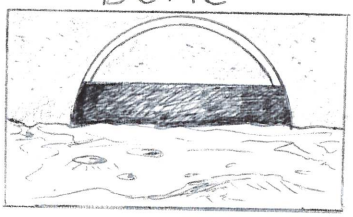
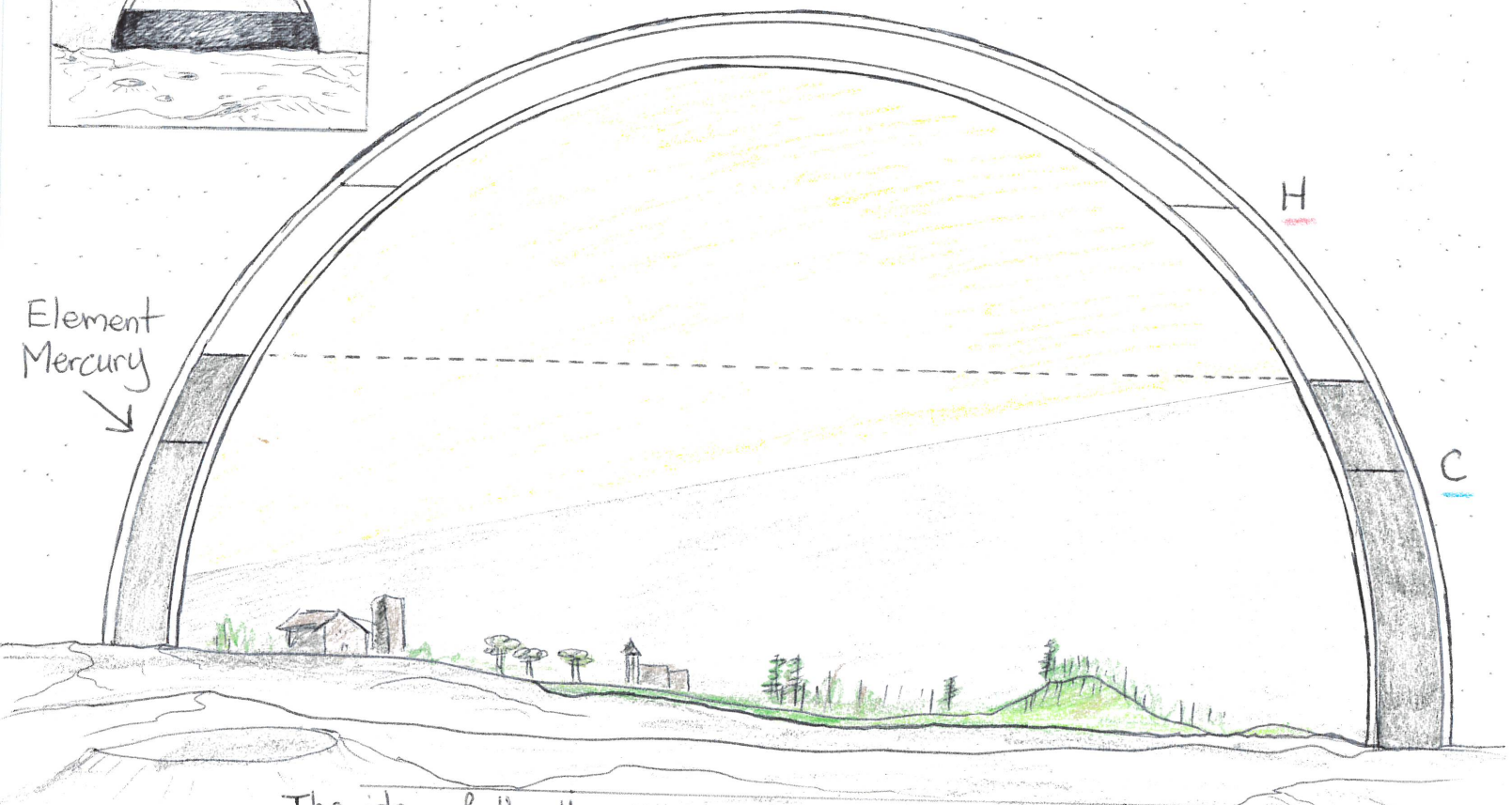
Planet

MERCURY

The Thurmometer Dome

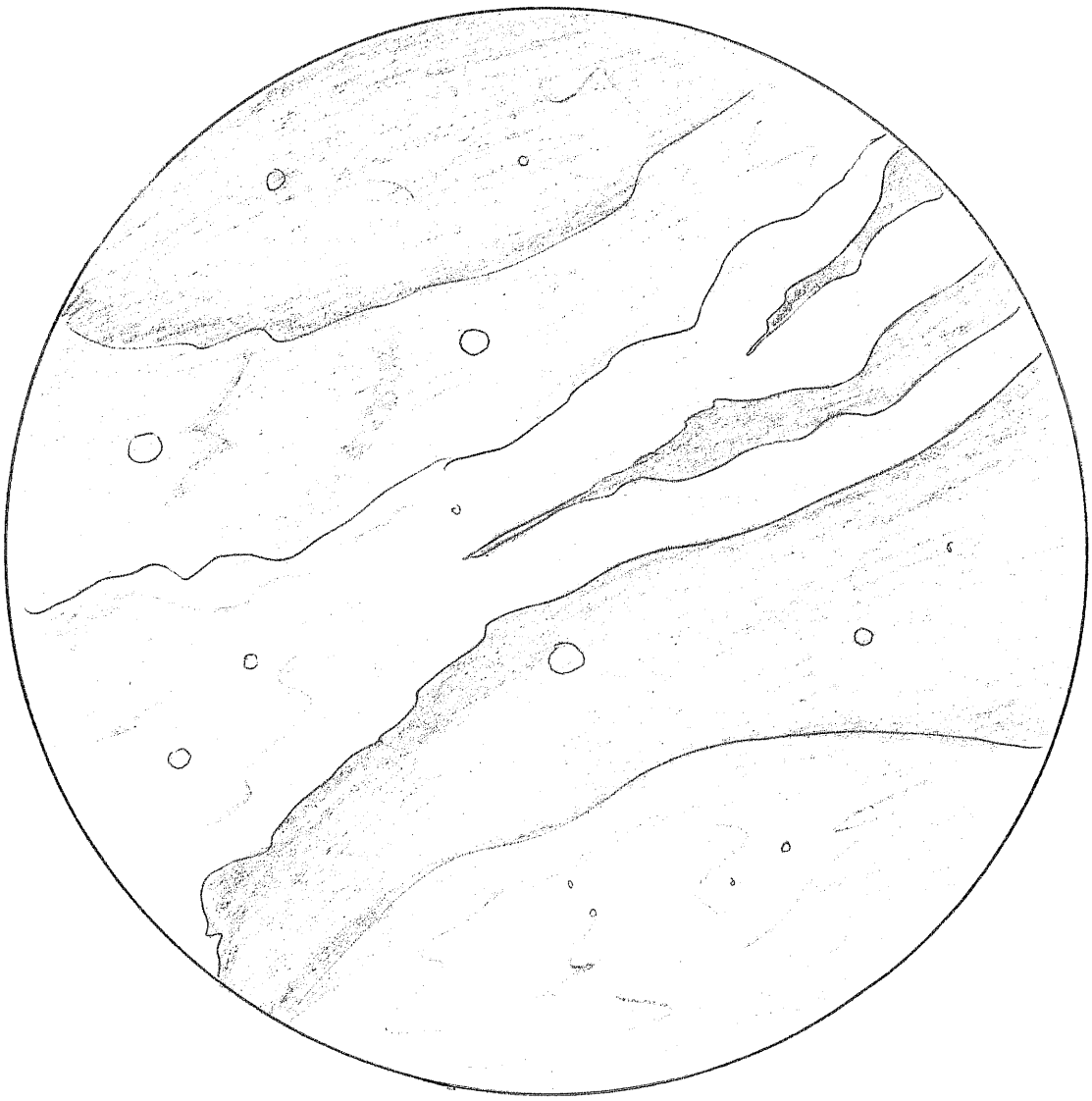


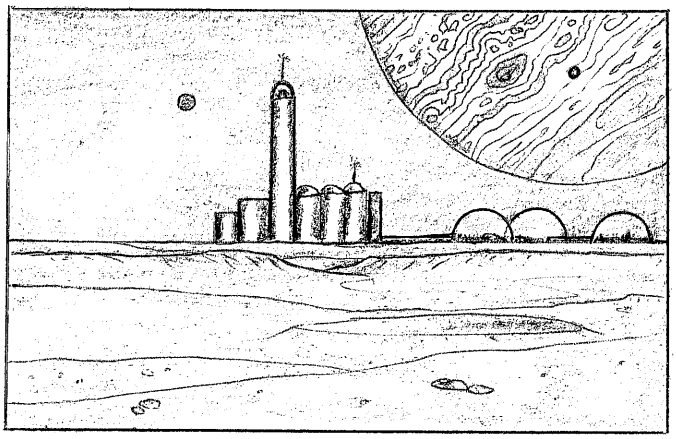


The idea of the thurmometer dome is that as it gets hot the Mercury will rise and block sunlight, while as it cools down the mercury will fall and expose the dome to sunlight. It should hit an equalibrium at the right tempurature, provided you add the correct amount of Mercury. With this tempurature regulation concept you should be able to make a colony upon the north or southern poles of the planet Mercury. The Element Mercury is the key to living upon the planet Mercury.

North-Pole

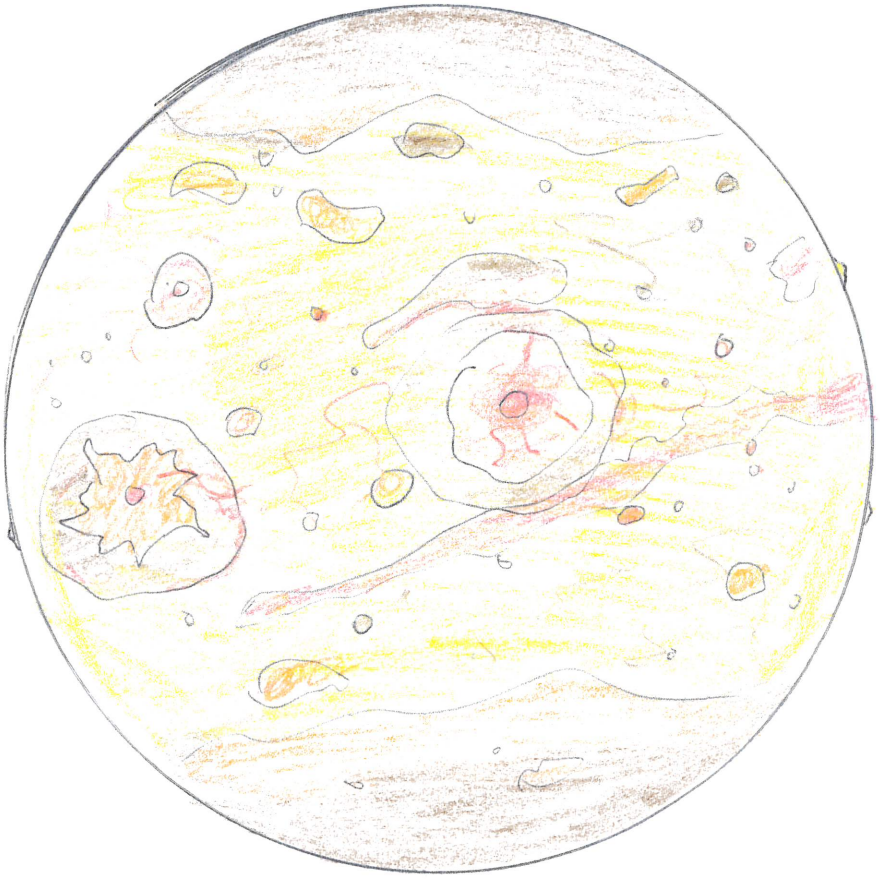
GANYMEDE

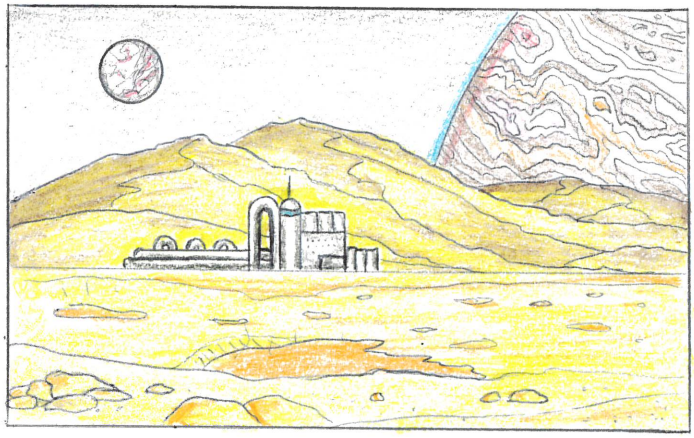




Nuclear Power Plant on Ganymede: Ganymede is the largest moon in the Solar System, and it is also the only moon in the Solar System with it's own Electro-magnetic field, protecting it from cosmic rays, radiation from the sun, and radiation from Jupiter. Ganymede is an ice moon, with a deep sub-icesheet ocean, providing plenty of water ice to use as water coolant for a nuclear power plant. This would provide power for a colony.

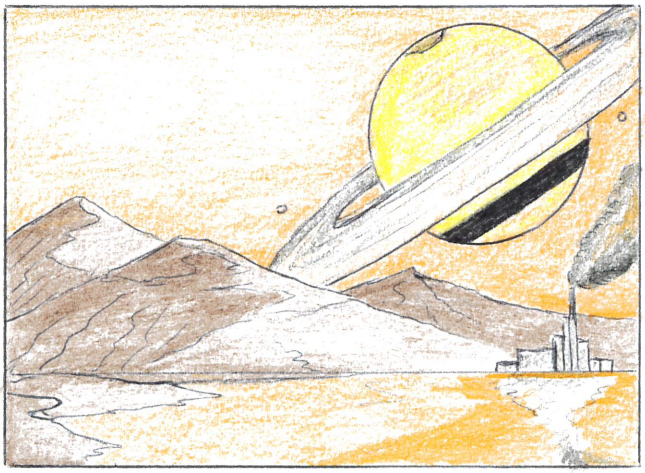
Io





Geothermal Power Plant on Io:
Io is a moon covered in volcanoes and molten sulfer lakes and springs. Although most of Io is extremely deadly and unstable, the active regions are in the mid-latitudes, while the polar regions are relatively calm and inactive. It should be possible with the right equipment and technology to build a geothermal power station in one of these polar regions, and a colony.

TITAN



Natural Gas Power Plant on Titan:
Titan's atmosphere is 95% Nitrogen; however, Titan's ice-sheet surface is covered in lakes and streams of Methane. Because of the abundance of Water ice and liquid Methane, some kind of Natural Gas power plant is possible, notwithstanding several technical challenges which are too complicated to go into on this paper. If you could overcome the challenges of this environment, you could build a colony.