

COSMOS

20 07 1969



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RULES OF THE GAME



Symbol key

celestial bodies of the Solar System



particular features, the feature of the celestial body, the one that most distinguishes it



the position states where the celestial body is. According to the distance from the Sun there are the Inner Solar System, followed by the Asteroid Belt, the Outer Solar System and finally the Kuiper Belt



the equatorial diameter, expressed in km



the mass, expressed as the ratio with the Earth mass, which is equal to $5,9726 \times 10^{24}$ Kg



the rotation period, expressed in days. During the challenge the fastest celestial body wins, therefore the one with the lowest value



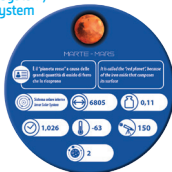
the average temperature, expressed in °C



the year of discovery. The Sun, the Earth and the Moon do not have a date, while in 150 AD Ptolemy wrote the Almagest



the number of satellites. On the satellite cards the name of the corresponding planet is indicated



2

Symbol key

constellations of the celestial sphere



the total area, expressed in square degrees



the number of particularly bright stars, those that have an apparent magnitude less than 3

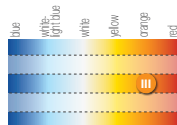


the number of stars visible to the naked eye, those that have an apparent magnitude less than 6



the name of the main star and its typology

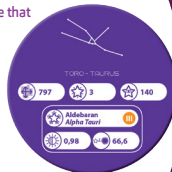
- I Supergiant
- II Bright giant
- III Giant
- IV Subgiant
- V Main sequence



the apparent magnitude. During the challenge the brightest star wins, which is the one with the lowest value (it can also be negative)



the distance from the sun, expressed in light-years



multiple star systems



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Contents

- 48 cards: 18 of the Solar System
30 constellations
- 4 wooden astro-pawns, which represent the Apollo 11 control module
- 1 wooden die
- this instruction booklet

The faces of the die



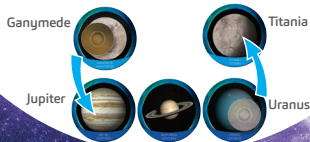
one's astro-pawn moves one step closer to the Sun



one's astro-pawn moves one step away from the Sun






one's astro-pawn moves up or down, depending on where it is



4



you need
to pass a **TEST**.

You choose a card on which there is an astro-pawn of another player, then you choose a feature (for example the mass in the game of the Solar System) and finally you have to tell which of the two cards has the greatest value. If the test is passed, move forward one position by choosing the direction between   

NOTES

- It is also possible to say that the two cards have the same value
- If all the astro-pawns are on the same card, they have to say the value of a feature of that card, or the particular features or the name of the main star (for the constellations)



a **CHALLENGE** must be made. If there is an astro-pawn that is ahead of the others in the race to the Moon it can be challenged and, in case of victory, the places have to be switched. To win the challenge, choose one feature as for the test, but in this case the value of the card must be **higher than** the one of the other card.

NOTES • If there are no astro-pawns to challenge, the player challenges any opponent and, in the event of victory, can advance of one position



joker: you can choose any one of the 5 faces indicated above

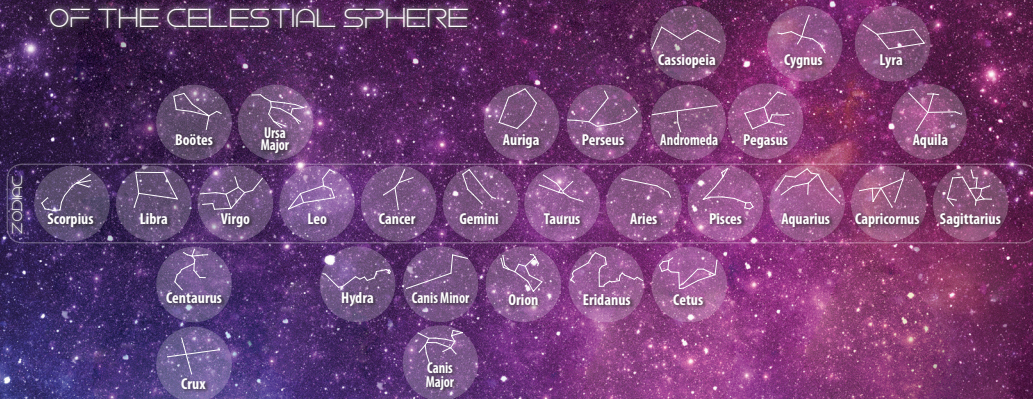
5

THE CELESTIAL BODIES OF THE SOLAR SYSTEM



* dwarf planet

THE CONSTELLATIONS OF THE CELESTIAL SPHERE



Warm Up Sort it

PURPOSE OF THE GAME: Put your card in the right position.


GAME SETUP: Choose whether to play with the 18 cards of the Solar System or with the 30 Constellation cards, and then **choose the feature** to play with (for example the equatorial diameter of the celestial bodies). The cards are shuffled and the deck is put at the center of the table, with the side of the photo visible. The youngest player starts the game, by taking the card on top of the deck and putting it on the table, turned on its back, and the game then continues clockwise.

GAME PLAY: The Current Player gets the first card on the top of the deck and, without reading the information on the back of the card, puts it on the table next to the other cards already present. When positioning it the player must choose whether to put it to the left (the smallest diameter of all), or to the right (the largest diameter of all) or in the middle of the row of cards, in a precise position.

After placing the card with the side of the photo visible, the card is turned to check if it has been positioned in the right place, keeping all the cards in ascending order (in diameter). If someone puts the card in the wrong place that player is out of the game, unless the

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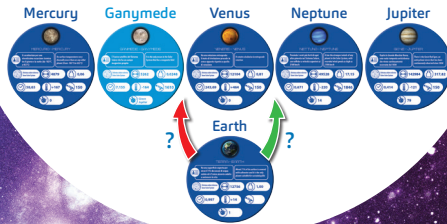
star  is obtained with a roll of the die. In any case, the card is then put in the right place. The game continues until only one player remains in the game, who wins the game round and wins the last card.

NOTES:

- the second card is simply put to the right or to the left of the first card
- from the third card on you can put your card either to one of the two extremes or within the row of the cards

END OF THE GAME: The first player to win 3 cards wins the game.

GAME VARIATIONS: It is possible to play by sorting the 18 cards of the Solar System or the 30 constellations using any feature.



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GAME N°1


The Solar System

PURPOSE OF THE GAME: Whoever arrives first on the Moon wins

GAME SETUP: Arrange the 18 cards of the Solar System as indicated on pages 6 and 7. Arrange the 4 astro-pawns in the following order based on the number of players: Charon and Triton (2 players), Pluto (3 players) and Titania (4 players). The youngest player starts and the game then proceeds clockwise.

GAME PLAY: The Current Player rolls the die and performs the action shown on pages 4 and 5, trying to get closer to the Moon. In case of a TEST or a CHALLENGE the player cannot use a feature if it has already been used previously for the same two celestial bodies.





SPECIAL CASES:

 if the astro-pawn is on Mercury **A** the player goes on the Sun and leaves the game

 if the astro-pawn is on Ceres **B** the player is sent to Charon

END OF THE GAME: The game ends when a player reaches the Moon

NOTES:

-  if the astro-pawn is on a satellite **C** it can not move
-  if the astro-pawn is on a satellite **D** it can not move
-  if the astro-pawn is on Pluto it can not move
-  if the astro-pawn is either on Mercury **E** or Venus **F** it can not move



GAME N°2 The Constellations

PURPOSE OF THE GAME: Whoever arrives first on the Moon wins.

GAME SETUP: Arrange the 30 Constellation cards as shown on pages 8 and 9. Take the Moon card and place it on the Constellation card corresponding to the current day. If the Moon is between Scorpius and Gemini the 4 astro-pawns are put in the following order based on the number of players: Sagittarius and Lyra (2 players), Cassiopeia (3) and Cygnus (4), whereas if it is between Taurus and Sagittarius they are placed on Scorpius and Crux (2), Boötes (3) and Canis Major (4). The youngest player starts and the game then proceeds clockwise.




GAME PLAY: The Current Player rolls the die and performs the action shown on pages 4 and 5, trying to get closer to the Moon. In case of a **TEST** or a **CHALLENGE** the player turns the card **before deciding** which feature and respect to which other constellation the test or the challenge has to be played. As in game n°1 the player cannot choose a feature already used.

SPECIAL CASES: when they reach their zodiac sign, they can continue the game turn by throwing the dice a second time.

END OF THE GAME: The game ends when a player reaches the Moon.

NOTES:

(assuming the Moon card is on Capricorn)

-  the astro-pawn moves in the direction of the Sun (therefore also of the Moon) **A**. If there are no constellations in the direction of the Moon the astro-pawn can not move **B**
-  the astro-pawn moves away from the Sun **C**. If there are no constellations in the opposite direction to the Moon the astro-pawn can not move **D**
-  the astro-pawn moves towards the more "convenient" constellation which is a row above or below the one it is standing on **E**. The astro-pawn **must** always move, even if it means a step back **F**

