

VEX Change Up: Wasteland Warriors

By Chris Reimer and Team NXS

Goals: Teleport Gates

Balls: Hacking Chips

The year is 2560. Large amounts of the Earth have become scorched and uninhabitable wastelands. Scattered throughout the land are the last remnants of humanity, clinging on to life using advanced technology and underground shelters.

Long before people were forced to take shelter from the lethal sunlight, in the year 2113, Nine teleportation gates had been created at key locations in the United States of America. These gates allowed for instantaneous travel across the country and had a significant effect on the economy, the country's ability to manoeuvre its army, and the travel industry. Unfortunately, the demand grew to meet the supply, and we were once again found with crowded roads, non-stop flights, and fuel-burning spacecraft making hundreds of flights per day.

The first stage of the apocalypse occurred in the early 2200's. Storms grew more severe each year, and were coming in greater numbers. Coastal settlements were either flooded by the rising sea level, or completely wiped off the map by the weekly Category 6 hurricanes. Large inland lakes appeared all over the continent, which destroyed a large amount of farmland, and set the stage for the next crisis. It was during this period that the military began creating large underground habitats, each capable of supporting a few hundred people. These oases were designed to be self-sufficient, with their own farms, thermal energy generators, and oxygen recyclers.

In the year 2293, the Earth's core reached a critical point, and left the Earth without a magnetosphere. The sun's rays tore away at the atmosphere and scorched the land. The Earth entered a worldwide famine, leading to hundreds of millions of deaths. The majority of the surface water evaporated within a few years, and most of the terrestrial flora and fauna dwindled into extinction. The shelters had only been designed to hold a limited number of people, and with great anguish, were forced to lock their doors once that limit was reached. Humanity would not leave these shelters for another 200 years.

While humanity hid away from the surface, the teleport gates remained untouched on the surface. Their robust design was a testament to the engineering that had gone into them; the gates were still functional after lasting 400 years. Sand slowly engulfed them, obscuring them from view.

By the late 2400's, the first shelters were beginning to fail. The machinery keeping them running had been repaired countless times, and their farms had drained the soil of nutrients. If people were to survive, they needed to find a way to get resources from the surface. The shelter doors were opened, revealing an inhospitable wasteland. Humans could only survive on the surface using advanced survival gear, and with only limited oxygen in

their tanks they could not travel far from the shelters. In order to explore the surface, they created robotic rovers, designed to travel long distances. These rovers began their journeys across the barren terrain, in hopes of finding usable resources.

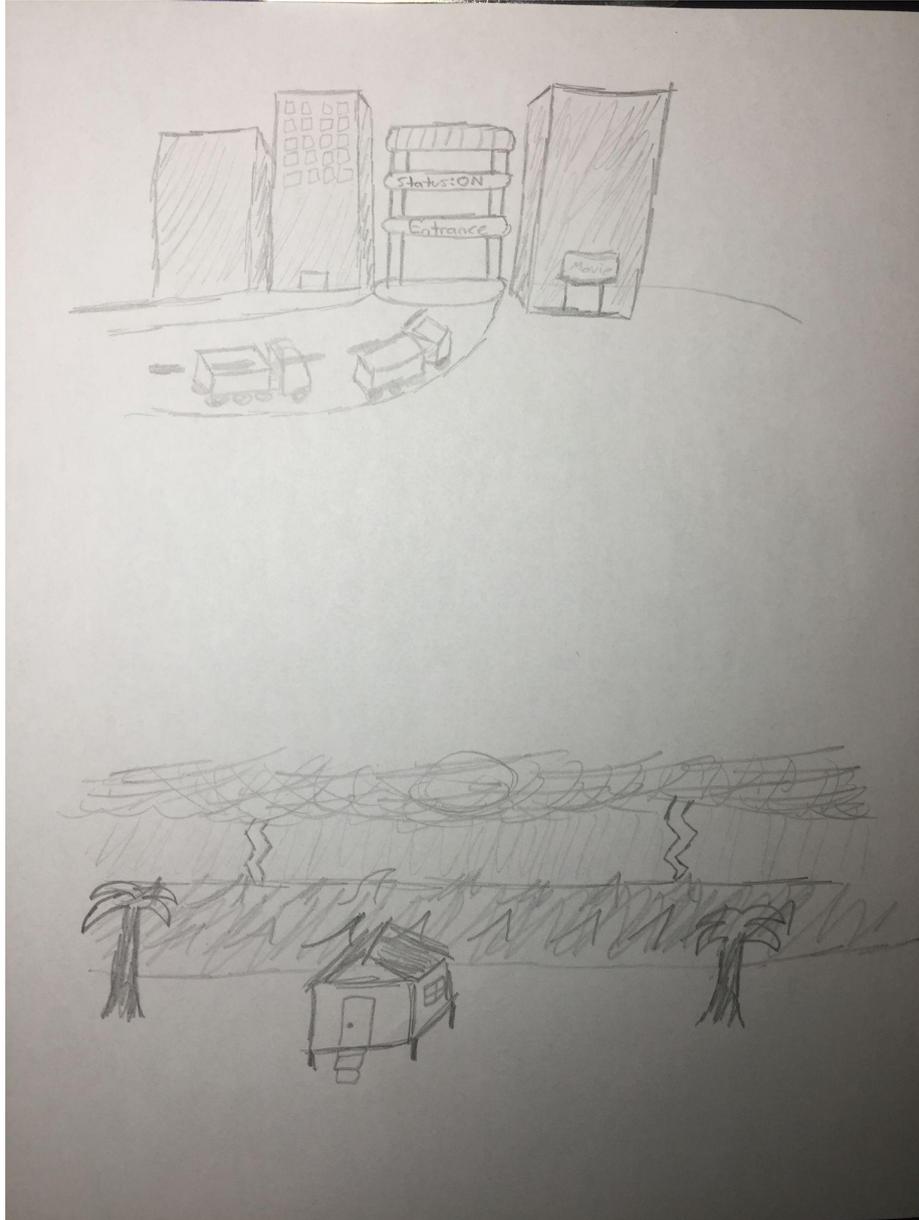
The first thing of note that the rovers discovered was each other. Some shelters saw the others as easy resources, leading to wars between them. To increase their chances of survival, the shelters began to form alliances. Several factions were created, and a war that would span several decades began. The shelters barely had enough resources to survive as it was, and the added strain of a war effort on top of that led to the downfall of a significant number of the shelters. After 60 years of drawn out battles and raids, only two factions remained.

It was then that these two factions discovered the warp gates. It quickly became clear that these would be the deciding factor. Whoever controlled the gates would be able to send more than just rovers to invade the opponent's shelter. Taking command of the gates became a matter of life or death.

To control the gates, each faction designed their own hacking chips that, if positioned correctly, would take control of the gate. These chips were also powerful enough that if a rover took too many of the enemy's chips, the chips could cause serious damage to the rover's systems. Additionally, to make the gates function, it required 3 gates to be aligned to calibrate the teleportation system.

After 2 months of war, one faction reigned supreme. Having taken control of all the shelters and their resources, they realized just how little they had gained. For humanity to continue to survive, they would need to innovate even further, and eventually return to the surface they had abandoned.

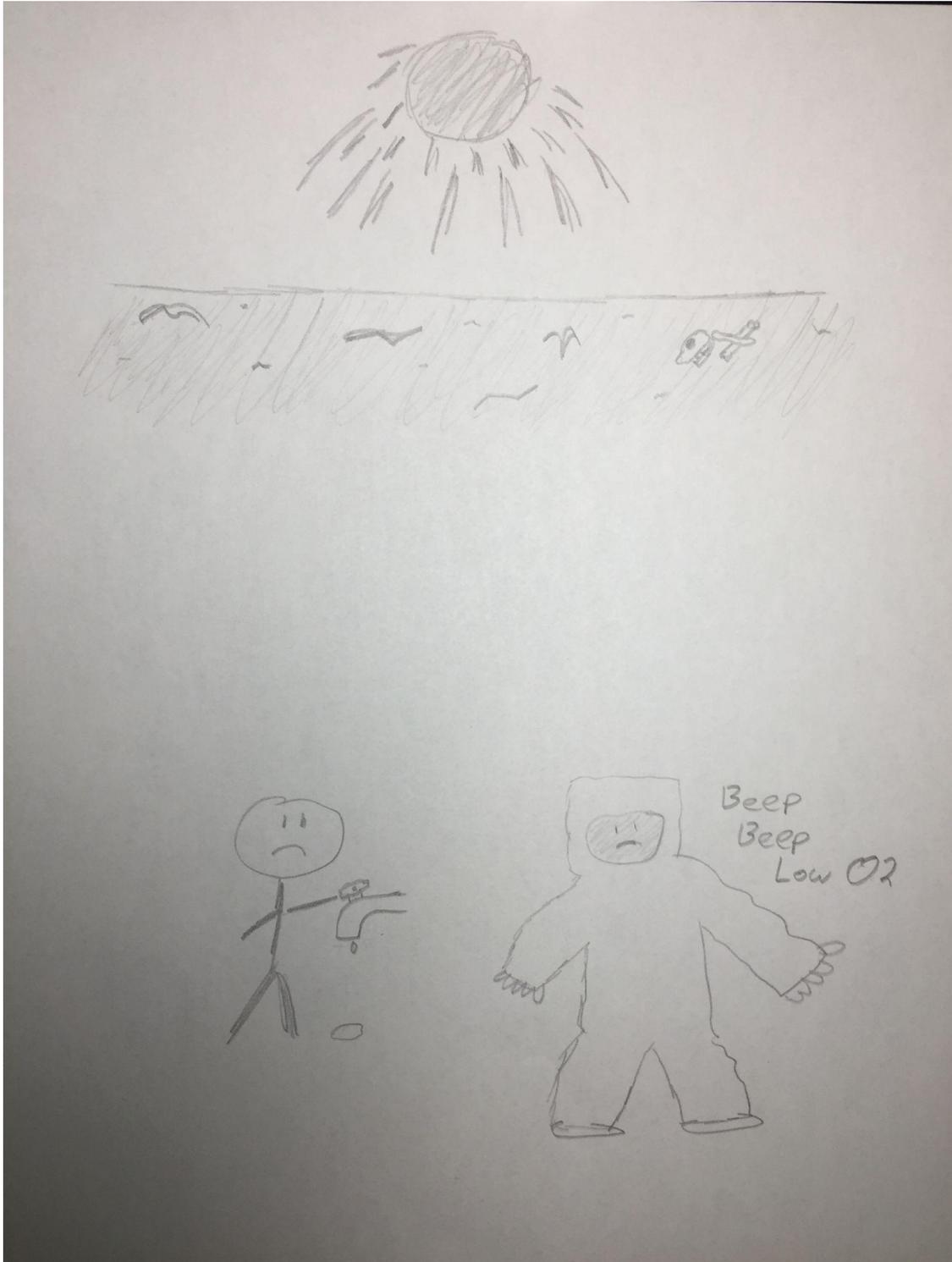
Storyboard



(Top: Early Utopia, teleportation is invented)

(Bottom: Storms wreak havoc on the coastal areas)

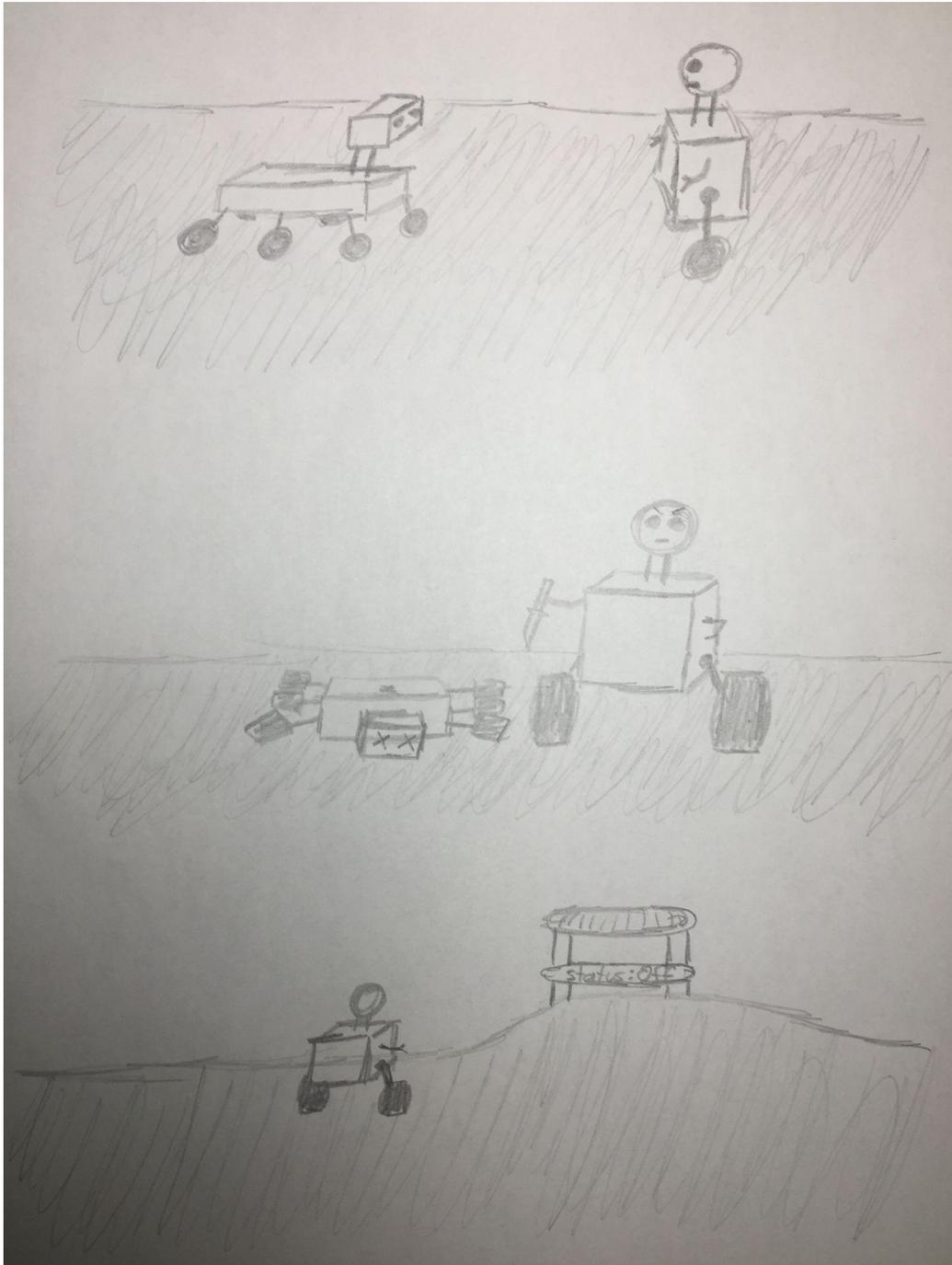
(Top: After losing the magnetosphere, the Earth's surface because a scorched wasteland)
(Bottom: Shelter inhabitants run low on resources)



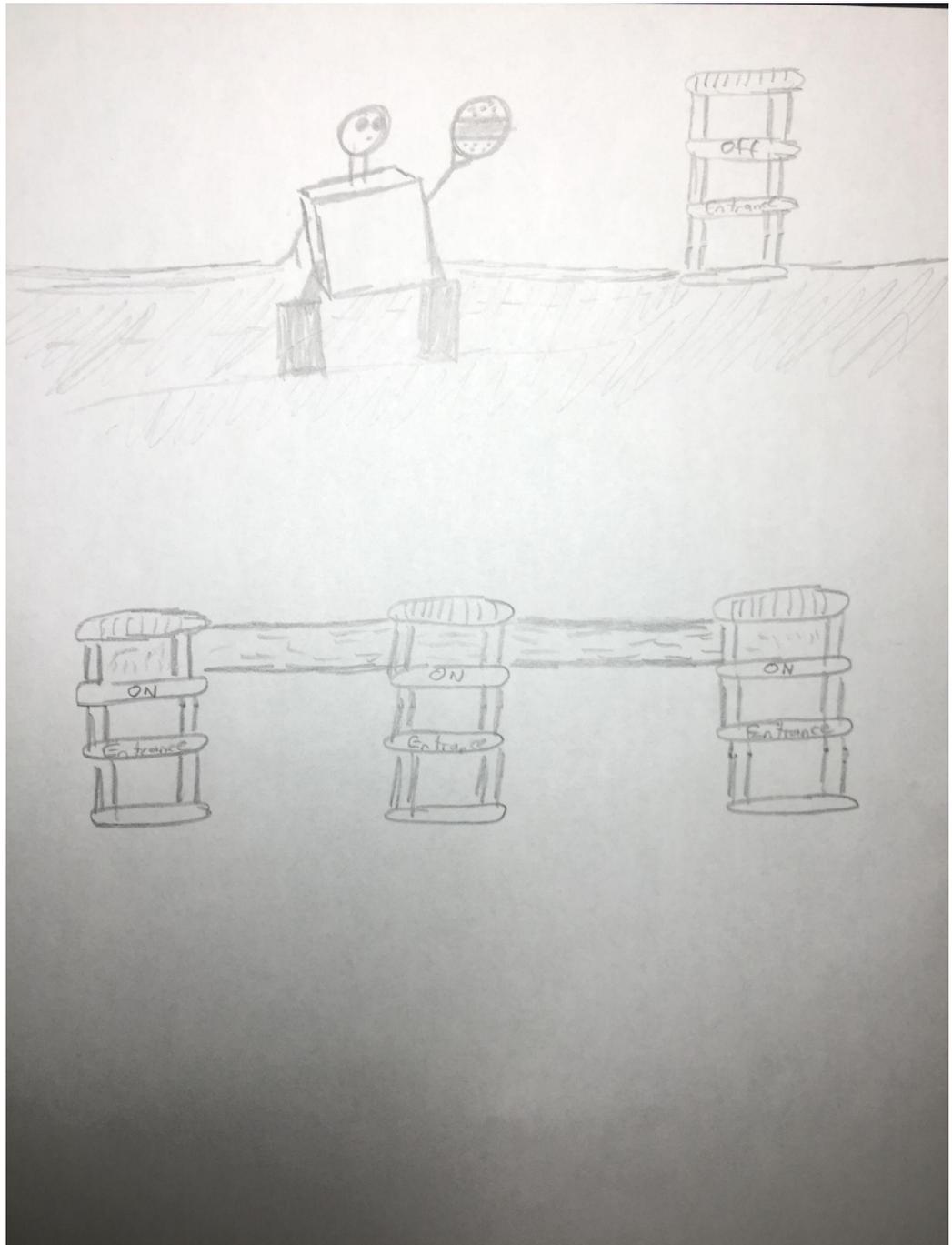
(Top:Rover meet each other for the first time)

(Middle: The humans order the rovers to fight each other)

(Bottom:The rovers discover the teleportation gates)

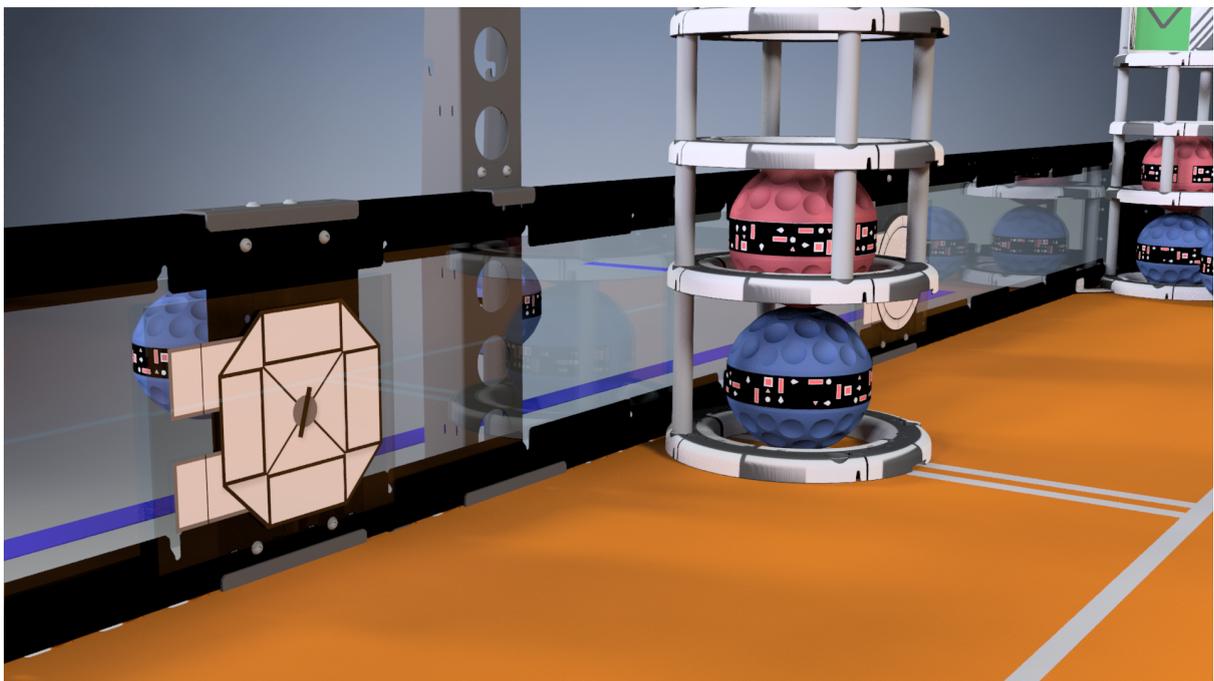
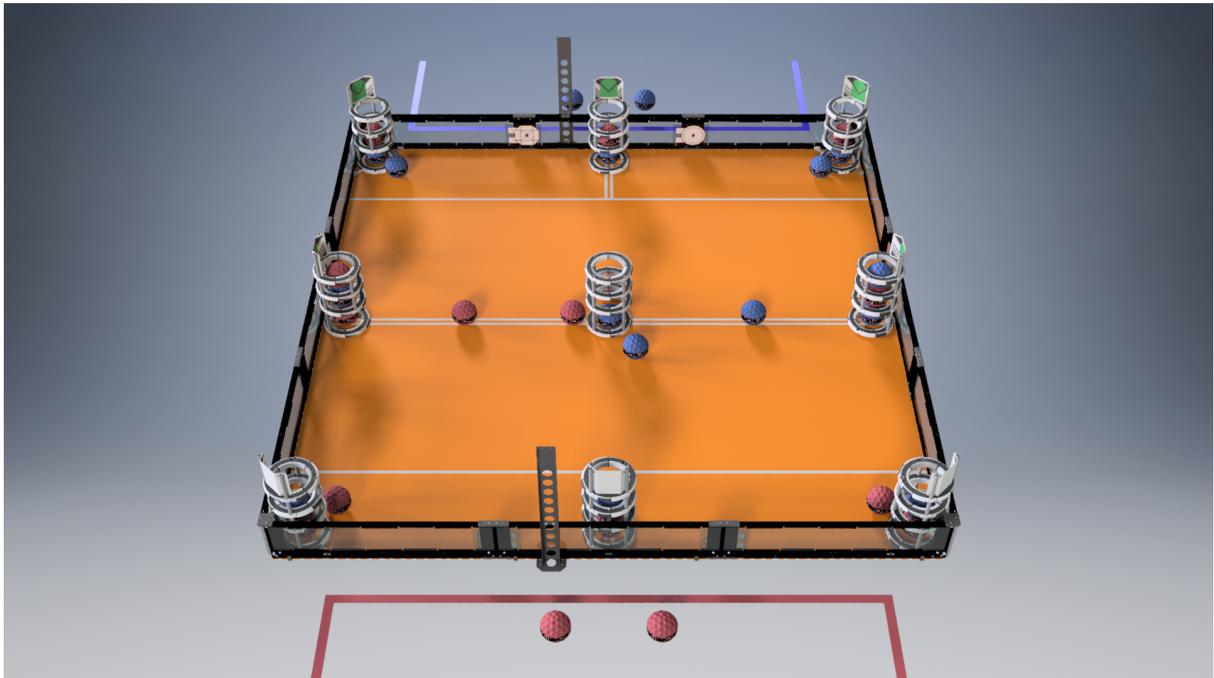


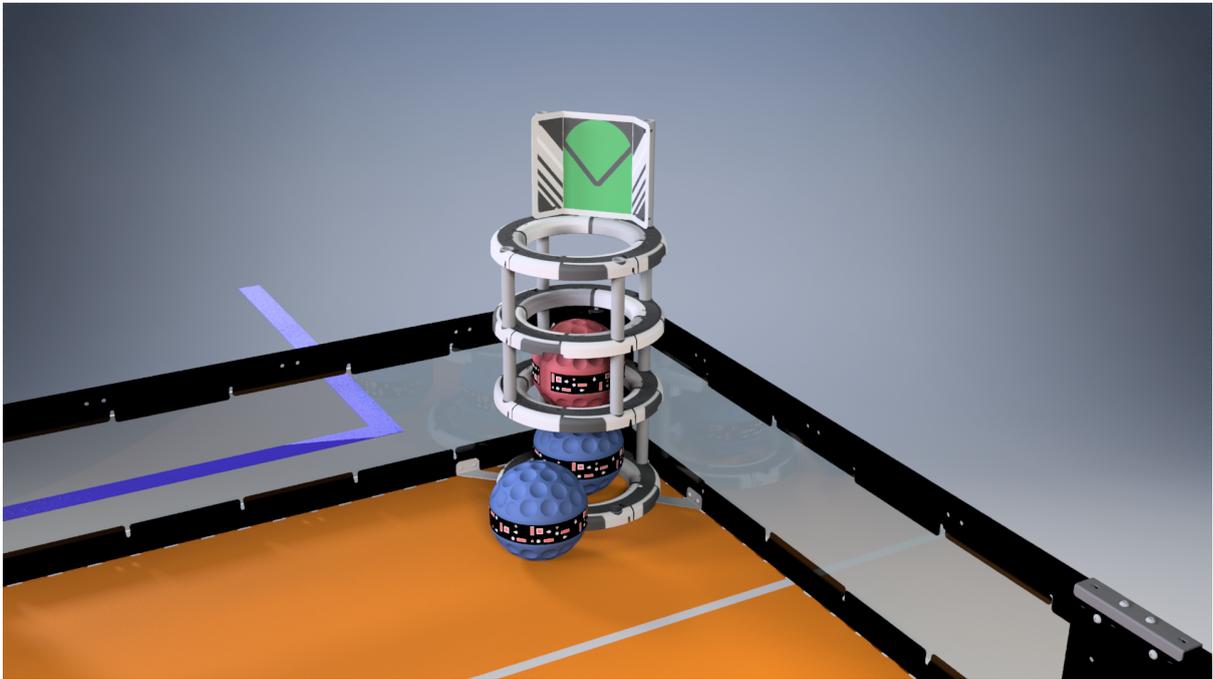
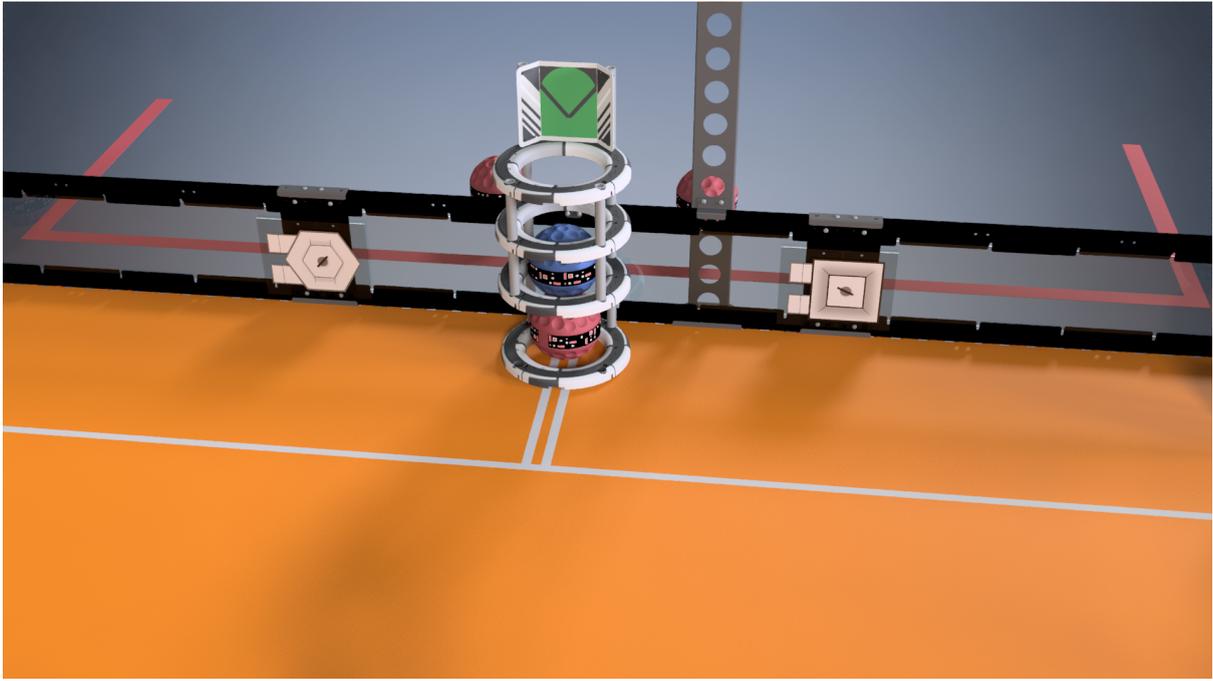
(Top: Robot carrying a Hacking Chip)
(Bottom: 3 Calibrated Gates)

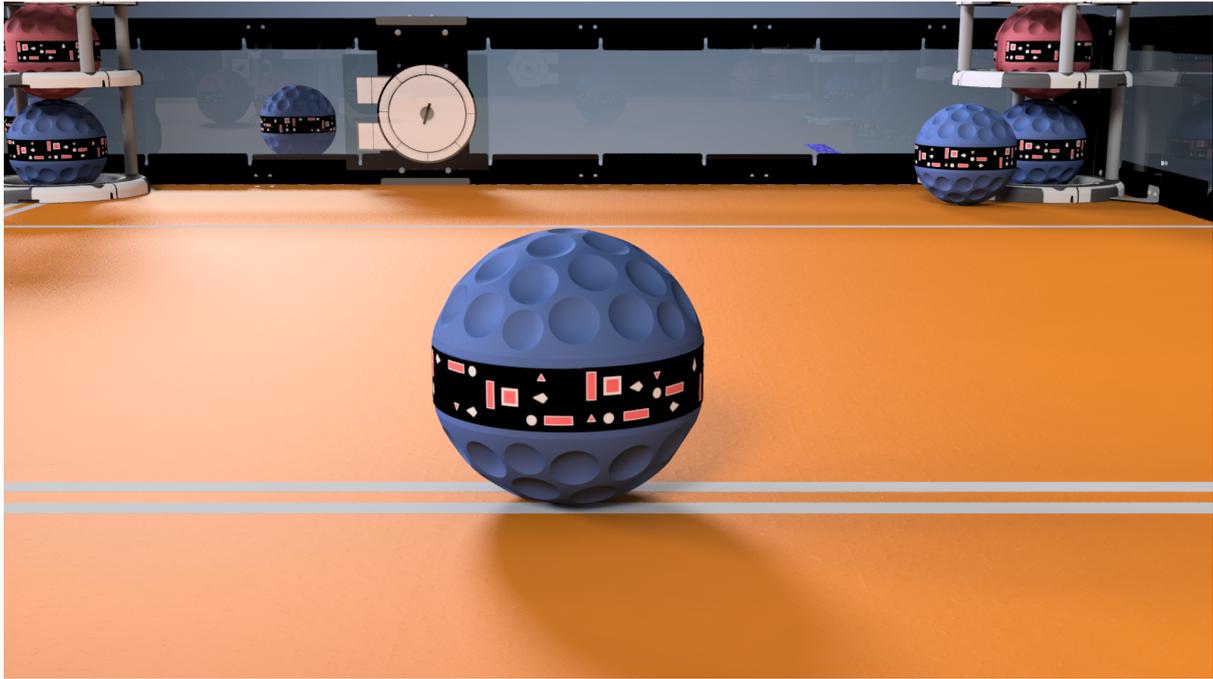


Field Renders

(Balls not setup in starting position)

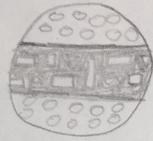




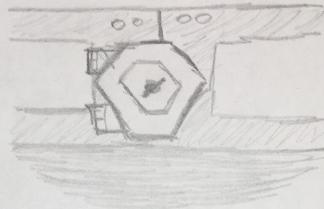


Field Modifications

- 2" by 19.8" Stickers to go around balls to change them into **Hacking Chips**
- Sticker decals added onto the goal rings, transforming them into **Teleportation Gates**. Original plan was to have different text for the top and bottom rings, but the inventor assembly made it very difficult to do this, so a generic texture was used for all rings.
- Lexan rectangles with printed pictures of vault doors on them to represent the **Shelters**
- Replace the tiles with orange foam tiles to simulate the **Wasteland**



Hacking Chip

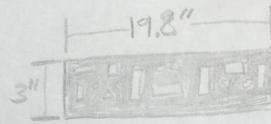


Shelter Door



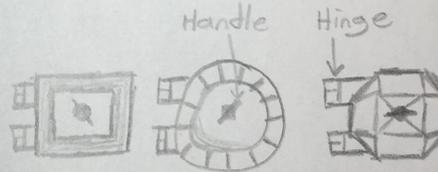
Teleport Gate

All field tiles replaced with orange tiles.



sticker to convert balls into hacking chips.

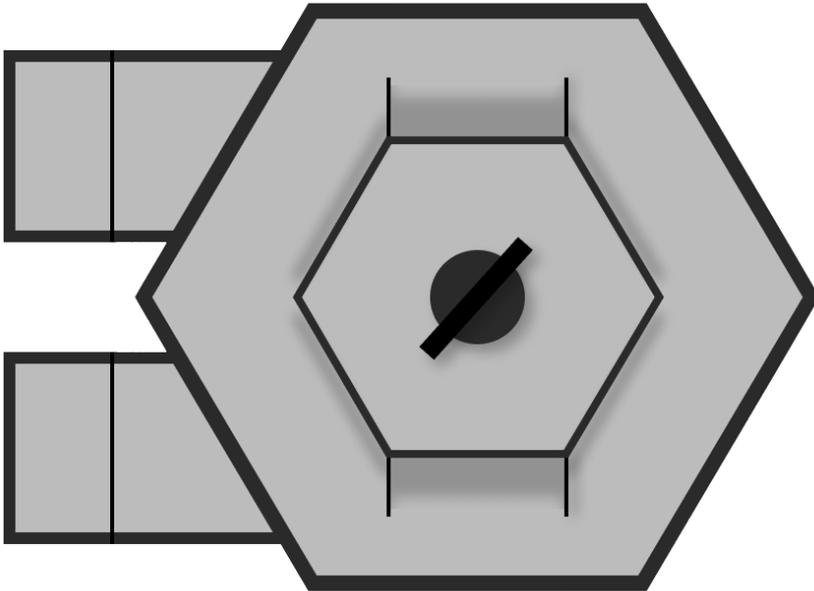
Shelter Doors are printed onto cardboard pieces. Each team has a unique shape.



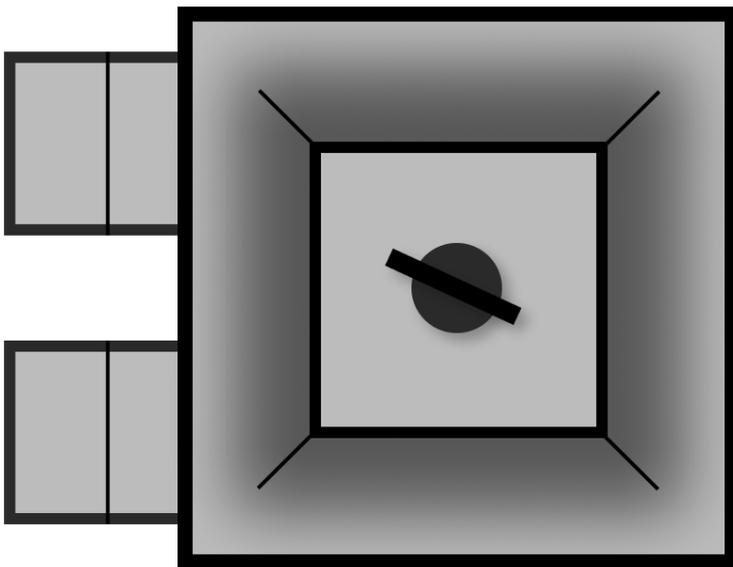
Teleport gate text and textures are stickers.



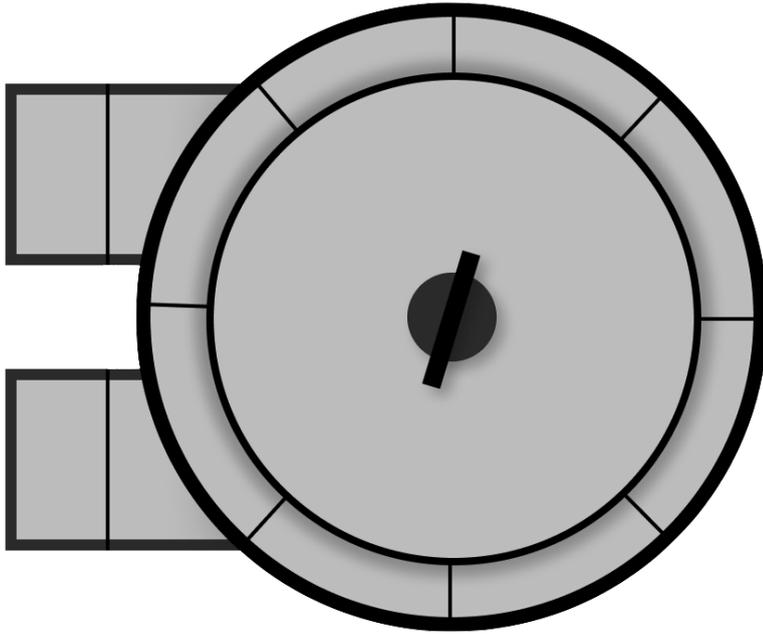
Ball Sticker



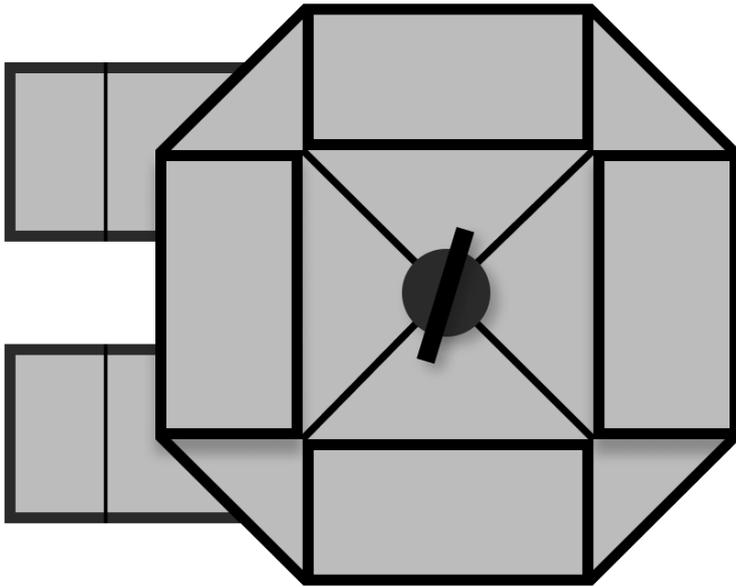
Door 1



Door 2



Door 3



Door 4



Goal Ring Texture

Source: <https://pngimage.net/futuristic-circle-png-1/>