

# Life Above

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## **Destruction and Entering Mars**

It is the year 2154 and Earth is changing. It is no longer a habitable place because of climate change and natural disasters. Fortunately, NASA worked out a solution. They were studying other planets near Earth and they agree that Mars is the most habitable. It has ice that can be melted into water and minerals that can be used to build structures. It just needs oxygen. They cannot figure out how to make an atmosphere on Mars, so they make a generator that works by separating oxygen atoms from carbon dioxide molecules, which are made up of one carbon atom and two oxygen atoms with intense heat to make oxygen in a dome instead. Now unfortunately, because NASA didn't have enough time to plan and design the technology, the generator needs to be fed iron, titanium, and ice to keep it running. NASA decided to use iron, titanium, and ice to power the generator because iron and titanium are common on Mars and ice is near the dome.

## **Rules**

NASA decides that getting that many materials will be hard work. The more materials are put in the generator, the more oxygen it is able to create. Soon, NASA makes 9 shoots, 3 for each material. 6 times a day, the chutes close to make a platform for one minute for something to stack materials on it. The chutes can only open for one minute because if it is open all day or even for 2 minutes, dust and other mars resources will clog the chutes. They try to make people collect the materials to give the machine, but they realize that humans are too slow and they waste a lot of resources. Once, the humans were so slow at gathering the resources and placing them in the right areas, the whole human population almost suffocated because the generator barely had enough energy to make sufficient levels of oxygen. So, NASA figured out that they had to use robots.

## **NASA making robots and programming them**

NASA quickly gets to work on a robot. The chutes only make a platform for the materials for 1 minute, so the robot has to quickly sort the materials. So, NASA gathers a team of scientists and engineers to create a robot that can hurriedly gather materials and sort them quickly. So the team of scientists made 2 designs for the robot. The first design was a robot that could collect the materials fast, but couldn't sort the materials quickly. The second design could sort materials fast, but couldn't collect the materials fast. So, the scientists and the engineers combined the ideas of the robots into 1 robot and the new robot was able to gather materials

fast and sort them fast if driven. Then, NASA and their team of programmers make a program that would make the robot gather materials and sort them when the humans are resting. So the humans would control the robot half the time when they are awake, and the program would run when the humans are resting.

### **How the game works**

6 times a day, the chutes close to make a platform for one minute for something to stack materials on it. If there is not enough materials going into the chutes after 1 minute, there will not be enough materials in the generator. If this happens for over 12 hours, the generator won't be able to generate enough oxygen, and all the living things in the dome will die. But, if there is a stack of three in a row, then it powers the generator so that a lot of oxygen comes out. If there is a row of a single material, it gives lots of oxygen, but not as much as the stack of three. If there is every platform and every row is filled to the max, then the generator will get enough energy to make oxygen for 12 hours.

Life Above Storyboard

