

Citizen Group Card #5

Vocabulary

Scientists' Opinions about Proposed Space Colony

resources: (n.) materials that may be used for some other purpose

technological: (adj.) involving tools

innovations: (n.) new ideas, methods, tools, or products

modes: (n.) types or kinds

financial: (adj.) dealing with money

astronomers: (n.) individuals who study the stars, planets and other objects in outer space

sustain: (v.) provide support for; continue

Many scientists support funding a space colony because they believe that only the government has the *resources* necessary to finance, or pay for, such a large job. They point out that NASA's space program has resulted in many *technological innovations* including improved weather monitoring systems, mapping technologies, and *modes* of transportation. Additionally, space exploration has resulted in a number of innovative everyday products including cordless tools, adjustable smoke detectors, scratch-resistant lenses, memory foam, ear thermometers, long distance telecommunications (cell phones), water filters, and countless medical innovations. These scientists say that the research they get while establishing a space colony will lead to *financial* gains for our entire country.

Most *astronomers* support the funding of the space colony. They hope to find out more information about the universe. They hope to find evidence of life and explore the mineral and chemical makeup of distant worlds. Also, astronomers hope to explore ways to *sustain* life on other planets by growing crops,

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regenerating: (v.) replacing with something new

regenerating a fresh water supply, producing energy, and managing waste disposal. By conducting research on a space colony, scientists hope to learn new strategies to deal with challenges here on earth.

displacing: (v.) being forced to move or relocate

population: (n.) the number of people or animals

plague: (v.) to bother, cause harm, or annoy

Many climatologists favor investing in a space colony. They state that global climate change causes glaciers to melt, raising sea level, and *displacing* *populations* in low-lying areas. Additionally, more extreme weather patterns including droughts, powerful hurricanes, and flooding will continue to *plague* the Earth as a result of global climate change. They believe that an exploratory space colony is necessary to begin the essential work of relocating many human beings from Earth.

Some scientists believe that funding a space colony is not a wise investment. They believe that this money would be better spent upon exploring scientific issues on Earth. They point to many under-funded areas for scientific inquiry including the study of disease control, more efficient transportation systems, genetic

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divert: (v.) to move

research, earthquake preparedness, and new ways to generate energy. These scientists emphasize that the creation of a space colony is too costly and will *divert* money away from other scientific concerns.

habitable: (adj.) livable

Other scientists believe that investing in an experimental colony is worthwhile, but that this research should be done in an undersea environment rather than a space colony. They point out that the ocean offers 138 million cubic miles of *habitable* space, and many research opportunities. They believe that the primary purpose of this colony ought to be to monitor and protect the ocean because it is the most essential of all of Earth's biomes.

The ideas of scientists add important information into the discussion of a proposed space colony because their expertise is essential to the success of this mission.