

Will Humans Be Living on Mars by 2024?

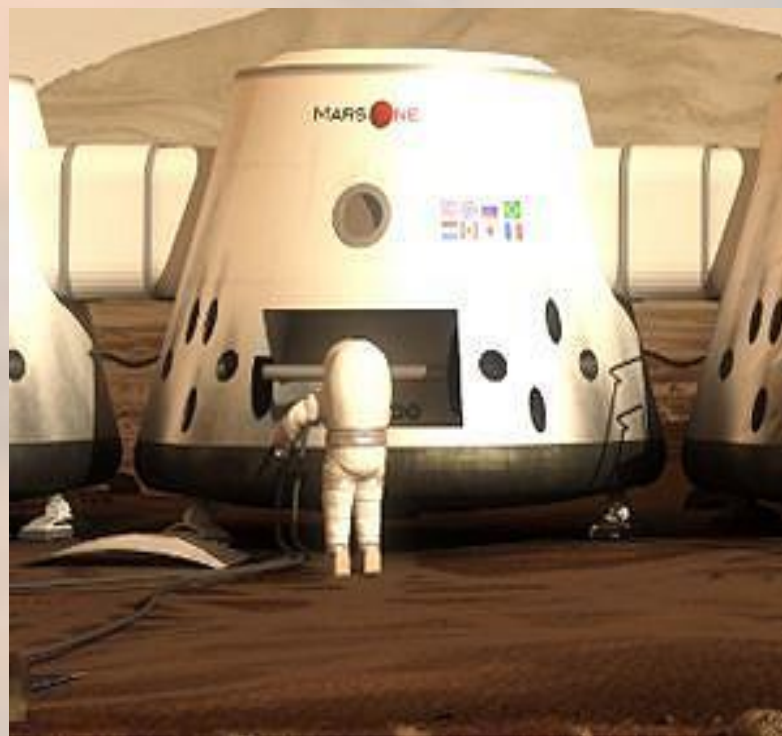
Humans could be living on Mars by 2024 if an international organization called Mars One has its way. Mars One is a non-profit organization started by Bas Lansdorp in 2012. Mars One wants to put four people on Mars by 2024 and four people more every year thereafter. There is only one catch. It will be a one way journey. That's right. People will be sent to Mars but there is no plan to bring them back. Instead they will set up a permanent colony on Mars. In order for Mars One's dream to become a reality, they are going to have to come up with solutions to many challenges such as getting money and equipment, as well as finding the right people to go to Mars.



1 Mars One Logo

The first challenge that Mars one has to overcome is getting enough money to get people to Mars. Just getting into space is very expensive and getting all the way to Mars is going to be even more expensive. In fact many people say that Mars One will not reach its goal because the costs will be too high. Mars One says **it** will need approximately six billion dollars to get the first group of four to Mars and then another four billion dollars for every group of four after that. In order to have enough money to go to Mars, Mars One must do two things: keep costs down and raise a lot of money.

To keep cost down Mars One solution is to not plan on developing new technology, but instead use existing technology from well-known companies. Companies like Space X which is a company that makes rockets. Mars One plans to use Space X's Falcon Heavy Rocket to get into outer-space and Space X's Dragon *capsule* to land on Mars. Once they have landed on Mars the Dragon *capsule* will also be reused to make the homes for the people who are going to settle on Mars. Mars One will also save money by making the trip to Mars a one way trip. **This** saves money because they do not have to design and produce a rocket that can both land and take-off from Mars which is much more difficult as currently there is not a rocket design that can both land and take-off from Mars. Mars One is also planning to use solar panels to create energy for the Mars settlement



2 Dragon Capsule reused as living space

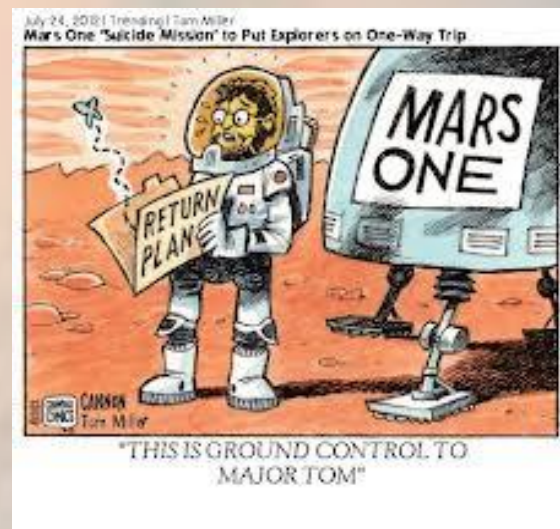
because a nuclear reactor would cost too much money to build and get into outer-space. Also all the spacesuits, which will be needed to protect the explorers from the Martian environment, will also come from designs that are currently in use.

Mars One has several ideas to raise money. Mars One is a nonprofit company. This means they can raise money by people giving **donations**, giving money to a good purpose. If you wanted to donate you could go to <http://www.mars-one.com/donate> and use PayPal to give money to help Mars One get to Mars. You could also buy t-shirts, sweaters, coffee mugs, and posters to help support Mars One. One of the more unusual ways they plan to get money is by filming the training of the astronauts as well as the journey to Mars and then making a reality TV show. They hope to make several million dollars from **it**. However, the majority of the money will come from donations from everyday people like you who give 10 or 20 dollars a year. So as you can see getting enough money to pay for a mission to Mars is going to be one of the biggest challenges for Mars One, but they have a plan and with a little luck and a lot of people's help they believe they can overcome this challenge.

The next challenge is getting the right people to go to Mars. Finding the right people for any job is a difficult process, but for Mars One this is even more difficult because this will be a one way trip. This means that anyone who goes to Mars will never come back to Earth. **They** will never see their friends or family again. They may never see a forest or a grassland or a meadow full of wild flowers again. So if you went to Mars you would have to give up everyone and everything you have ever known. A one way trip to Mars could also be extremely dangerous if their equipment got damaged or destroyed because there would be no way to escape or quickly be resupplied. The one way trip idea has caused some people to call Mars One a suicide mission. As a result many people who are qualified to go, will not want to go because it would personally cost them too much or they believe it is too dangerous.

Mars One is searching internationally for the right **candidates** (people who want to be chosen for a job) for the first human mission to Mars. Of course there are certain basic requirements such as being healthy or being over the age of 18; however, they are not looking for someone with a particular skill or job. Instead they are looking for people with certain characteristics and will train the explorers in the many different skills they will need to survive on Mars.

The first characteristic they are looking for is resiliency. **Resiliency** means a person is able to recover quickly after a difficult problem. They are looking for people who will not let a problem or challenge defeat them, but instead will continue to fight

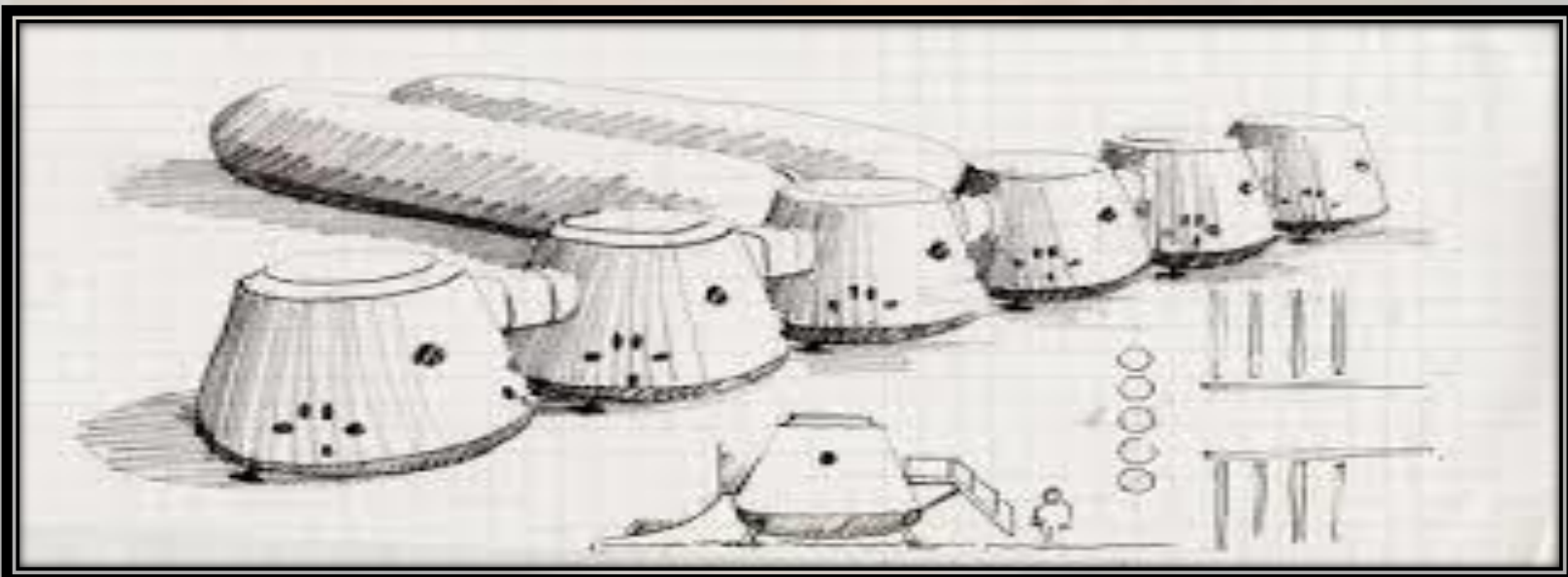


until the problem is solved or the challenge is overcome. The second and third characteristic is adaptability and creativity. In space and on Mars there could be many problems that no one had thought about or prepared for, so anyone planning to go to Mars needs to be able to change and come up with new ideas to solve these problems. Another characteristic is **curiosity** – a desire to know or learn. To be an explorer you must want to know what new things are out there waiting on you to find them, and you must be willing and able to share these discoveries with others once they are found. The last characteristic they are looking for is an ability to trust. In space you must be able to trust others especially when they are making decisions that could affect your life. Not only must you trust others, but you must trust yourself. You will also be making decisions that could result in the life or death of yourself and your fellow explorers. If you don't trust yourself or your decisions, then your teammates will not trust your decisions either.



3Dubai Resident Khalid Al Jaaidi candidate for Mars One

As you can see there are many challenges for Mars One to solve before they can send people to Mars. However, Mars One has come up with some creative solutions to these challenges. It will be a great day for science if in the year 2024 we see mankind taking their first steps on another planet. If we succeed in getting to Mars, maybe our next goal should be getting to another planet around a different star. Won't that be exciting! If you want to help Mars One complete their goal of sending humans to Mars, you should go their website at <http://www.mars-one.com/> to get more information and donate money to help provide the funds needed to get humans on Mars by 2024.



Questions

Short Answer: Write the answer in the blank.

1. What international organization wants to go to Mars by 2024?

2. Why do some people say that Mars One will not reach its goal?

3. How much money will it take to get the first group to Mars?

4. In order to have enough money to go to Mars what are two things Mars One must do? _____
5. From what company will Mars One get its capsule and rockets?

6. What kind of company is Mars One? _____
7. How much money do they expect to get from the TV show?

8. How old must you be to apply for the Mars mission? _____
9. What are the five characteristics that Mars One is looking for in its candidates?
(same order as text)
10. What website can you go to for more information on Mars One?

Pronoun Reference: Write what the pronoun refers to in the blank.

1. **it** (paragraph 2) _____
2. **this** (paragraph 3) _____
3. **it** (paragraph 4) _____
4. **They** (paragraph 5) _____

Vocabulary in context: Write the meaning of the word as given in the text.

1. donations (paragraph 4) _____
2. candidates (paragraph 6) _____
3. Resiliency (paragraph 7) _____
4. curiosity (paragraph 7) _____

True or False: Choose *T* for True, *F* for False, or *NG* for Not Given

1. ___ Bas Lansdorp started Mars One in 2012.
2. ___ Getting into space is not expensive.
3. ___ Most of the money will come from donations.
4. ___ Corporate donors are called sponsors.
5. ___ A one-way trip to Mars saves money because they don't have to design a new Capsule.
6. ___ They will bring a nuclear reactor to create electricity on Mars.
7. ___ Mars One hopes to raise money by making a reality TV show.
8. ___ Mars One is looking for doctors to go to Mars.
9. ___ Mars one is looking for candidates who made at least an 8 on the IELTS.
10. ___ Khalid Al Jaaidi is a candidate for Mars One.

Match the topic: Write the number of the paragraph next to the topic.

1. ___ The difficulty in finding people willing to go to Mars.
2. ___ The way Mars One plans to keep costs down.
3. ___ Characteristics of candidates for Mars One.
4. ___ How Mars One will raise money.

Dictionary Definition: Write the number for the best definition to define the word "**capsule**" as used in the following sentence. _____

Once they have landed on Mars the Dragon **capsule** will also be reused to make the homes for the people who are going to settle on Mars.

cap·sule (kăp'səl, -sōōl) *n.*

Taken from <http://www.thefreedictionary.com/capsule>

1. A small soluble container, usually made of gelatin, that encloses a dose of an oral medicine or a vitamin.
2. Anatomy A fibrous, membranous, or fatty sheath that encloses an organ or part, such as the sac surrounding the kidney or the fibrous tissues that surround a joint.
3. Microbiology A mucopolysaccharide outer shell enveloping certain bacteria.
4. a small pressurized compartment or vehicle (as for space flight)
5. A brief summary; a condensation.