player can only score each set once per game. In the example the sets Orientation and the Summer Triangle are one symbol away to be scored. The minimum required amount is indicated underneath the symbol on the card. Multiple sets may be scored simultaneously. Each set can only be activated once per game, when this happens, the corresponding set token is activated on the player board.

1.1 ASTRONOMER

1.1.1 Checking Observations

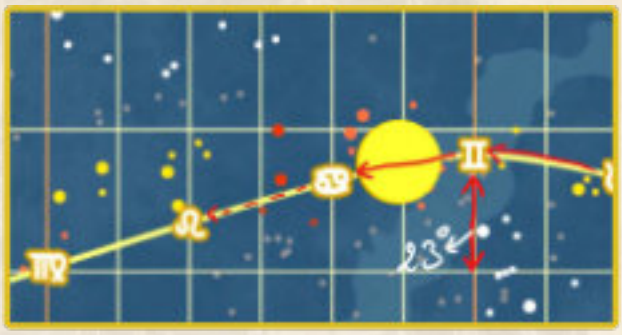
- The moon phases are checked with the symbols and week numbers under the observation card on the lunar phase board.

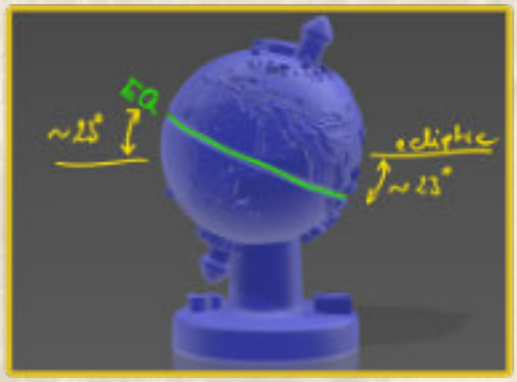
- If one of the cards in one of the four weeks corresponds with the moon phase icons, the card can be observed and scored.

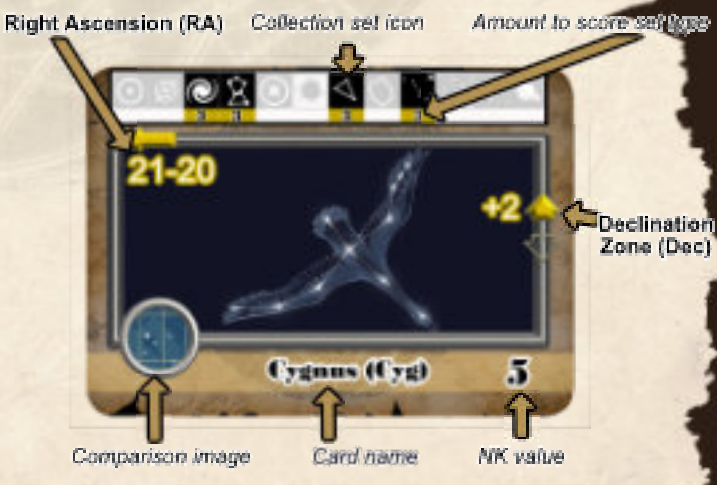


- How to observe the constellations? Before diving into the game mechanics, I want to show you the science behind it. On the star map here, which is a flat projection of a celestial sphere, you see the solar disc in the sky with the invisibility range during certain months.

Constellations with parts in that range are not entirely visible during a certain period in the year. These periods are translated into months. Each month the Sun is blocking constellations with its light. The background constellations of the Sun's disk change monthly and are called the zodiac constellations. The path the Sun makes through the zodiac areas is called the ecliptic, which is directly linked with the plane of the Earth's orbit in the Solar System. What you see as 'the Sun moving to the left' during the year is actually 'the observer moving to the right' on Earth with an axis tilted in an angle of about 23° with the celestial equator during summer solstice, when the Sun covers the constellation Gemini in the sky. On a flat projection this circle forms a sinusoid.







1.1.2 Positioning

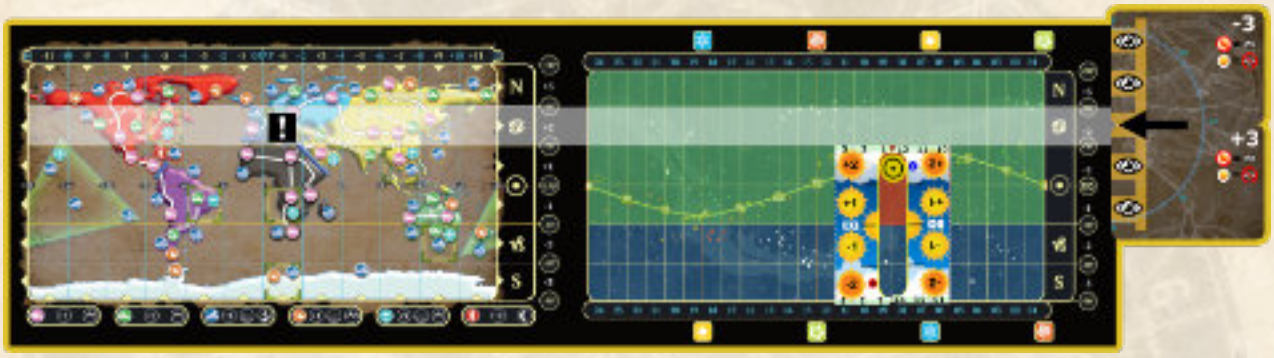
- The link between the Earth map and the star map is the position on Earth and the zenith of the observer. The zenith is what is called the highest point above the observer's head in an angle of 90° to the horizon. By combining the main board maps, it is fairly easy to find the zenith of certain latitude. To simplify the game we work with latitude and longitude zones of 30° and on the star map the right ascension is also split up into 15°, corresponding to one hour. The latitude regions in the game can be linked to the celestial zenith regions by simply following the same row.

- The armillary sphere depicted below shows how the celestial sphere is linked with the observer's zenith and horizons.

1.1.3 Visibility ranges on the star map

- Comparing the zones on the celestial spheres will help you understand the correlation with the positions and the celestial visibility.

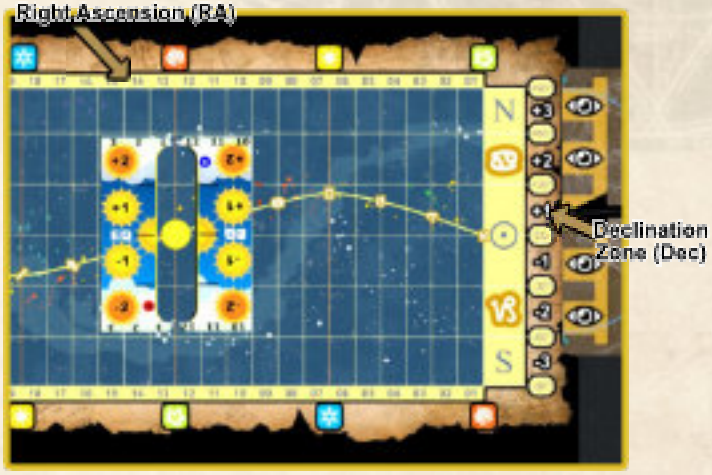
- Let's say we are in August, the 8th month

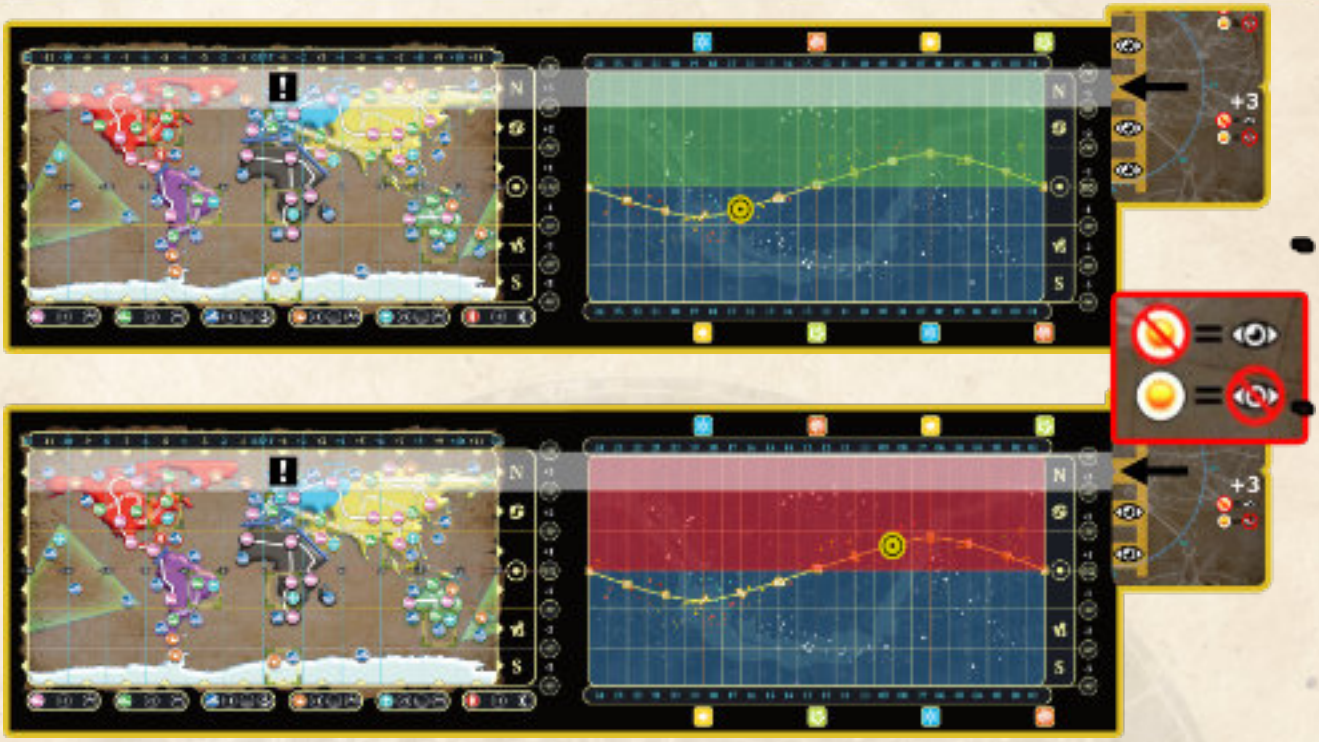


of the year, but the 6th month in the game from the start of spring (month 3). To show that some stars are present during day and night we need to slide the daylight cards to the zenith position. The armillary card should be pointing at the zenith with the arrow. The nocturnal visible area is the green area minus the area covered by the daylight tiles.

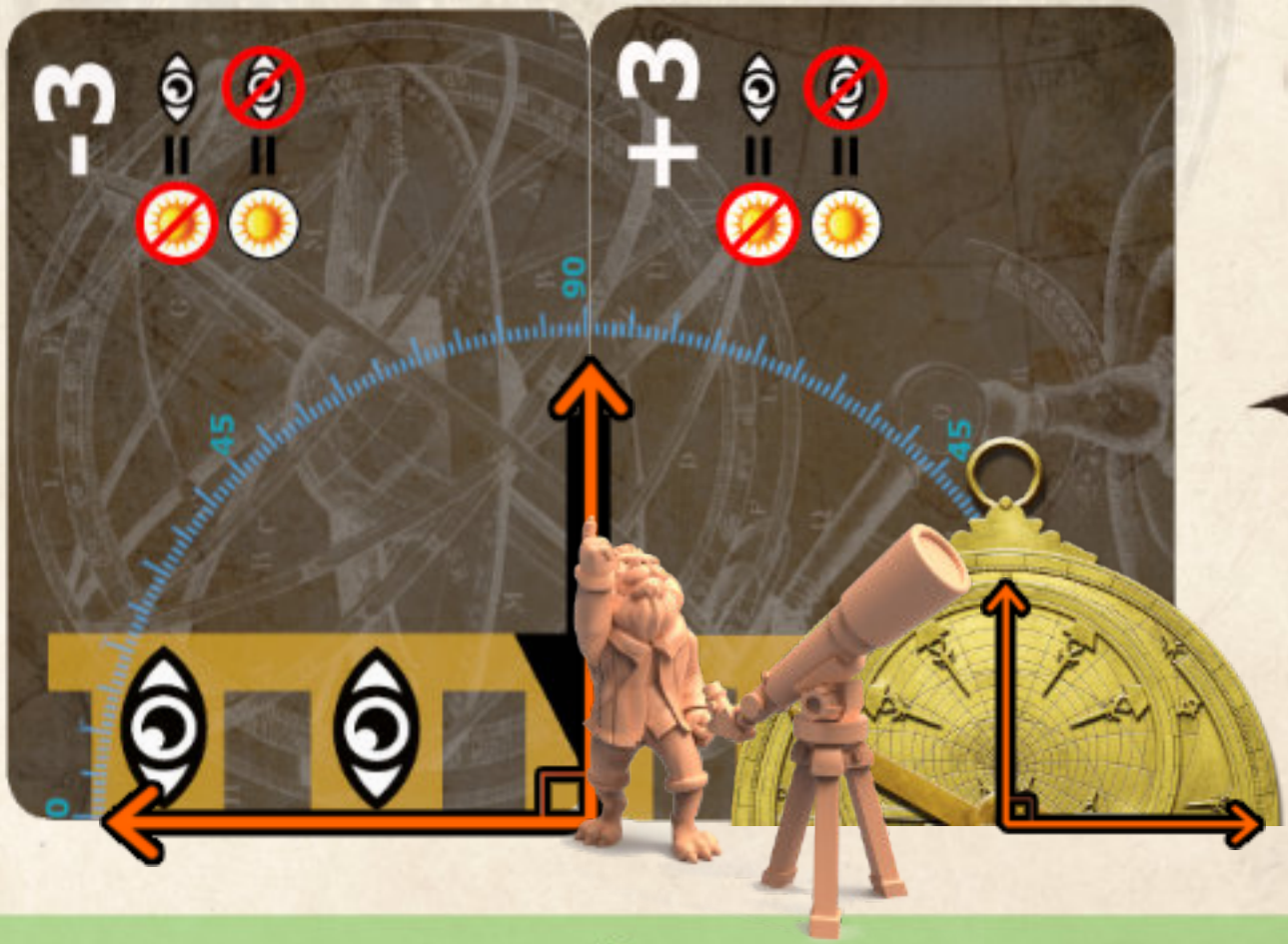
- The first example is for the northern hemisphere '+2'-zone, showing 2 never setting latitude zones which are not covered by any part of the daylight tiles. The solar disk is closer to the zenith at noon in the summer than in the winter of the current location.

- When in doubt, like during the equinoxes twice a year, keep the EQ line as near to the equator as possible. This means that during the start of spring or fall, tropical zones +1 and -1 will have the same daylight card position in the game.





- For the North Pole region, the entire 3 rows above the equator are visible during the northern polar nights, when the solar disk is on the other hemisphere. The same goes for the South Pole region, when the entire 3 rows under the equator are visible during southern polar nights. During the equinoxes, when the solar disk is on the equator, no polar nocturnal observations are possible in either hemisphere. Transits however, like solar eclipses and in later modes planetary transits, are only possible when the solar disk is visible (including equinox).



1.1.4 Travel ranges

- The D6 vehicle die choice in the digital version on Tabletopia follows the iconography under the world map from 1 to 6. In the PnP-version a regular die can be used that way.

- Counting steps can be done orthogonally and diagonally.

- Vehicles start at a spot with their icon and must end their movement in a spot with the same icon.

- The car goes a maximum of 1 step following the road on land.

- The train goes a maximum of 2 steps following the rails on land.

In the example above is indicated that you are not allowed to stop with the train in a square without another train icon.

- The boat goes a maximum of 1 step following water ways and seas, without crossing land orthogonally or diagonally. As

an exception, a boat may end a movement in open waters, but you can only change vehicle, if available, next time after reaching a port (boat icon).

- In the North Pole region the upper line is a point, connecting all squares with each other. Boats can use icebreaker sea

ways, while planes and helicopters can execute trans-polar flights. In the South Pole however, a land mass keeps boats from crossing. Only trans-polar flights are possible.

- The helicopter flies a maximum of 1 step over land or water.

- The plane flies a maximum of 3 steps over land or water.

• The spaceship leaves the world map, starting the Lunar Trajectory Movement, during your astronaut chapter, to the next available stage to the Moon.

1.1.5 Travel tokens

• There are vehicle tokens and continent tokens.

• All players start with their continent token matching their home, gaining the corresponding NK. Each time a player visits a new continent by arriving at the corresponding vehicle icon linked to that continent, a matching continent tile is drawn and points are acquired. One vehicle icon on a continent tile can be triggered during travelling for additional connections after the primary travel action, when the icon is also present on the current world map square. After activation, flip the continent tile.• After each first usage of a vehicle,

gain the corresponding points and flip the vehicle token to its point value side.

• Whenever you have collected all vehicle tokens or continent tiles within the first year cycle, you get a bonus of 20 NK, indicated by the bonus reward token.

1.1.6 End year cycle

When a one year cycle is complete, no vehicle/continent bonuses (+20NK) are granted anymore. Normal vehicle points are still valid. The end of the second year cycle is the end of the game. Ignore the flag icon for the first mode on the time stimulus token.

1.2 ASTRONAUT

1.2.1 Finishing Navigator training

Once you decide not to conduct anymore observations, the On-board calibration phase is available. You may declare that your character becomes prepared as an astronaut and flip your character token to the astronaut side after the resolution phase. If you wish to calibrate, shift your character token towards covering the lunar phase token between the actions on the current week to calibrate the on-board

spaceship instruments. If there are more astronauts, the calibration order follows the week order. From this point on, the player is not allowed to conduct any more observations until his first rocket launch has been activated. Travel movements are still allowed.

When a one year cycle is complete, all players must finish their Navigator training as Astronomers. Only travel movements are still allowed, but no vehicle/continent points or bonuses are granted anymore!

1.2.2 On-board calibration

During this phase a scored lunar phase on the Space Sextant (SXT) or/and a constellation set token on the Scanner Telescope (SCT) can be spent. An extra set token from the gyroscope area (blue area) can be placed on the Attitude Indicator (AI) of the gyroscope to raise the odds. One of both **set symbols** (**on SCT and AI**) has to appear in the observation area during planet movement to get an extra movement on the lunar trajectory. In the resolution phase your astronaut **does not have to be** in the week with the top observation card bearing the same set symbol. Any token on the SXT or SCT is spent during the next resolution phase. The token on the AI can be used again later and is unspent. No gyroscope calibration is possible without SCT calibration, and is therefor only possible if you have at least two set tokens. The **lunar phase** spent on the **SXT** may negate any tile value encountered during the next resolution phase.

1.2.3 Lunar trajectory movement

After each launch, the player **launching** and every player still on the **Earth** map **draws a trajectory tile** from the stage number deck of tiles they haven't drawn yet. The stage number is common knowledge, but keep the values private. Movements go from the Earth map to the first available stage on the lunar trajectory. Each turn movement goes to the next available stage. If unavailable and thus occupied according to player count, skip stages until the next available stage or moon landing. Every tile can hold two vehicle dice in a 3-4 player game and one vehicle die in a 1-2 player game (spacecraft housing). Add the lunar mode (LM) token on top of your vehicle die on or while passing stage 3. Stage 5 is not the last stage. The lunar surface is the last stage of the outbound trajectory. Put the LM-token there to indicate landing. The CSM or spacecraft die is put in orbit (spacecraft symbol). **Once per game a player may exchange one of his/her drawn trajectory tiles from a corresponding stage with a tile on the trajectory during his/her movement. The place of movement and the trajectory tile does not have to be the same. If you replaced the same value, get +1 movement.**

Stage values are negative Difficulty Values (DV) and its total absolute value may never exceed the total value of your Navigation Knowledge. The DV of a trajectory tile is added to your DV dial with each step, unless mitigated in any way by skipping due to full spacecraft housing or lunar phase tokens. In the example above, you can see the red vehicle die skips stage 3 because of the maximum spacecraft housing.

1.2.4 Abort re/action

If the total amount of the gathered DV would ever exceed your NK, you need to spend the "Abort" token by flipping it to its back side, and restart at your previously used launch pad (with the spacecraft CM icon or rocket miniature), without regaining your spent lunar phase and constellation set tokens, but resetting the Difficulty Value.

During the On-board Calibration phase, you may spend the "Abort Stage" token by flipping it to its back side, to restart at the launch pad, resetting the Difficulty Value and also regaining all spent lunar phase and constellation set tokens.

1.3 FINAL NOTES

1.3.1 Winner

The first astronaut arriving on the lunar surface is the winner.

1.3.2 Player aid

Use the player aid to follow the phases.

1.3.3 Ignoring symbols for this mode

In this mode 'Time', 'Telescope' and 'Solar Protection' symbols are ignored and form no restrictions during the game. No character card abilities, hidden agendas, quests, instruments nor alternate launch sites are used in this game mode. Ignore all non-vehicle icons on the continent tiles.

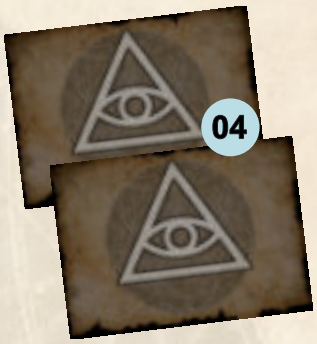
2 Constellation mode

2.0 BASIC RULES

2.0.1 First and Fast rules

All the basic rules are found in the previous mode, except for minor setup changes and rule expansions. The most striking upgrades in the rules are additions of asymmetric abilities of the characters, their hidden agendas and the Earth Trajectory with a return track. The win condition is based on Reputation Points. You will be able to observe space from the lunar surface, and the Earth trajectory only allows an abort action, not an abort stage action.

2.0.2 Additional setup



01 Shuffle the ability cards and the first player who last saw the Orion constellation in the night sky (tiebreaker: one's birthday closest to 21 March) may start drawing 2 ability cards, choose one to keep unrevealed and shuffle the other card back.

02 The player to the right does the same, and then the next player to the right and so on, until everyone has an ability card.

03 Players reveal their character and ability and place their ability card in the designated area near the player board.

04 Each player takes the corresponding character standees or miniatures, the vehicle die, spaceship/lander token or miniature and the 2 basic hidden agenda cards.

05 Follow the First and Fast mode setup (1.0.1).

06 Shuffle the Earth trajectory tiles (blue numbers with yellow background) after sorting them into 5 piles according to their stage number.

07 Add the deck of 4 Terra cards near the lunar-Earth trajectory board.

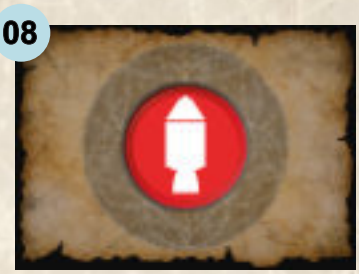
08 Shuffle the Alternative Launch Sites deck and put it face down near the main board.

09 Place the top tiles on the Earth trajectory without peeking.

10 Each player chooses a hidden agenda card and places it unrevealed next to the ability card in the designated area near the player board, and puts the other card back in the box.

11 The player who last choose a character will start the game as first player and takes the first player token (sextant).

12 Player turns alternate clockwise (to the left).



2.1 ASTRONOMER

2.1.1 Abilities

Neil Aquila (North America)

Starting location: +2, -60/-90

Ability: Neil can save up to 3 observation cards instead of 1. During a planned observation, multiple cards can be scored if observable.

Time: During the action phase you can choose to score the second card on top of the observation week instead of the top card by sliding that top card to the bottom. Otherwise, never change the order of cards in a week unless instructed.

João Luna (South America)

Starting location: -1, -30/-60

Ability: Observing a solar eclipse, planet transit or a lunar eclipse is rewarded twice the NK.

Solar protection: Some observation cards require a 'Solar protection' technique. This technique is required for transits like solar eclipses and for some planet observation cards with solar transits from the next mode.

Yuri Newton (Europe)

Starting location: +2, 0/+30

Ability: While executing a planned observation, score the spontaneous observation as well if able.

Telescope: Some planet observation cards from the next mode require the telescope technique.

Leo Maseko (Africa)

Starting location: -1, 0/+30

Ability: Observations of constellations are worth 10 Navigation Knowledge (NK) points instead of 5. No rewards for Milky Way observations. No NK for set collections. Set collection tokens are rewarded though.

Telescope: Some planet observation cards from the next mode require the telescope technique.

Wang Xiongmao (Asia)

Starting location: +1, +90/+120

Ability: Lunar observations are rewarded with 5 extra Navigation Knowledge (NK) points.

Time: During the action phase you can choose to score the second card on top of the observation week instead of the top card by sliding that top card to the bottom. Otherwise, never change the order of cards in a week unless instructed.

Jarrah Walker (Oceania)

Starting location: -2, +120/+150

Ability: Jarrah may take an additional step by boat.

Solar protection: Some observation cards require a 'Solar protection' technique. This technique is required for transits like solar eclipses and for some planet observation cards with solar transits from the next mode.

Sphen Easydive (Antarctica)

Starting location: -3, 0/+30

Ability: After choosing the travel action, Sphen may instead of moving, place or change the location of up to 2 heliport tokens. This counts as his primary travel action. Followup travel connections are allowed in either case.

Time: During the action phase you can choose to score the second card on top of the observation week instead of the top card by sliding that top card to the bottom. Otherwise, never change the order of cards in a week unless instructed.

2.1.2 Basic Hidden Agendas

Hidden Agendas are secret missions to obtain unique abilities for the endgame.

Neil Aquila (North America)

1. **Apollo Star Map**

Mission: Score the Summer Triangle.

Reward: If successful, reveal while leaving step 2 on the track towards the Moon. Skip step 3, ignore its value and continue to step 4. Don't reveal tile 3 for this action. The same goes for the way back to Earth.

2. **Spying the World**

Mission: Visit all continents, except Antarctica.

Reward: If successful, reveal while launching to directly go to step 2 on the track towards the Moon.

João Luna (South America)

1. **Galactic Alignment**

Mission: Score 'Milky Way' before the 12th month. (use the D12 to keep track, March is month 3)

Reward: If successful, reveal at the start of the 12th month. Each time you resolve a move action in a week which has a top observation card with a 'Milky Way' icon, move 1 additional step on the lunar-Earth trajectory board, while facing all DV along the way.

2. **Demons and Jaguars**

Mission: Observe a solar and a lunar eclipse.

Reward: If successful, reveal while launching. Each time a Luna Phase shows up in one of the observation weeks, the current DV is 0. The lunar phase doesn't need to match the week.

Yuri Newton (Europe)

1. **Science and Superstition**

Mission: Score Precession.

Reward: If successful, reveal while launching. For Yuri alone, the maximum spacecraft housing in on trajectory tile 2 or 4 is decreased by 1. Choose one of both on the outbound lunar trajectory and one on the inbound Earth trajectory. Choose while approaching outbound trajectory tile 2 for the outbound choice, and choose while approaching the inbound trajectory tile 2 for the inbound choice.

2. **Chasing the Hunter**

Mission: Observe Scorpius and Orion.

Reward: If successful, reveal while launching. Whenever a player jumps your current step in space, move one step while facing all DV along the way. Ignore the spacecraft housing rule in this situation to avoid a jump, which is often the case in a 2 player game.

Leo Maseko (Africa)

1. **Between the Poles**

Mission: Score Polar Axis.

Reward: If successful, reveal while launching. After moving to the next step, draw a new tile of the same step type and the new DV is the difference of the stage DV and the DV of the drawn tile. Discard the drawn tile afterwards.

2. **Sphinx and Pyramids**

Mission: Observe Leo and Orion. Then, be on location Latitude Region +1 and Longitude Region 0/+30.

Reward: If successful, reveal at the indicated spot. When the current DV is 0 or 5, move 1 additional step on the lunar-Earth trajectory, while facing all DV along the way.

Wang Xiongmao (Asia)

1. **Moon Festival**

Mission: Observe all the Moon Phases.

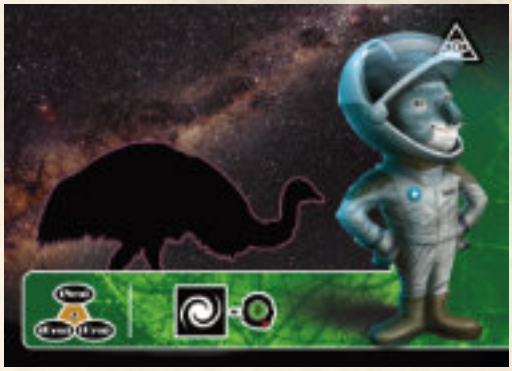
Reward: If successful, reveal while launching. After each movement, you may draw a new tile once and change it with the current tile. Apply the new DV for that step from then on. If any other vehicle is present on the previous tile, place it back on the new tile.

2. **Qixi Festival**

Mission: Observe 2 of the 3 options: Cygnus, Lyra, and Aquila.

Reward: If successful, reveal while launching. You can spend each Lunar Phase twice during the game. After first activation, turn the lunar phase token back to the crescent symbol, but leave it on the SXT after resolution. To activate a second time, turn the token again to the inactive side and place it back on its original spot after resolution. Lunar phase tokens gained from Earth Rise can also be used twice.

Jarrah Walker (Oceania)



1. **Hokule'a**

Mission: Score ‘North & South’ and ‘Orientation’ and travel the Polynesian Triangle.

Reward: If successful, reveal while in the Polynesian Triangle. Each time you resolve a move action in a week which has a top observation card with a ‘North & South’ or ‘Orientation’ set icon, move 1 additional step on the lunar-Earth trajectory board, while facing all DV along the way.

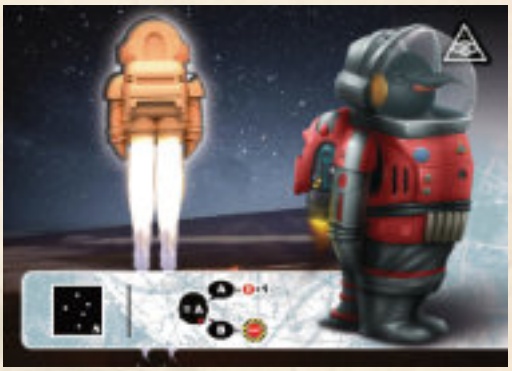
2. **Walkabout Emu**

Mission: Observe 2 of the 3 options: Scorpius, Centaurus, and Crux.

Reward: If successful, reveal while launching. Each time you resolve a move action in a week which has a top observation card with a ‘Milky Way’ icon, Jarrah’s current stage is considered to have a DV of 0.

Sphen Easydive (Antarctica)

1. **Slippery Boost**



Mission: Score Southern Sky.

Reward: If successful, reveal while launching. After moving to the next stage, Sphen may guess the value of a newly drawn tile of the same step type. If Sphen guessed correctly, he moves to the next stage. If a different value was drawn, Sphen aborts the mission for free. No abort token is lost unless the difficulty value would exceed Sphen's navigation knowledge. Repeat the process at your own risk.

2. **Thermal Roll**

Mission: Score Orientation.

Reward: If successful, reveal before launching. Name a value. Each time Sphen draws a tile with that value, Sphen's current stage is considered to have a DV of 0.

2.1.3 Observation technique requirements

- Time

During the action phase you can choose to score the second card on top of the observation week instead of the top card by sliding that top card to the bottom. Otherwise, never change the order of cards in a week unless instructed.

- Telescope

Some observation cards require the 'Telescope' ability or the activation of a continent tile with the telescope icon. Characters Yuri Newton and Leo Maseko have this ability, and only some planet observation cards from the next mode require this technique.

- Solar protection

Some observation cards require the 'Solar protection technique' ability or the activation of a continent tile with the solar protection icon. This technique is required for transits like solar eclipses and for some planet observation cards with solar transits from the next mode.

2.1.4 Dice Chain travelling

- Arriving on the same spot with another vehicle die

Roll your vehicle die when arriving at the same spot as another player's vehicle die. When you rolled the same die face as that other player's vehicle die, you may travel one legal connection of your choice for free. If successful, turn the die face to the new choice, otherwise keep the original die face before the roll.

2.2 ASTRONAUT

2.2.1 Alternative Launch Sites

A player can ***reveal the top card*** of the Alternative Launch Site deck after activating the continent tile with a **spacecraft vehicle icon** (red background) on it. Add an alternative launch site token or miniature rocket on the designated square on the world map. If a player activates the continent tile with a **rocket icon** (white background) on it, he ***draws the 2 top cards*** of the Alternative Launch Site deck, ***chooses 1 and shuffles the other back in that deck. The player reveals the launch site whenever he decides to use it.***

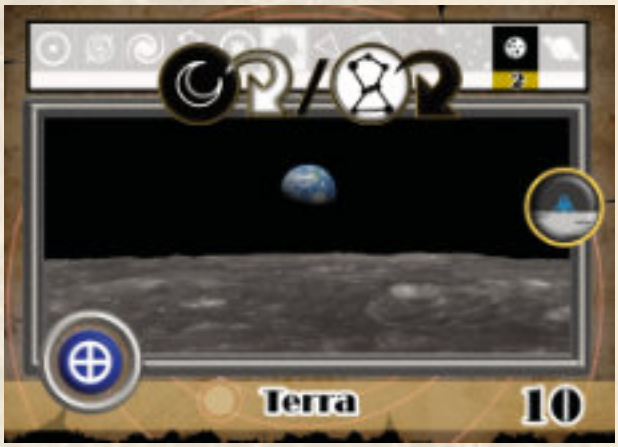
For this mode you should ignore the bonus depicted in the engine frame under the location coordinates. The player who draw the launch site chooses the location if there is a multiple choice. These rocket abilities will be part of the Solar System mode.

2.2.2 Observation from lunar orbit

Once the player's lunar mode (LM as miniature or token) has landed, the command mode (CM as vehicle die face or miniature) is placed between stage tiles on the board in lunar orbit. See black and purple vehicle die (CM) in the image on the next page

- Earth Rise

While the LM is on the surface, the CM can observe the Earth Rise (Terra) with an observe action.



Compared to the Solar System mode, no special preparation is needed, just a separate observation action. One of the Terra cards set aside can be scored this way. The rocky planet set icon has no influence in this mode.

2.2.3 Earth Trajectory movement

- *Launching ascent LM for 'second rendezvous'*

When leaving the lunar surface with a 'travelling action', put the vehicle die or CM-miniature on stage 1 of the Earth Trajectory and flip the token on the lunar surface to the descent LM face, or detach the ascent LM from the descent LM and fix it on the miniature CM.

- *Release ascent LM from CM on Earth Trajectory stage 2*

When playing with the miniatures, remove the ascent LM.

Stage 5 is not the last stage. The Earth surface is the last stage of the inbound trajectory. Put the CM there to indicate landing.

2.2.4 Abort re/action

Once on the Earth Trajectory, an abort situation is a direct dropout of the game and the player falls into secondary ranking, marking his last reached stage. No leftover points are granted when aborted this way. If no one successfully returned to Earth at the end of the game, the player who has reached the furthest Earth Trajectory stage, and thus closer to Earth, is first in arrival position. If you aborted without the activation of an abort button, you will never receive reputation points for arrival position.

2.3 FINAL NOTES

2.3.1 Winner

The winner of the game is determined not only by the race, but also by the knowledge you acquired. This balances out fast plays without efforts for other aspects of the game.

A system of reputation has been laid out. Although the race is of paramount importance, you will earn reputation for successfully managing hidden agendas and economizing on DV.

The winner of the game is the astronavigator with the most reputation points. Tiebreaker is the position in the race.

Reputation points (RP)

	4 players	3 players	2 players
Arrival position	**3-2-1-0**	**2-1-0**	**1-0**
Most leftover points = *NK-DV*	**2-1-0**	**1-0**	**1-0**
Hidden Agenda	**+1**	**+1**	**+1**

3 Solar System mode

3.0 BASIC RULES

3.0.1 Constellation rules

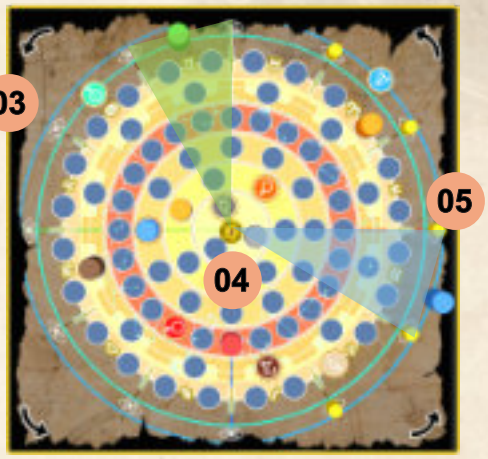
All the basic rules are found in the previous mode, except for minor setup changes and rule expansions. The most striking upgrades in the rules are an orrery board with a model of the Solar System, additional hidden agendas for planet observations and quests to wield powerful astronomical instruments.

3.0.2 Additional setup

01 Add the third hidden agenda per character to the choice in the Constellation mode setup (2.0.2).

02 Put the orrery board to the right of the main board after the First and Fast mode setup (1.0.1) has been done in the Constellation mode setup (2.0.2) and wait with placing the starting continent tile on your player board.

03 Place all planet disks or miniatures (image right) on their designated start position on the orrery for your first Solar System game. In a next game, players will have a better feeling with the positions and can then alternately choose a spot for a non-Earth planet in its orbit, starting with the one who last chose a character. Uranus and Neptune can be placed in any triangular zodiac zone (see image below) on their orbit.



04 Place the D12 Sun die in the middle of the orrery on face 3 (March).

05 Cover 5 visibility icons with 5 invisibility pillars, on the Sun's opposite site to planet Earth, indicating 4 triangular zodiac zones blocked by Sunlight for the observer on Earth.

06 Shuffle the planet observation deck together with the 'Terra'-cards and put it near the lunar phase board.

07 Reveal the top planet observation card and put it face up on the deck.

08 Turn each continent pile face up.

09 Each player places their starting continent tile on their player board

10 Shuffle and put the quest/instrument deck face down near the orrery board. Put the instrument tokens or miniatures near the deck.

11 Each player adds their inactive planet set tokens to their player board.

3.1 ASTRONOMER

3.1.1 Extra Hidden Agenda

Neil Aquila (North America)

- **Asteroid Belt**

1. Observe Jupiter and Mars.

2. If successful, reveal while launching. Each time both Jupiter and Mars are visible on the Orrery or on top of the Planet Deck, **choose: difficulty values are subtracted by 15 to a minimum of 0 OR move 1 additional step on the lunar-Earth trajectory.**

Yuri Newton (Europe)

- **Magnifying Discoveries**

1. Observe Uranus and Neptune.

2. If successful, reveal while launching. Each time both Uranus and Neptune are visible on the Orrery or on top of the Planet Deck, **choose: difficulty values are subtracted by 10 to a minimum of 0 OR move 1 additional step on the lunar-Earth trajectory**.

João Luna (South America)

- **Triple Conjunction**

1. Observe first quarter Moon while Venus and Jupiter are visible on the Orrery for observation.

2. If successful, reveal while observing. Each time both Jupiter and Venus are visible on the Orrery or on top of the Planet Deck, **choose: difficulty values are subtracted by 10 to a minimum of 0 OR move 1 additional step on the lunar-Earth trajectory.**

Leo Maseko (Africa)

- **E=mc²**

1. Observe 2 of the 3 options: Mercury, Solar Eclipse and Taurus.

2. If successful, reveal while launching. Each time Mercury is visible on the Orrery or on top of the Planet Deck, **move 1 additional step on the lunar-Earth trajectory.**

Jarrah Walker (Oceania)

- **Barnumbirr**

1. Observe Venus, then be on location Latitude Region -1 and Longitude Region +120/+150.

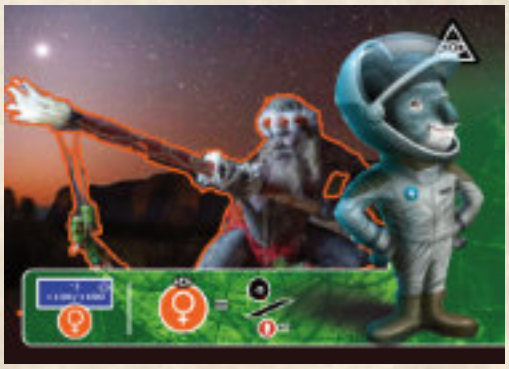
2. If successful, reveal on the indicated spot. Each time Venus is visible on the Orrery or on top of the Planet Deck, **choose: difficulty values are subtracted by 10 to a minimum of 0 OR move 1 additional step on the lunar-Earth trajectory.**

Wang Xiongmao (Asia)

- **Stars of Wood and Soil**

1. Observe Jupiter and Saturn.

2. If successful, reveal while launching. Each time both Jupiter and Saturn are visible on the Orrery or on top of the Planet Deck, **choose: difficulty values are subtracted by 10 to a minimum of 0 OR move 1 additional step on the lunar-Earth trajectory.**



Sphen Easydive (Antarctica)

- **Tiny Rock and Giant Ring**

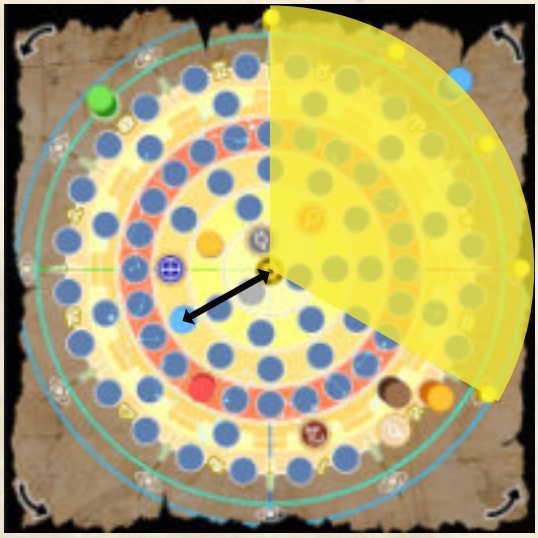
1. Observe Mercury and Saturn.

2. If successful, reveal while launching. Each time both Mercury and Saturn are visible on the Orrery or on top of the Planet Deck, **choose: difficulty values are subtracted by 10 to a minimum of 0 OR move 1 additional step on the lunar-Earth trajectory.**

3.1.2 Orrery observations

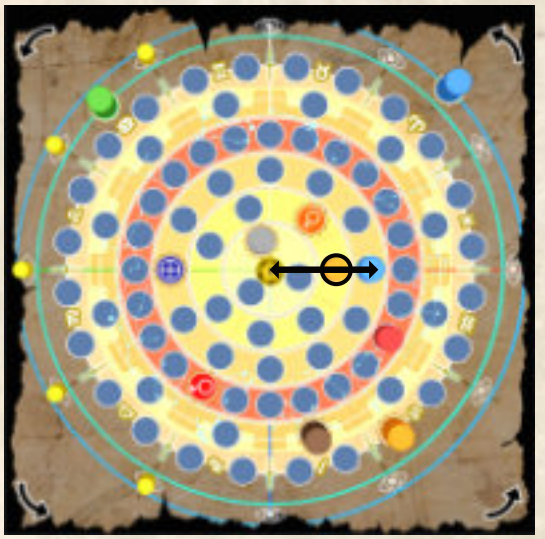
- visibility

Only planets that are completely outside the invisibility range (within the yellow pillars) are visible.



- scoring planets

When the top revealed planet observation card is from a planet visible on the orrery, the card can be scored. Like with constellations, sets can be scored. The sets are rocky planets and gaseous planets. During the action phase the astronomer who wishes to observe or plan the planet, puts the planet observation card on top of the pile in his chosen week. Planning and scoring happens like with the basic observation deck.



- transits

For planet transit cards, additional conditions are needed to score the observation card. The line of sight of the observer (planet Earth) needs to be obstructed by the transiting planet. In each month, a line of sight goes through the position of Earth towards the Sun (D12). When both Earth and the transiting planet are on the same line on the same side of the Sun, the transiting planet card can be scored. Having the alignment and the card at the same time happens rarely in the game. Scoring a Venus transit card really needs a bit of luck and careful planning.

- planet movement

Put the top card from the planet deck at the bottom and reveal the new top card. Rocky planets (Mercury, Venus, Earth and Mars) move one step counter clockwise at the end of each month in the planet movement phase. Jupiter and Saturn move one step counter clockwise after 1 year cycle, when Earth arrives back in the equinox of March (month 3). Uranus and Neptune don't move in the game. Their slow movement is insignificant in this game. Counter clockwise, move the last pillar in front of the first.

3.1.3 End year cycle

When a one year cycle is complete, no vehicle/continent bonuses are granted anymore like in the previous modes, but this time quest rewards are not doubled any longer. The end of the second cycle is still the end of the game.

3.1.4 Quests and instruments

Quest cards are unresolved when drawn after activating a flag icon or spending two unspent continent tiles. Always draw two and pick one to slide under your hidden agenda card. They are not considered to be a quest anymore once the quest is completed and are turned into an instrument. While uncompleted they are not considered to be an instrument. Before drawing for quest cards, instead you may declare to search the quest deck to get the quest matching the colour of your continent.

When owning an instrument after completing a quest, take the corresponding miniature or token. You may put the instrument next to your character during the action phase. Activate the ability during the resolution phase. The sextant player however triggers the ability at the start of the month before the first player takes his first action. Rewards for completing a quest are doubled in the first year cycle.

1. Alaskan Bears (North America)

Quest: Return flag to Alaska coordinates after having observed Ursa Minor and/or Ursa Major.

Sextant: Once until you are the first player, while the instrument token shows the sextant, you may take your action before another first player during the action phase in the next month. Flip the token to cog wheels and keep it that way until you are the first player, in which case you flip it back to the instrument side. The amount of activations per game is equal to the amount of players.

Reward: 1 success = +10 NK, all 2 success = +20 NK

Technique: Orientation

2. Brazilian Sky (South America)

Quest: Return flag to Brazil coordinates after having observed Octans, Crux and/or Scorpius

Armillary Sphere: During your action search the current week deck for a card and put it on top.

Reward: 1 success = +10 NK, all 3 success = +20 NK

Technique: Orientation, Star Map

3. Portuguese Armillary (Europe)

Quest: Return flag to Portugal coordinates after having observed (Ecliptic) Cancer, Aries and/or Capricornus

Reflector Telescope: During your action search the planet deck for a card and put it on top

Reward: 1 success = +10 NK, all 3 success = +20 NK

Technique: Magnification

4. Egyptian Merkhet (Africa)

Quest: Return Merkhet to Egypt coordinates after having observed Ursa Major, Leo and/or Orion

Refractor Telescope: During your action search any deck of another unoccupied week (or only occupied for a travel action) for a Luna card and put it on top of your current week

Reward: 1 success = +10 NK, all 3 success = +20 NK

Technique: Magnification

5. Roof of Beijing (Asia)

Quest: Visit the Ancient Beijing Observatory coordinates after having observed Lyra, Cassiopeia and/or Taurus

Jian Yi: During your action search the basic observation deck for a card and put it on top

Reward: 1 success = +10 NK, all 3 success = +20 NK

Technique: EQ-mount, Star Map

6. Australian Cross (Oceania)

Quest: Return flag to Australia coordinates after having observed Crux, Carina and/or Eridanus.

Persian Astrolabe: During your action switch any card on top of another unoccupied week (or only occupied for a travel action) with the top card of your current week deck.

Reward: 1 success = +10 NK, all 3 success = +20 NK

Technique: Time, Star Map

7. Captain Cook's Quests (Antarctica)

Quest: Observe Venus Transit and/or Octans at Tahiti coordinates

Octant: During your action switch any card on top of the 4 weeks with the top card of the general observation deck

Reward: 1 success = +10 NK, all 2 success = +30 NK

Technique: Orientation

3.1.5 Rockets

Drawing rocket cards and placing alternative launch sites are the same as in 2.2.1. However, like with quests, this mode offers the same choice for characters to **directly choose a rocket** of their own continent. **Africa and Antarctica do not have that choice**, because they don't have their own rockets. Although the standard rocket Saturn V still grants you +10 NK during launch, the other rockets only trigger their ability in this mode while calibrating or aborting. Calibrating a Luna or a specific set icon gives you +1 movement regardless of set appearance on the lunar phase board. Other set applications during calibration still count and may result in a total of +2 movement. While using the **Falcon Heavy**, the Abort reaction triggers resetting used calibration tokens like an Abort Stage reaction. The **Starship** triggers an immediate relaunch with +2 movement after any Abort or Abort Stage reaction. Sphen Easydive's "Slippery Boost" does work with this rocket.

The rocket ability is available as soon as the vehicle token is switched to the engine icon.

Only revealed rockets at your current launch sites can be activated.

After calibrating the "Precession" set get +1 movement

After calibrating the “Rocky Planet” set get +1 movement

After calibrating the “Polar Axis” set get +1 movement

After calibrating the “Gas Planet” set get +1 movement

After calibrating a “Lunar Phase” get +1 movement

Treat an Abort as an Abort Stage. This also works with Sphen Easydive’s “Slippery Boost”.

After an Abort Stage or an Abort, immediately relaunch with a +2 movement. This also works with Sphen Easydive’s “Slippery Boost”.

3.2 FINAL NOTES

3.2.1 Winner

The winner of the game is determined not only by the race, but also by the knowledge you acquired about astronomical instruments, among other accomplishments. This balances out fast plays without efforts for other aspects of the game.

A system of reputation has been laid out. Although the race is of paramount importance, you will earn reputation for completing the most quests, for successfully managing hidden agendas, economizing on DV. Remember that no leftover points are granted when aborted during the inbound Earth trajectory.

The winner of the game is the astronavigator with the most reputation points. Tiebreaker is the position in the race.

Reputation points (RP)

For ‘most foreign instruments’ and ‘most leftover points’, no RP is gained for having 0. Tiebreaker is the position in the race.

	4 players	3 players	2 players
Arrival position	**3-2-1-0**	**2-1-0**	**1-0**
Most foreign instruments	**2-1-0**	**1-0**	**1-0**
= not from own colour			
Most leftover points	**2-1-0**	**1-0**	**1-0**
= NK-DV			
Hidden Agenda	**+1**	**+1**	**+1**

4. Solo Play mode

4.1 Objective and setup

You will use the Solar System mode for this version. The aim of the game is to **return back** from the Moon **first** (before the shadow) **within 2 years**. Story-wise it is more like mastering all the spacecraft and navigation techniques, because a return trip takes only about 6 days (3 towards the Moon and 3 back to Earth). The other condition is that you must have completed your **hidden agenda** in your first game. In a **MEDIUM** level game have **at least 1 instrument** on top of it, in **EXPERT level 2 instruments** by completing Quests.

During the setup the shadow (AI) starts to choose a planet by drawing cards until a planet shows up that hasn't been placed. Roll the D12 sun die to determine in which section to place the planet. The exact position within a section is your choice. Than you choose a planet and place it wherever you want it to be on its orbit. Repeat the process until all planets are placed. Then, shuffle the planet cards and prepare the planet deck.

4.2 Bad Timing and the Shadow

4.2.1 Timing and manipulation

Two tokens are constantly blocking half of the week options. The "bad timing token" (use the back of the sextant token) moves each round (month) to the next moon phase (starting the game in the first week), while the "**shadow token**" (use another character token) takes the moon phase you **chose** last round or the one before the "**bad timing token**" if already occupied by bad timing. Always move the "bad timing token" first before the shadow token in the planet phase. In the first round the shadow is not placed. The next round you only have two options. There is room to anticipate, because you always know where the tokens are going to block you. The shadow is the one you can manipulate the most.

4.2.2 Space Race Trajectory

Once the second year starts and the parachute token is being revealed, the AI spacecraft launches (use the vehicle die or spacecraft miniature of the shadow player). If **either** the bad timing or the shadow token precedes your character in the weeks on the lunar phase board, the shadow spacecraft **moves first**. If **both** the bad timing and the shadow token are preceding your week, the shadow player gets **one additional step**. Both you and the shadow also make use of skipping stages due to spacecraft housing rules for 1-2 players. The shadow never flips an unrevealed stage, so you cannot abuse the shadow for scouting. The shadow also never gains navigation knowledge nor does it tackle difficulty values. In this solo

variant, launching **does not trigger the draw of trajectory tiles** like in the multiplayer game (see 1.2.3 Lunar trajectory movement).

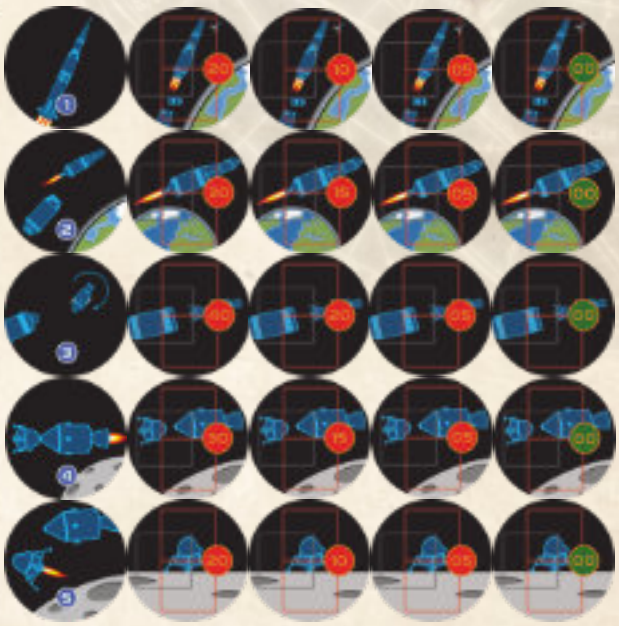
D. REFERENCES

1 Continent tiles

2 Lunar Earth Trajectory tiles

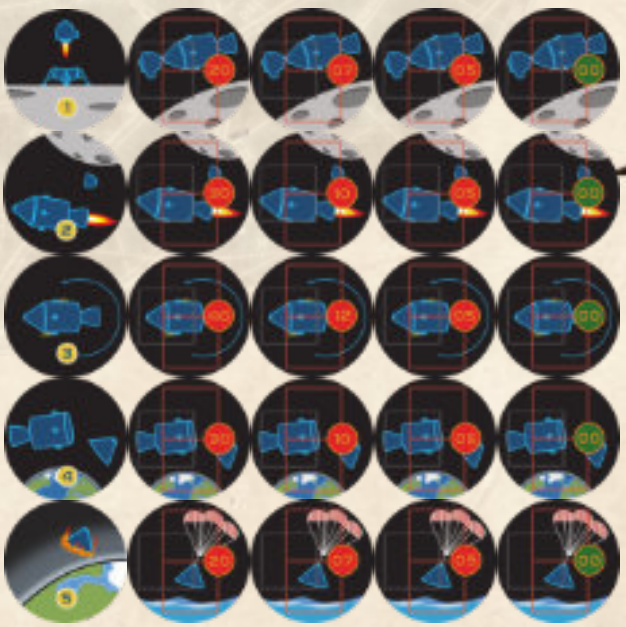
2.1 Lunar Outbound Trajectory

Face down	x4	x3	x2	x1



2.2 Earth Inbound Trajectory

Face down	x4	x3	x2	x1



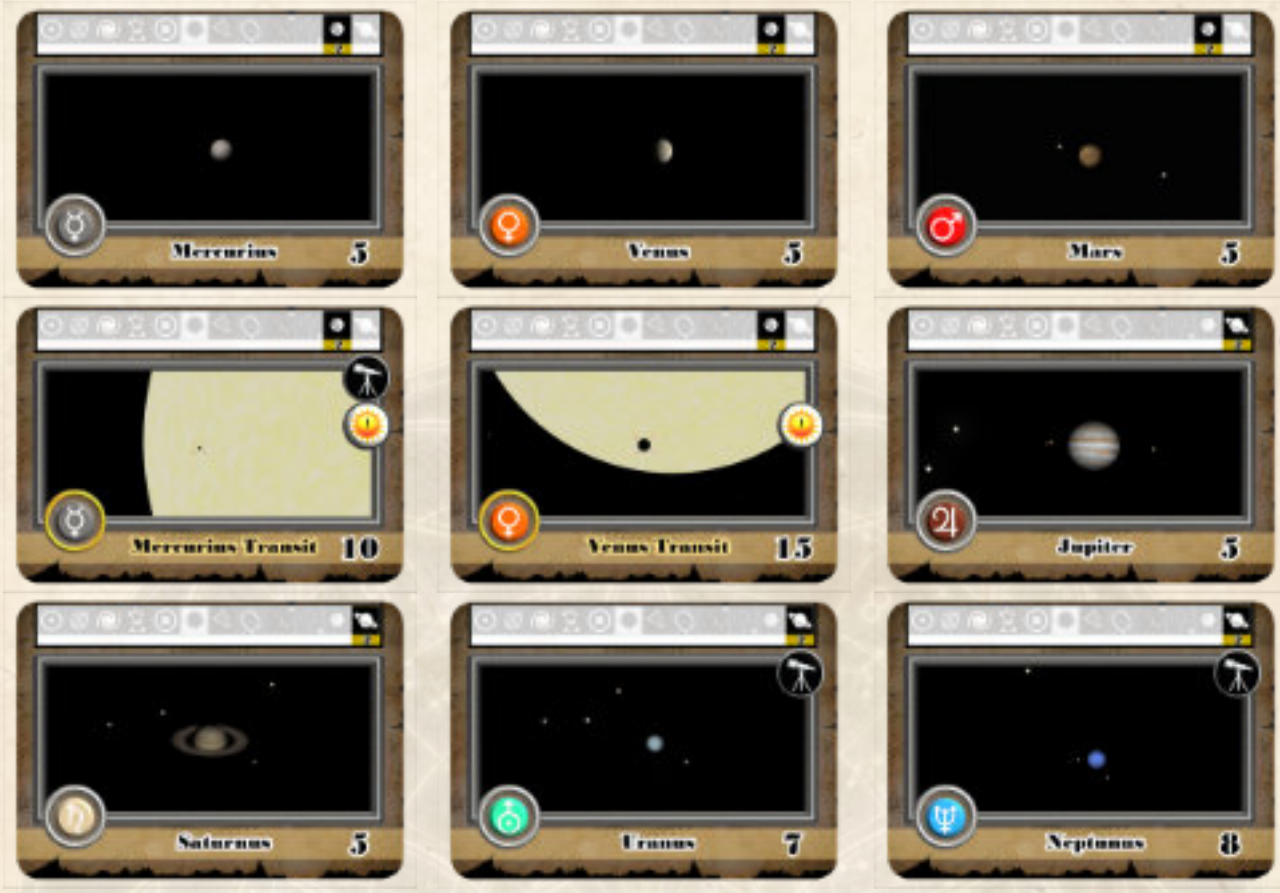
3 Observation Cards

3.1 Constellations (x2)

3.2 Lunar Phases (x4)

3.3 Earth Rise (x4)

3.4 Planets (x4)



4 Hidden Agendas

4.1 Constellations

Apollo Star Map

Science and Superstition

Moon Festival

Slippery Boost

Spying the World

Chasing the Hunter

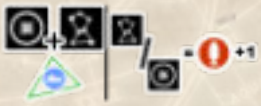
Qixi Festival

Thermal Roll

Galactic Alignment

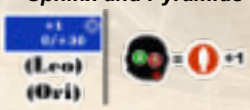
Between the Poles

Hokule'a



Demons and Jaguars

Sphinx and Pyramids



Walkabout Emu

5.4.2 Solar System

Asteroid Belt

Magnifying Discoveries

Stars of Wood and Soil

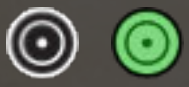
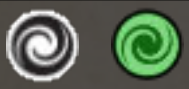
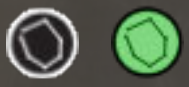
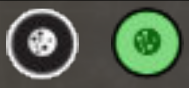
Tiny Rock and Giant Ring

Triple Conjunction

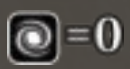
E=mc²

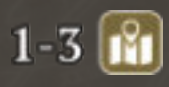
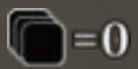
Barnumbirr

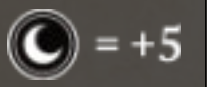
5 Iconography

	Inactive/active token for **Ecliptica**
	Inactive/active token for **Precession**
	Inactive/active token for **Milky Way**
	Inactive/active token for **Orientation**
	Inactive/active token for **Polar Axis**
	Inactive/active token for **Dark Spot**
	Inactive/active token for **Summer Triangle**
	Inactive/active token for **Winter Circle**
	Inactive/active token for **Northern Sky**
	Inactive/active token for **Southern Sky**
	Inactive/active token for **Rocky Planet**
	Inactive/active token for **Gas Planet**
	**Mercurius (Mercury)**
	**Venus**
	**Terra (Earth)**
	**Mars**
	**Jupiter**
	**Saturnus (Saturn)**
	**Uranus**
	**Neptunus (Neptune)**

	Current DV is subtracted by a certain value “x” to a minimum of 0.
	The current DV is 0 or 5.
	The current DV is 0.
	Before resolving the DV, You may draw a new trajectory tile once this month, change it with the current one.
	Name a value at launch. Trajectory tiles with that value, are considered to have 0 DV for you.
	At each stage, you may guess the value of a newly drawn tile of the same step type. If the same, move to the next stage, otherwise abort for free.
	At each stage, draw a new tile of the same step type and the new DV is the difference of the stage DV and the DV of the drawn tile. Discard afterwards.
	Score a specific set.
	Observe a solar and lunar eclipse.
	Visible on the lunar phase board, observable on the orrery board or visible on top of the planet deck.
	Any kind of lunar phase card.
	Move 1 additional step on the trajectory map, while facing all DV along the way.
	Visit all continents except Antarctica.
	Directly go to step 2 of the outbound trajectory after launch.
	Skip step 3, ignore its value (if unrevealed, leave it that way) and continue to step 4 on both trajectories.
	Score before and reveal at the start of december (month 12).
	Observe the first quarter Moon (week 2) while Venus and Jupiter are observable on the Orrery.
	The maximum spacecraft housing on this trajectory tile is decreased by 1.
	Choose one of both on the outbound lunar trajectory.
	Choose one of both on the inbound Earth trajectory.

	Whenever a player jumps your current step in space, move one step while facing all DV along the way. Ignore the spacecraft housing rule.
	Target location on the Earth map defined in latitude zone (Z) and longitude degrees (L).
	The target constellation name.
	Observe all Moon Phases.
	Polynesian Triangle
	Observe 2 of the 3 objects.
	**Time:** during the action phase you can choose to score the second card on top of the observation week instead of the top card.
	**Telescope:** some objects can only be observed with magnification.
	**Orientation:** technique without ability, present for super invention expansion.
	**Star map:** technique without ability, present for super invention expansion.
	**Equatorial mount:** technique without ability, present for super invention expansion.
	**Solar protection:** some objects can only be observed with solar protection. They can be observed during polar days, but not during polar nights.
	**Rocket:** draw the 2 top cards of the Alternative Launch Site deck, choose 1 and shuffles the other back. Reveal whenever you decide to use it.
	Only observable after landing, while CM is in lunar orbit.
	**Quest**
	As long this token is face up in the game (first year cycle), double the quest NK rewards, and score vehicle and continent sets when completed.
	When the Sun disk ends under this token in the second year cycle, the game ends.
	Spent when your NK is less than your DV, without regaining your spent navigation tokens. Set your DV to 0. If it was already spent, you are out.
	During the On-board Calibration phase, spend to restart at the launch pad, resetting the DV and regain all spent navigation tokens.
	You earn no points from observation cards with the Milky Way set icon.

	**Car**
	**Train**
	**Boat**
	**Helicopter**
	**Plane**
	**Spacecraft (CSM)**
	Activated lunar phase
	**New Moon** (week 1)
	**First Quarter** (week 2)
	**Full Moon** (week 3)
	**Last Quarter** (week 4)
	**Spring**
	**Summer**
	**Autumn/Fall**
	**Winter**
	You can save up to 3 observation cards.
	Observation of a solar eclipse, planet transit or a lunar eclipse is rewarded twice the NK.
	While resolving the action of a planned observation, score the current top card of the week as well if able.
	Observations of constellations are worth 10 Navigation Knowledge (NK) points instead of 5
	No NK for set collections. Set collection tokens are rewarded though.

	You may take an additional step while travelling by boat.
	Instead of moving, place or change the location of up to 2 heliports. This counts as a primary travel action. Connections are allowed.
	Lunar observations are rewarded with 5 extra NK.
	Reactivate a previously acquired constellation set token or lunar phase token.
	**Sextant specialist:** Activate at the start of the action phase to choose a week before the first player. This icon has priority and goes before the sextant instrument.
	**Spacecraft (option on continent tile):** draw the top card of the Alternative Launch Site deck, reveal and mark the new site.
	**Saturn V:** Get +10 NK each time you launch
	**Ariane 6:** After calibrating the “Precession” set get +1 movement
	**Vostok:** After calibrating the “Rocky Planet” set get +1 movement
	**Long March 9:** After calibrating the “Gas Planet” set get +1 movement
	**Proton K:** After calibrating the “Polar Axis” set get +1 movement
	**H2A-2022:** After calibrating a “Lunar Phase” get +1 movement
	**Falcon Heavy:** Treat an Abort as an Abort Stage. This means you will, like with an Abort Stage, get all your used tokens back after an Abort.
	**Starship:** After an Abort Stage or an Abort, immediately relaunch with a +2 movement.


1 Action
2 Resolution
3 Calibration
4 Planet movement
5 First Player
4 players 3 players 2 players
3-2-1-0 2-1-0 1-0
2-1-0 1-0 1-0
2-1-0 1-0 1-0
+1 +1 +1
1. Arrival position
2. Most foreign instruments
= not from own colour
3. Most leftover
= NK-DV
4. Hidden Agenda