



Study Guide for

MADAME MARS:

WOMEN AND THE QUEST FOR WORLDS BEYOND

This **powerful documentary** reframes the story of space exploration as a feminist issue, connecting the original space age that denied opportunities to women to current Mars initiatives that still lack a full commitment to diversity. *Madame Mars* taps into public enthusiasm over proposed human missions to the red planet and argues for a more inclusive spacefaring future.

Questions for Further Thought and Reflection



“MAN” IN SPACE: THE EARLY YEARS OF SPACE EXPLORATION

NASA sent a “thanks but no thanks” letter to girls who wrote inquiring about how to become an astronaut in the 1960s. Despite a lack of encouragement, why do you think so many girls still yearned to be astronauts? Were these girls being hopeful about their futures in space, or were their space dreams unrealistic?

When famed rocket scientist Wernher von Braun describes NASA’s plans to send a man to Mars, an audience member asks: “what about women?” Has von Braun’s response, that “women’s lib will see to it,” proven to be true? How have advancements in women’s rights helped fuel more equity in the aerospace industry?

Why couldn’t girls be engineers (as Donna Shirley’s advisor told her)? Can you think of any reason besides gender that females were discouraged from entering STEM disciplines? How did she make herself more visible in a “hidden figures” (i.e. male-dominated) workplace? Do you think wearing a “Martian red” suit (as she often did) helped?



LANDING THE FIRST FEMALE ON MARS

Why do you think Donna Shirley insisted on a female name for the Sojourner rover? Should spacecraft be gendered? How might we think of them differently if they are?

Why was Sojourner so popular? How did the rover personify our space dreams and represent our goals of exploring Mars? What is the enduring legacy of Sojourner as the first Mars rover, and as the first female presence there?

What do we expect from our robots: are they scouts, extensions of our own senses and abilities, or full-fledged space explorers? What can robots do that humans cannot? Are there limits to what these machines can accomplish? What can humans do that robots cannot? How might humans and machines best work together to explore distant worlds like Mars?



SEARCHING FOR MARTIANS

Why do you think scientists have had such a hard time finding a definitive answer about whether life exists on Mars?

Why are "Martians" such an enduring presence in our culture? When you imagine a Martian, is this being male, female, or something else altogether?

If we find life on Mars, what should we do? How can we protect it while still establishing human outposts and settlements there? How might humans on Mars disturb or even destroy Martian life, and prevent Mars from evolving on its own schedule?

Who owns Mars? Who determines what should be done there? How should we best consider environmental and ethical issues that arise as our plans to visit and eventually settle on Mars evolve?



EXPLORING MARS ON EARTH

What useful and valuable knowledge can we gain from living and working in Mars simulations on Earth?

Despite scientists' best efforts (such as using time delay to communicate with mission control and donning spacesuits and going through airlocks when going outside), why do Mars simulations on Earth stop far short of actually mimicking life on Mars? Do you think these simulations are worth the effort and the expense?



FUTURE MARTIANS: ARE WE ALL READY?

How has Mars rekindled human enthusiasm over space exploration in recent years? How will we know when we're ready to send humans to Mars? How can you determine whether you are "Martian" material?

Are we on a path to becoming a multi-planet species or not? If so, what are the next steps: back to the moon, more space station research, or moving directly forward to landing on Mars? What would it mean to have humans living on another world? How do you think would this affect life on Earth?

If we'd gone ahead with plans to send humans to Mars in the seventies, do you think women would have been a part of the effort? Were women prepared, did they have the education and the work experience? Are women ready now?

How can we best ensure that ALL humans are ready and prepared to go to Mars?

For More Information: www.madamemarsfilm.com