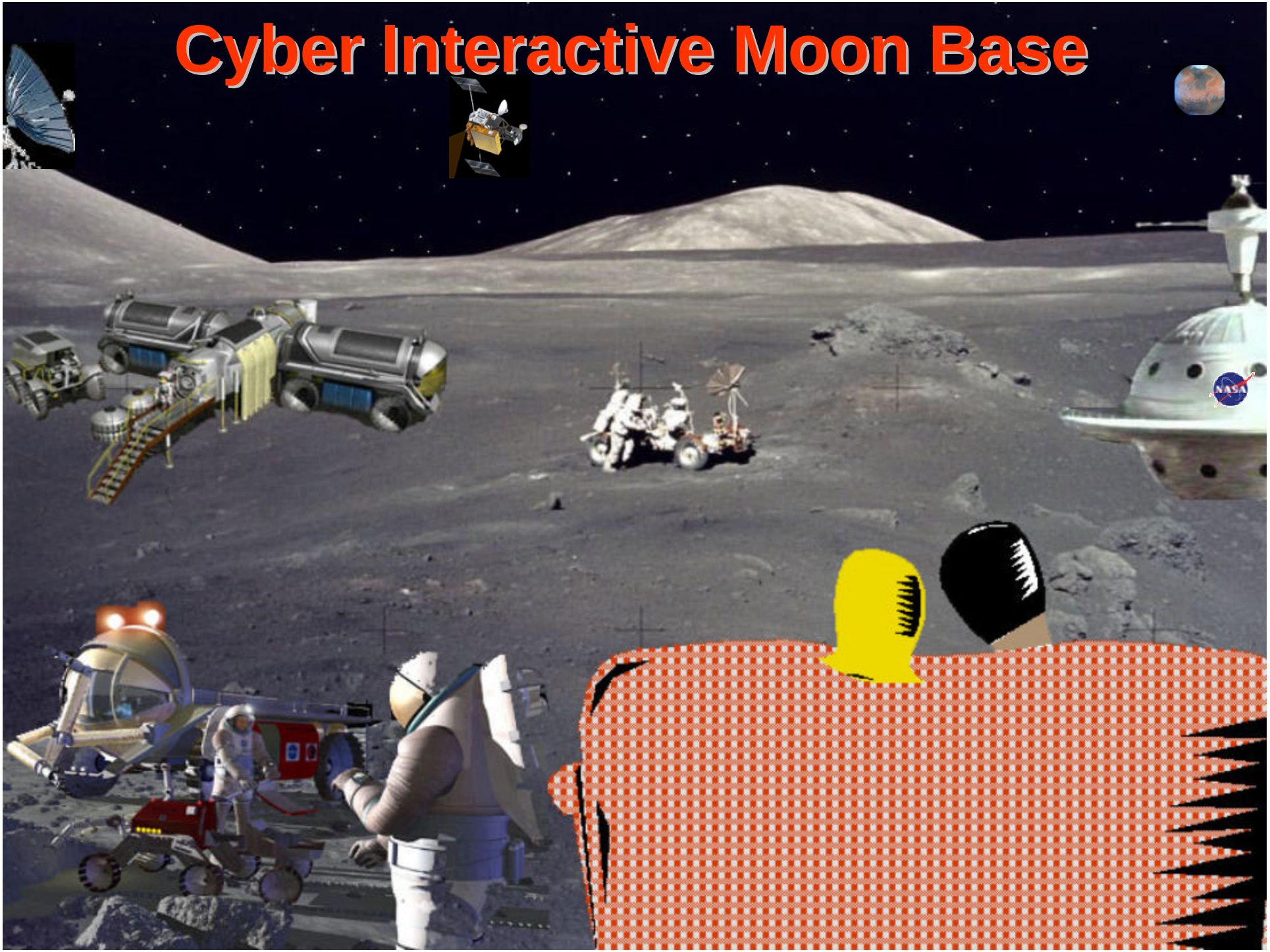
Cyber Interactive Moon Base



Project Description: The President has directed NASA to establish a moon base as a stepping-stone to Mars. This must be accomplished in a safe and cost effective manner and involve public interaction throughout because lengthy, dangerous and costly missions tend to erode tax-payer support. The Cyber Interactive Moon Base strategy turns challenges into opportunity. It reduces the cost and danger by first sending in robots to prepare the way, then following them with humans to establish a combined machine/human crew. It ensures long-term public support and attracts funding by cyber interactively involving the public in both moon-based and earth-support activities. But, how can the public be cyber interactively involved so people feel a part of the NASA moon effort? The NASA Academy will provide the answers by looking ahead to on-line/TV capabilities in (say 2020) and developing a detailed Cyber Interactive Moon Base Strategy/Technology Roadmap that will engage and hold tax-payer support throughout.

Situation: It is 2020, NASA, as leader of a UN scientific task force, has a colony of robots operating on the moon. Their initial mission is to pave the way for astronauts by constructing spaceport facilities for re-supply to and from both earth and Mars. The colony is supplied and commanded from earth. A GPS, operating in the vicinity of the moon, facilitates command and control of the colony.

Objectives: It is crucial, that viewers on earth be able, to experience the moon colony with "Tele-Presence/Virtual Reality." The "Tele-Presence/Virtual Reality" experience must be a Cyber Interactive one, which permits each viewer to select and experience a particular robot or activity, and provide technical feedback and Q&A using NASA chat rooms.

Student Tasks: Create a "Tele-Presence/Virtual Reality" pictorial, technological concept of Cyber Interactive robotic construction of a moon spaceport using Power Point animation clips. Communicate a sense of what will make a viewer experience "Tele-Presence/Virtual Reality" in their 2020 home media- center, what a Cyber Interactive viewer chat room will be like, and how it will work. Extend this work to include lunar astronauts. Provide a Technology Roadmap to show how the technology modules relate