

2nd PLACE WINNER
Middle School



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The City

One day soon, we will have the ability to live in vertical cities on Mars. The colony will consist of ten cities each with a compact living area where you can shop, work, play and live the best life ever because you have the latest advances in technology in your daily life that aren't available on Earth. First of all, the living quarters will have three many categories; the upper class is the most expensive, then there's the middle class which most working people could afford, and the lower class which allows for the cheapest forms of living. In this city, everyone is transported by compressed air, like the tube transporters at the banks on earth. You just say what part of the colony you want to go to and you are launched to that area. Just above the housing levels, there will be businesses and research centers of all kinds. On the top level of the colony you will find astronomy research and giant lasers available to destroy any possible threats towards the colony such as meteors. Just to the right of the astronomy research center will be the agricultural hub. The center of the colony will consist of an enormous mall where you can find any thing from food, to clothes, toys, Robots and vehicles to move around outside of the colony as well as private space ships to travel back home. Above the mall you have a landing zone that can handle vertical craft landings like similar the present Harrier jump jets, as well as horizontal landings like standard airplanes. Launch pads and mission control will be located the other side of the astronomy center. Below that, water creation and purification facilities will be in full production. Just as important, public services like fire and police stations as well as hospital will be conveniently located with in each of the ten cities. Power will be made mostly by solar energy and human waste. We will use human waste as biomass and solar panels that are set to track the sun as to get the most energy possible. We will mainly use solar power because it is economical and very available due to the small amount of atmosphere in space. The colony consists of ten small cities each with a population of 106,500 people, for a total population of 1,065,000 people. Each small city has its own housing, shopping,

businesses, water, and oxygen creation, water purification and city services. The reason the colony will be design this way is because with the colony being vertical you save room to expand the colony and it will be more convenient to get from one part of the colony to the other.

How to Get Resources Necessary For Life

Food will be grown by aeropockets in a huge building. We will get meats by having animals flown to mars where they will be grown. Almost every kind of food available on earth will also be available on mars. We will get water from melting ice from the Polar Ice Caps and mixing oxygen and hydrogen. Large amounts of water will also be flown to mars on large transport ships. We will get air from trees growing throughout the base and algae farms as well as other plants to help make oxygen and remove Corbin monoxide. Large amounts of oxygen will also be flown to mars on large transport ships.

Transportation

There will be rockets that fly to space stations, Earth, Earth's moon, Mars's moons and to other parts of Mars. They will look like an airplane but will be strapped onto solid rocket booster for an extra boost to get into deep space. The rockets that stay on Mars will be able to carry a crew of four for exportation. The rockets that travel to earth and to other bases will be two leveled, and can hold up to seven hundred and fifty passengers. The rockets will carry people and cargo such as air, water, food or anything else that is need on the colony. All travel operations will be controlled at mission control. You will also be able to buy space cars for fun on the red planet.

City Services

You will be able to find any kind of city services on the Mars Colony such as trash collection, water treatment and a courthouse just like on Earth. There will also be hospitals, police stations, and fire stations. The colony will be broken down into districts that a mayor that will oversee, the mayor will report to a colony governor who will report back to his supervisor on Earth. The city is responsible for the protection of the colony because people from all nations can come to the colony to escape the troubles on earth like a war. So the mayors and governor are the ones responsible for keeping peace on the colony. The colony will work as a group for all mankind and work towards peace on Mars. City services are needed on mars because without city services to help run and protect the colony the colony will fall apart.

Shopping

Residents of this Mars colony will be able to shop for anything that they can imagine. Super stores like a Marsmart, Twenty First Century Tools, Space Toys and Galaxy Fashions will be open to all residents. There will be a Space Transport Mall where licensed drivers can rent or purchase space planes and space cars for the fun of exploring mars. There will also be many different stores and markets to purchase Mars grown and all natural foods for yourself and family.

Housing

Each suite will have a kitchen, one to three bathrooms, a living and dinning room, and one to six bedrooms. The furniture will be built into the wall so that you get the most room possible. All you have to do is just grab the handle and pull out a bed, table or sofa. The closets will also have every thing built into the wall. Doors and places to hang thing are all built into the wall. Also in the housing complex everyone will have a room where they can talk to friends and family back on earth in a 3D Virtual World. The three D virtual world will be set up so that once you strap on the virtual helmet, you will be instantly connected with your friends and family. This is an important feature for survival, because without a connection to family and friends on Earth it would be very difficult to thrive on Mars.

Education

Elementary schools, middle schools, high schools, and colleges will be open to all residents so everyone can get the best education there is. The most highly educated teachers will teach at these schools. Education is needed on mars, especially in space exploration so that we can continue to develop as a society on Mars. We will also need to be able to teach people on Earth everything that is being learned and taught on Mars.

Protection for the Harsh Environment of Space

Water will be stored in large compartments on the out side of each colony to protect the people from radiation and to transport the water. There will be a large laser that will be used to destroy any incoming asteroids and meteors. The colony will also be able to withstand Martian windstorms by using very strong building materials. An emergency warning alarm will be installed throughout the colony and when sounded, everyone out side the colony needs to report inside immediately.

Research

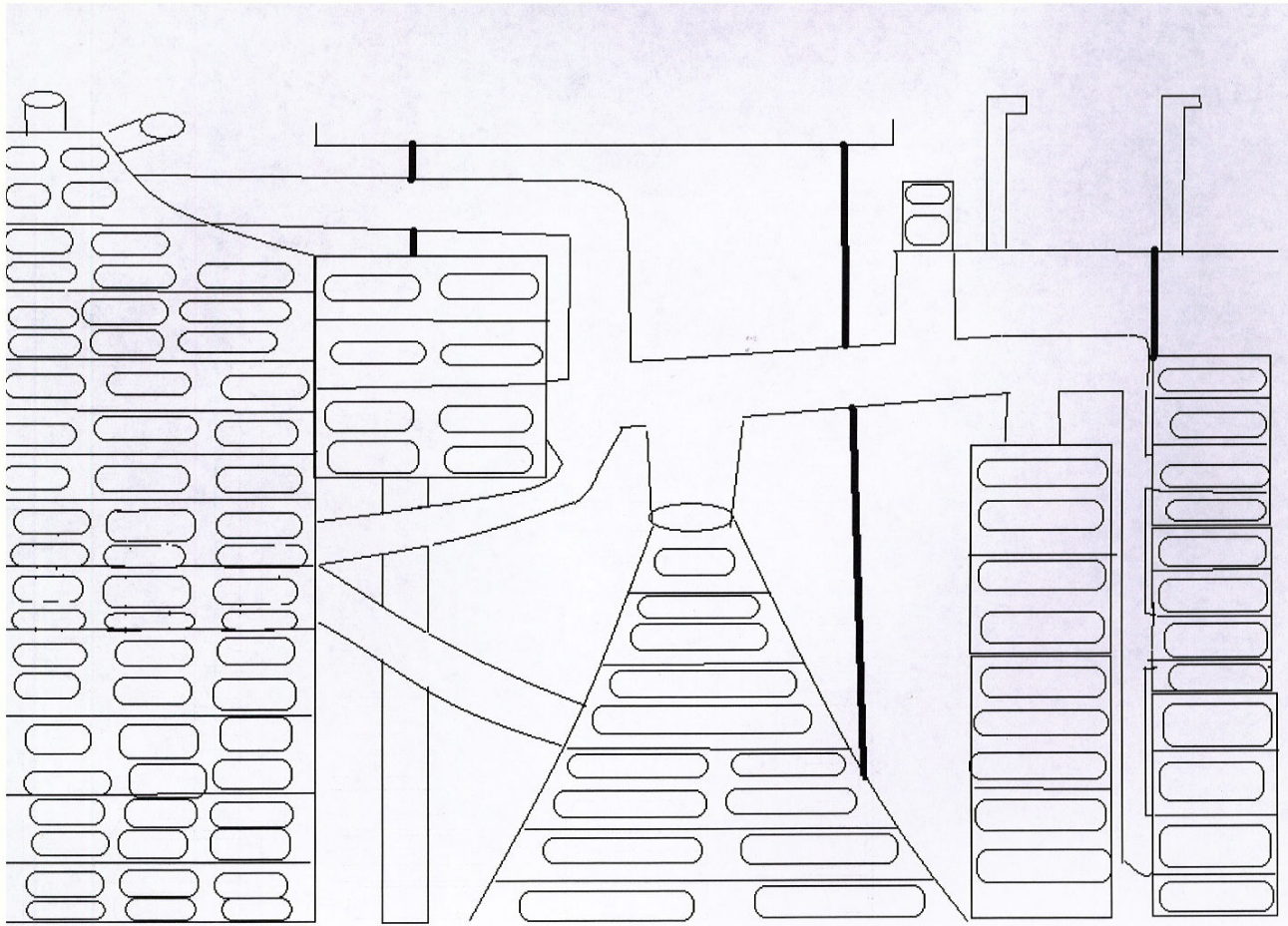
The most important thing that will be researched is a way to use materials from Mars to make cures for diseases. Another subject of research will be how living on Mars affects humans. Research is needed on Mars so we all can learn how to live more efficiently on the big red planet.

The Location of the Base

The base will be located near Mars caves, near the equator because there is a large amount of open land. The caves can provide human protection if there is a major radiation storm and they are located near the equator making it easier for the residents to find safety. This is also an advantage because there is believed to be a form of water in the caves, which we desperately need for survival. The caves could help us because of the condition of being underground there could be forms of life, and different minerals that we could use in our daily lives. Also being located near the equator, we would get a lot of sun which could be used to make solar power.

Fitness

The colony fitness centers will be located on each floor of the housing complexes. Fitness will be conducted in an artificial gravity room where you can pull one to three G's and get much more of a workout in much less time. This will allow everyone to spend more time with family and friends. It will be very important for everyone to find time to exercise every day because without it our bones will quickly deteriorate, resulting in weak and unhealthy people living on the base.



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