

# Mars Project: Could We Actually Live on Mars?

## Introduction

It might sound like science fiction, but there are several leading scientists who predict that we could send humans to Mars as early as 2025. Could we actually live there? Why would we want to try? What is Mars like? Could it provide all the resources we need to meet our needs? Some scientists even think there is a possibility of transforming the atmosphere and conditions on Mars to more closely resemble those of Earth. This hypothetical process is called **terraforming**.

In this investigation, you will have an opportunity to learn more about the Red Planet and to decide for yourself whether or not you think humans could eventually colonize Mars.



## Your Task

Use what you know about the Earth and what you will learn about Mars to examine the possibility of humans one day being able to live on Mars. Your goal is to determine the answers to the following questions in order to answer the overall guiding question for this project.

- Why should we even think about trying to travel to and find a way to live on Mars?
- How is Mars the same as the Earth and how is it different?
- What are the challenges to humans living on Mars?
- How could we meet the following needs: food, water, shelter, clothing, and oxygen?
- How could we terraform Mars?

The guiding question of this investigation is: **Do you think we could actually live on Mars?**

## Materials

You can use any or all of the videos below during your investigation. You may also use any other reputable resources to help you gather evidence to help you answer the guiding question.

- [Your Kids Might Live on Mars, Here's How They'll Survive](#)
- [Could We Actually Live on Mars?](#)
- [Could Humans Live on Mars?](#)
- [The Curious Life of a Mars Rover](#)
- [Terraforming Mars](#)
- [The Martian](#)
- [What The Martian Gets Right \(and Wrong\) About Science](#)

## Getting Started

To answer the guiding question you will need to answer each of the five questions listed above first. Then, analyze that evidence to make your own claim for whether or not it is possible for humans to actually live on Mars and back up that claim with evidence that you collected during your research.

To present your findings, you may do any of the following:

- Write a 5-6 paragraph essay
- Make a Google Slideshow
- Create a video of yourself (either with or without slides) using your phone or an app like Screencastify

## Rubric

Criteria	Points Available
Explains why we should even think about trying to travel to and find a way to live on Mars	4
Compares and contrasts the Earth and Mars (explains how they are the same and how they are different)	4
Explains the major challenges to humans living on Mars	4
Explains how we could meet the following needs: food, water, shelter, clothing, and oxygen	10
Explains how we could terraform Mars	3
Makes a claim about whether or not humans could actually live on Mars	1
Supports claim with at least 3 pieces of scientific evidence	3
Student voices a strong opinion, backed by scientific evidence	5
Project is turned in on time	3
Project is organized and easy to understand	3
Uses correct grammar, spelling, and punctuation	3
All work is paraphrased into student's own words (no copying directly from sources)	2
<b>Total Points Possible</b>	<b>45</b>