

Space Exploration: Mission to Mine

**Create a Planetary Resource Station by Mining
Other Planets for Resources**

Space Exploration needs you!!

The planets and celestial bodies in our solar system aren't just giant rocks or gaseous objects orbiting in space. There are valuable resources in every planet, moon, or asteroid. These resources could be used to aid our planet or to create resource stations to aid space exploration. You can create a mission to create a planetary resource station!

Resource Stations on Other Planets

Resource Stations on other planets would aid Space Exploration. Pick a planet in our solar system and determine what kind of resource is most plentiful and valuable there. Keep in mind that the resource will be used to further space exploration.

Resources on Other Planets

The first step is choosing which planet and resource mine. Watch this video:



Do some research on mining.

Use these links to learn about mining off Earth.

- <https://www.nasa.gov/press-release/nasa-s-sofia-discovers-water-on-sunlit-surface-of-moon/>
- <https://www.space.com/7530-significant-amount-water-moon.html>
- <https://www.newscientist.com/article/dn17861-how-astronauts-could-harvest-water-on-the-moon/>

Come up with a plan to get to that planet including the crew needed for the mission.

If the planet is too far away, the choice of hyper sleep or even a robotic crew may be needed.

Watch this video about asteroid mining to get ideas:

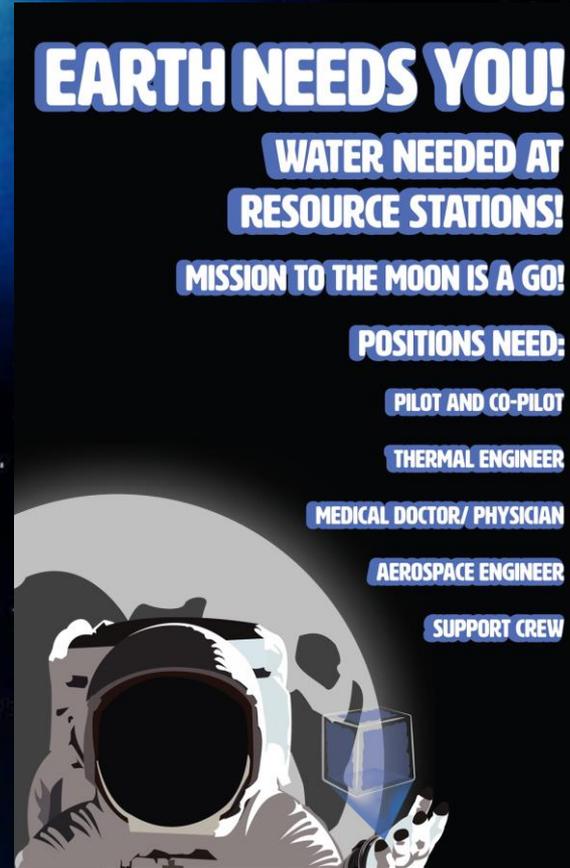


Recruit your crew!

What crew would you need for *your* mission?

For example, our moon has been proven to contain substantial amounts of water. With it being the closest celestial body in space, that would make it the best option if Earth ever needed to mine water off our planet. This poster is a sample recruiting poster for a Mission to the Moon.

The crew positions listed in this sample poster are needed to complete this mission. What crew do you need to complete *your* mission?



Make Your Recruiting Poster

Be creative and include the following information:

- The planet you have chosen
- An image of the resource being mined
- The crew needed to complete the mission
- Persuasive or enticing language

You will need

- Poster board
- Pencil or Markers

Or

- Digital program such as Photoshop, Illustrator, or Paint