

Middle School Lesson Plan

Mission Ready: Building Your Mars Crew

Student Handout



Mars Simulation

Which Mars simulation example did you receive? _____

Where is this real world Mars simulation? What makes it special? What types of activities can future astronauts train for here?

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Mars Flashline Roles

Student Name	Role	Description
	Commander	
	Executive Officer	
	Engineer	
	Scientist (Geologist)	
	Scientist (Biologist)	
	Health & Safety Officer	
	Journalist	

Team Planning Questions:

1. Why did you choose each person for their role?

- 2. What backup skills should each person have?
- 3. How will you handle conflicts or disagreements?
- 4. What happens if someone gets sick or injured?

Mission Patch Design

Drawing of Mission Patch	Description of Mission Patch

Your Role:

Key Challenges	Main Responsibilities	Critical Information

Group Responsibilities and Team Commitments	

30 Day Survival Plan

Using the prompts below, develop a plan for each day in order for your team to survive.

Planning Questions:

1. **Shelter:** How will you repair/extend your living space?
2. **Water:** How will you ensure clean water for 30 days?
3. **Food:** How will you ration food and what if supply is delayed?
4. **Power:** How will you conserve energy and handle dust storms?
5. **Health:** What medical emergencies worry you most?
6. **Roles:** How will you divide daily responsibilities?
7. **Morale:** How will you handle stress and conflict?

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14

Day 15	Day 16	Day 17	Day 18	Day 19	Day 20	Day 21
Day 22	Day 23	Day 24	Day 25	Day 26	Day 27	Day 28
Day 29	Day 30					

Write a 1-page journal entry as if you were preparing for your first analog mission:

Dear Diary,

Reflection Questions:

1. What surprised you most about analog missions?
2. Which environment (Arctic or desert) would be harder for you personally? Why?
3. What questions do you want to ask our guest speakers?
4. How do you think your Mars mission team would handle real isolation and stress?