

MISSION TO MARS

Rules



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MISSION TO MARS

In a very near future, Earth's inhabitants will be forced to find new places to expand to and survive in because this planet will no longer have enough resources to meet everyone's needs.

But finding a place that offers an environment where living conditions can be satisfied will not be easy.

The closest destination, with the available resources we have now, is Mars!

Will you be able to create a new civilization on the red planet?

You will have to organize all the arrangements to deal with this challenge, undertake a long journey, and finally begin the actual settlement!

But you are not alone...

All the crew members will help you, coordinated by your Captain.

Are you ready?

Countdown.

10... 9... 8...



Goal of the game.

MISSION TO MARS aims at enhancing the players' skills in taking shared decisions and acting towards common goals.

Choose your professional ROLE in the MISSION TO MARS and face the SCENARIOS by using one of the proposed STRATEGIES. Beware of the QUIRKS!

The players engage in hands-on design challenges that focus on: developing empathy, promoting initiative, encourage creativity, developing awareness, fostering active problem solving.

Components.

The game provides 4 decks of cards

10 ROLE CARDS explaining which expertises have to be involved in the mission.

30 SCENARIOS proposing the challenges you'll have to face

20 STRATEGIES suggesting how to carry out the tasks

20 QUIRK MODES adding some spice to the operations

Players can use all the materials at their disposal such as paper, pencils, books, small bricks, internet connection,... and their imagination etc.

Number of players.

MISSION TO MARS is designed to be played by a class or group that can also be divided into several subgroups

Time.

MISSION TO MARS can vary in length and can be played in multiple sessions of at least 40'.

For the first session, plan at least 2 teaching hours, 1 in order to properly introduce the game and one to play the first run.



TIPS FOR TEACHERS

You can pre-select the cards according to:

- your class level and needs
- your students' interests
- curricula

You can allow your students to choose their own scenario among the pre-selected cards or let them pick at random.

Groups of students can work all on the same scenario or on different ones.

Consider creating your own sets of cards and adapt the rules to your needs. Be ready to experiment and learn together with your students and most importantly...HAVE FUN!



RULES

MISSION TO MARS is a cooperative role-playing game where players will have to face challenges each time they draw the **TASK** cards, using the modality shown on the **STRATEGY** cards. But beware, the **QUIRK** cards will set special working conditions!

The game is played following 3 simple phases:

1 - CHOOSE THE ROLES, the captain draws the role cards one by one and explains them to the players. Each player can apply to only one role. Each role can be played by one or more players .

2 - PICK A SCENARIO, the captain draws a scenario card and introduces the main quest to the group. The players whose **ROLES** are indicated in the **SCENARIO** card will be responsible for helping the captain and will be in charge of collecting and organizing all the different ideas. Their actions will be affected by one of the conditions imposed by a **QUIRK** card they have to pick at random. Each player will have to research and collect as much information as possible about the scenario, through the glasses of their chosen role.

3 - APPLY A STRATEGY, the captain draws a strategy card and the group starts to deploy the proposed method towards the goal set by the **SCENARIO**. Each time you have to make a decision you can choose among the methods listed in the "HOW TO MAKE DECISIONS" box at the end of these rules.

Carrying out a PHASE.

DRAW: the captain draws a card from the deck

SHOW: the captain presents the contents of the card to the group of players

LAUNCH: each player gathers ideas, information and materials individually and gets ready to share

ACT: the group comes together to practice their abilities and fulfill what's requested by the cards. Remember to use the **MARTIAN METHOD™** to take turns.

WRAP UP: the captain gathers the results of everyone's experience

CLOSE: the captain closes the session and everyone cheers

End of the game.

At the end of the game, the **CAPTAIN** collects all produced material and explains which results have been achieved by the group.



SKILLS



CRITICAL
THINKING

Critical thinking: the process of questioning sources and challenge assumptions to make well-informed judgements based on solid evidence



CREATIVITY

Creativity: Thinking outside the box and see concepts under a different light



COLLABORATION

Collaboration: Working with others efficiently to achieve a common goal



COMMUNICATION

Communication: conveying ideas in an effective way by using a variety of methods



INFORMATION
LITERACY

Information literacy: Understanding facts, figures, statistics, data and learn to distinguish facts from fiction



MEDIA
LITERACY

Media literacy: Understanding the methods and outlets in which information is published



TECHNOLOGY
LITERACY

Technology literacy: Understanding the machines and applications that make the Information Age possible and the best way to use them



LEADERSHIP

Leadership: Motivating and guiding a team to accomplish a common goal



F FLEXIBILITY

Flexibility: Deviating from plans as needed and adapt to changes

I INITIATIVE

Initiative: being intrinsic motivated and starting projects, strategies, and plans on your own

P PRODUCTIVITY

Productivity: ability to prioritize, plan and manage the workload

SK SOCIAL SKILLS

Social skills: Meeting and networking with others for mutual benefit, interact effectively with others

TYPE OF TASK



IDENTIFY
THE PROBLEM

IDENTIFY THE PROBLEM or essential question



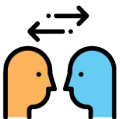
OBSERVE AND
DOCUMENT

OBSERVE & DOCUMENT elements that contribute to the problem or question



RESEARCH

RESEARCH current solutions



TEACH
AND LEARN

TEACH/LEARN Skills needed to address the problem or question



CREATE

CREATE a new solution or composition using your skills, processes and knowledge



SHARE

SHARE your ideas/solution with others



FACILITATE

FACILITATE feedback opportunities



REFLECT

REFLECT on others' suggestions and your own process



REVISE

REVISE your solution or composition as needed



MARTIAN METHOD

THE MARTIAN METHOD™

To overcome the challenges of our Mars journey we'll need everyone's ideas. Difficult problems will spark creative solutions and it's very natural to be eager for everyone to hear our stroke of genius. But can you imagine what would happen if everyone spoke at the same time?

Not much would get done and our Mars mission would end up being noisy and unsuccessful.

Therefore we devised the Martian Method™ of communication. It's easy and fun and you only need to raise your hand in a special way. Let's imagine someone is speaking and you have something to add (criticism, a different approach or a new idea). Look around you: can you see any other raised hands? If you're the first, raise your hand with ONE finger up, to signal that you'll be the next to speak when the moment comes. Raising your hand indicates you want to speak and the finger indicates your position in line. If you see other hands raised, count the fingers raised and just add one! If three adventurers have their hand held up, raise yours with FOUR fingers up. If there's many of you, you can also use two hands!

Of course, when the speaking adventurer is done talking, you'll have to adjust the number of fingers. If you were holding up FOUR fingers, lower one! Now you're third in line! The Martian Method™ is very powerful, because you need to pay attention and listen to everybody coming before you. If you don't listen, you might get distracted and not "update" your fingers, losing your place in line. On Mars, we talk AND we listen. That's our superpower!

To recap:

Raising your hands signals that you want to speak.

The number of fingers raised signals your position in line.

Accessibility note:

try to find a way to help any impaired player with a fitting solution (ie. if anyone is unable to raise an hand or to hold up fingers, prepare a series of pieces of paper with numbers going from 1 to 5, or more, if there's many adventurers. The relevant number card can be displayed in any way and will work just as a raised hand).



HOW TO MAKE DECISIONS

MULTICRITERION

Evaluate different solutions based on a set of rational and emotional criteria.

1. Make a list of proposed solutions.
2. Choose 3 to 5 basic criteria against which to evaluate the proposed solutions.
3. Create a table that cross-references ideas with the different criteria.
4. Each player has 10 hearts and 5 crosses to distribute among the cells of the table based on their ratings.
5. The idea with the most hearts and least crosses will be chosen.

OUTCOME

You will have a choice made taking into account everyone's preferences

TECHNICAL NAME

Multicriteria



PLAYERS

All together

THE MAJORITY WINS

Everyone can vote for the solution they prefer and the one with the most votes will be the one you choose.

1. Name and describe the different solutions.
2. Everyone can vote for only one solution.
3. The solution with the most votes will be the one chosen.

OUTCOME

Ultimately, you will have a solution chosen through voting.

TECHNICAL NAME

Majority voting



PLAYERS

-



A PERFECT PLAN!

Each group thinks of an idea to solve the scenario and describes each solution in a structured way.

1. For each idea, list on a sheet of paper: what steps you need to take, what equipment you need to use, how many people you will need, what materials you
2. Highlight the strong points of each idea.
3. Create a final solution sheet that combines the strengths of each list.

OUTCOME

You will get a reasoned action plan.

TECHNICAL NAME

5M: Method, Machines, Manual, Materials, Measurement.



PLAYERS

In groups

ALL AGREE!

Everyone can present their opinion in an organized way, with the aim of reaching a common decision for all.

1. Divide into groups and choose a spokesperson for each group.
2. Each spokesperson reports the opinion of his group to the Council of Spokesmen.
3. If consensus is not reached, each dissenter presents his or her objection.
4. Objections are reported to the groups which must formulate modified proposals. Then we start again from point 3 until we find a solution that is

OUTCOME

Make decisions together by each proposing their own ideas and arriving at an agreement that satisfies everyone.

TECHNICAL NAME

Consensus method



PLAYERS

In groups



A STORM OF IDEAS

Propose ideas of all kinds, even the craziest and most bizarre, and collect them all in a map or drawing.

1. Stand in a circle. Make sure you can all see and hear each other clearly.
2. Use an object to establish speaking turns. Only the person holding the object in their hand will be able to speak so as not to interrupt others.
3. Write down all the ideas that are proposed, without excluding any. Join the connected ideas with lines by drawing a diagram to hang on the wall.

OUTCOME

You will get a broad view of all the different ideas and their points of contact.

TECHNICAL NAME

Brainstorming



PLAYERS

All together

THE ROUND TABLE

A group of "experts" will have to talk about the problem, each from a different point of view.

1. The "experts" sit at a table facing the rest of the class.
2. Each expert will tell their idea on the problem to be solved.
3. Companions can ask the experts questions to understand more.
4. At the end, summarize the different ideas in a single speech.

OUTCOME

You will learn that the different positions enrich your knowledge of the topic

TECHNICAL NAME

Panel discussion



PLAYERS

All together



YOU ALREADY GET IN A FIGHT

Each group will propose an idea and will have to try to "defend" it

1. Prepare the room by dividing the spaces into two, with a border made, for example, of chairs or tables.
2. Form two groups and assign each to one side of the room.
3. Each group writes their idea on a sheet of paper.
4. The groups exchange papers and will have to "defend" the other group's solution, even if they do not agree!

OUTCOME

You will learn to understand a point of view different from yours.

TECHNICAL NAME

Come already argued



PLAYERS

In groups

