

how to build a spaceship for everyone in the world

a science fiction colouring adventure



Chapter 1
Kids built the post-scarcity society.
They knew the world wasn't fair. Most people had very little while a few hoarded so much.

"Let's take care of each other," they thought. How do we build a society founded on equity? Was it even possible?

Climate change loomed on almost everyone's minds. They thought, "If we look at the big picture maybe we can find a way to fix this." Asteroid strikes, supervolcanoes - we should probably have a plan for those too.

"Let's go big or we won't have a home!" they shouted. The sky's the limit! TO THE MOON!!! they typed in all caps!

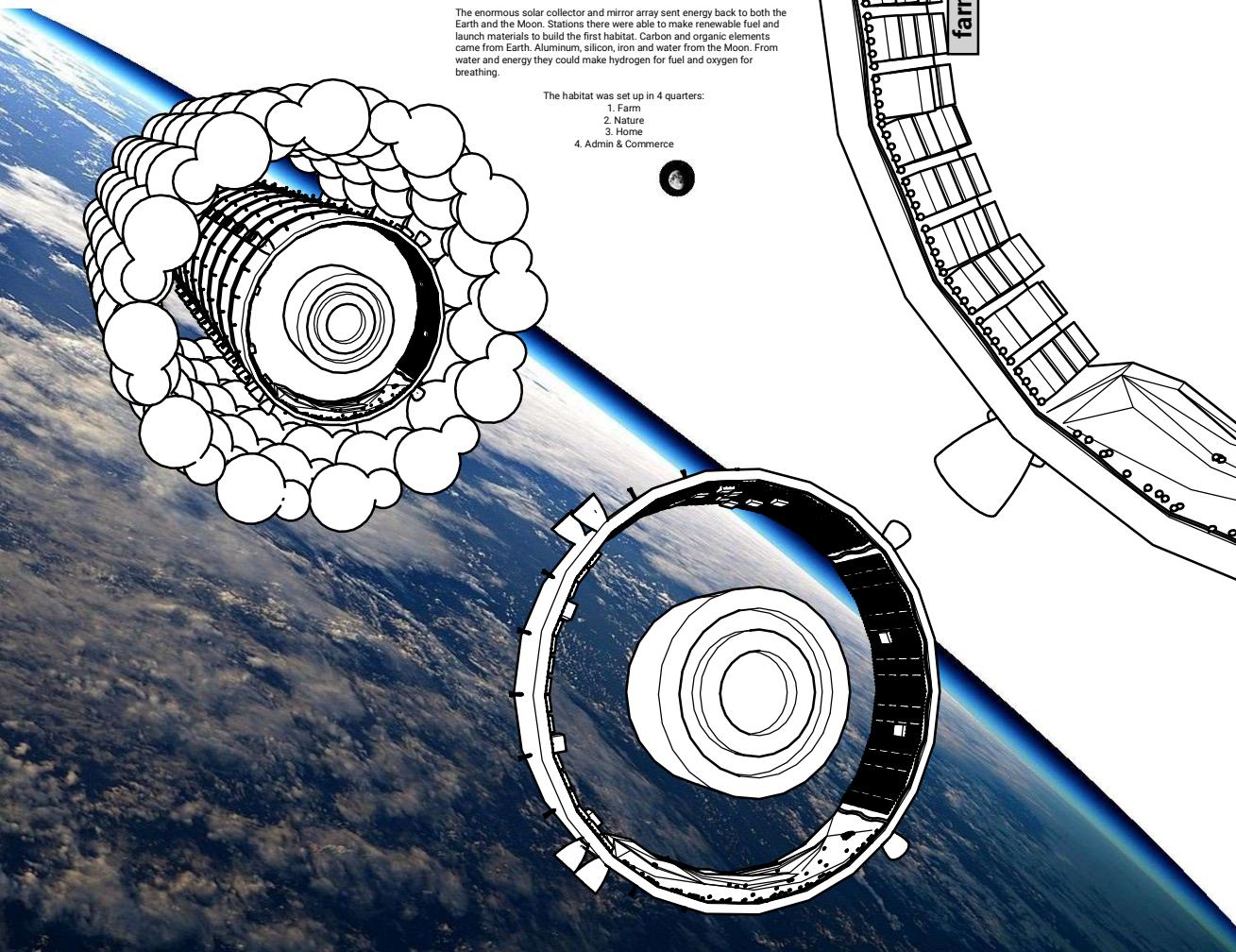
With their parent's permission they funded a blockchain smartcontract with Dogecoin. One hundred million kids pitched in \$10 each. SpaceX and a team of space agencies had \$1 billion to design and build the Sprout. #darmoon was planning a trip to the Moon anyway and delivered the Sprout on their way in 2023, to everyone's delight.

The Sprout was 146 tonnes of hydrogen and the most beautiful self-replicating mining and manufacturing robot you have ever seen. A 3D printer that 3D prints itself out of aluminum and silicon it gathers below the surface of the Moon.

Kids around the world were having a blast, quite literally. They led and trained the mining robots from the comfort of their Earth homes through virtual reality headsets.

Thanks to Minecraft, skilled operators were trained, experienced and ready to go. Especially since the smartcontract meant they got paid well. Everyone's input is valuable when building the inclusive society of the future.

The robots and machines launched solar panels, mirrors and other materials into the Moon's orbit using a magnetic launch system similar to a maglev train but pointed straight up. This was much easier than launching it from Earth since the gravity is less on the Moon. The mines were hollowed out rings below the surface of the Moon, being careful to have a small footprint and not change how the Moon looks. [The hollowed rings were eventually made to hold spinning habitats themselves. Shielded by moonrock above.]



The habitat was set up in 4 quarters:
1. Farm
2. Nature
3. Home
4. Admin & Commerce

The first 20 000 square kilometer solar collector was completed in 24 months. It was a good thing that nice people (kids!) that owned it with a secure and peaceful democratic system. 6 billion kilowatts! Such power and heat! WOW! Enough to take care of an asteroid that might come our way.

The enormous solar collector and mirror array sent energy back to both the Earth and the Moon. Stations there were able to make renewable fuel and launch materials to build the first habitat. Carbon and organic elements came from Earth. Aluminum, silicon, iron and water from the Moon. From water and energy they could make hydrogen for fuel and oxygen for breathing.

Functional spaces included:
1. Zero-g hanger at centre
a. Can be partitioned for various activities
b. Ship maintenance
c. Bulk goods delivery and storage
2. 1-g sports and activities
3. Ports at centre to connect and stack habitats into cities

Services included:
1. Electricity
2. Potable water
3. Ventilation - CO₂ scrubbers and air recycling
4. Refrigerant for heating and cooling
5. Mail - secure highspeed physical mail - ideal for mail-in-voting!
6. Material recovery, recycling
7. Data
8. Transportation (train/elevator pods)

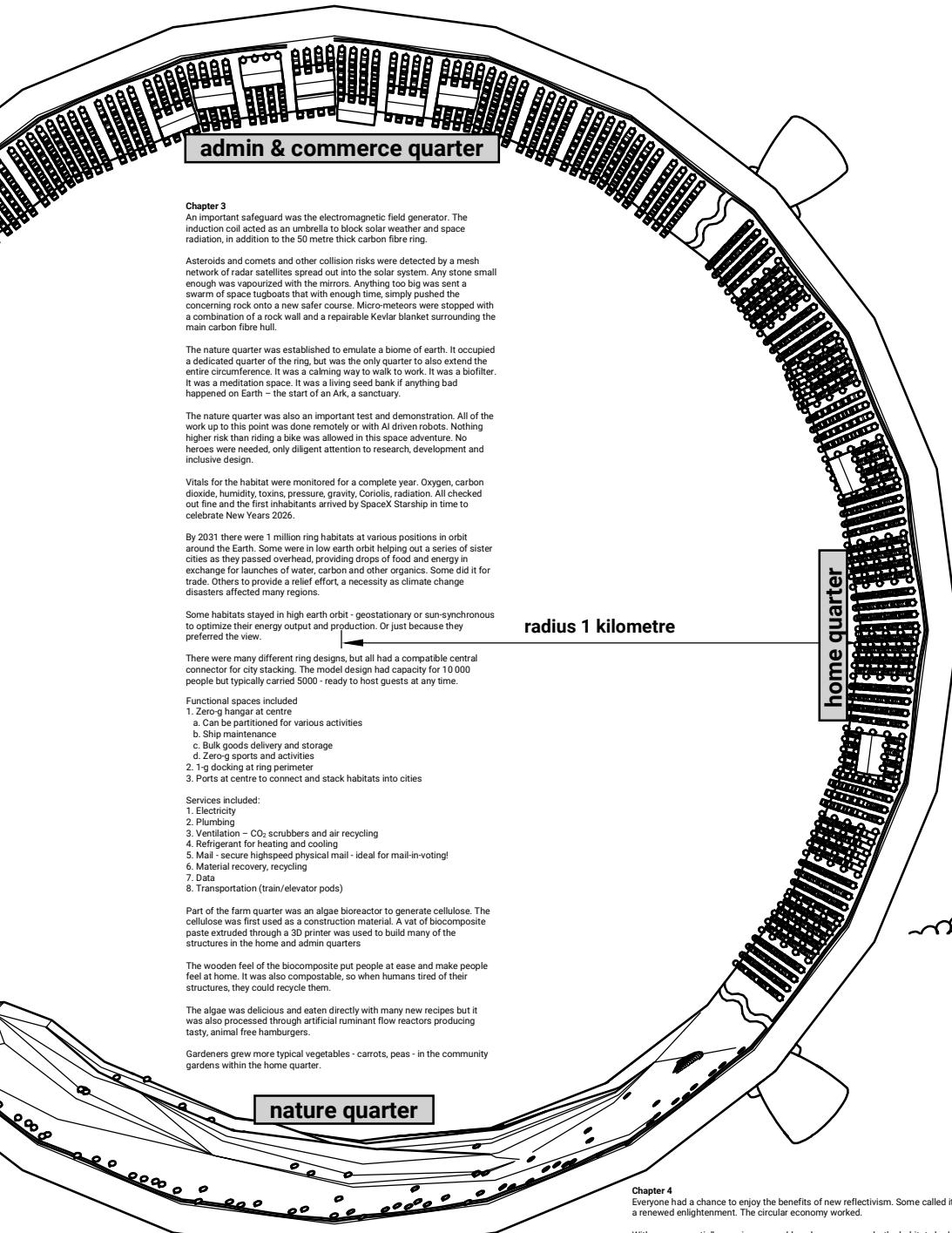
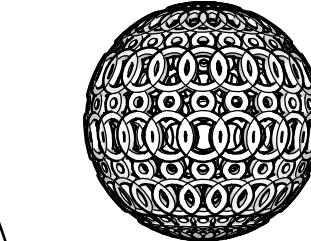
Part of the farm quarter was an algae bioreactor to generate cellulose. The cellulose was first used as a construction material. A vat of biocomposite paste extruded through a 3D printer was used to build many of the structures in the home and admin quarters.

The wooden feel of the biocomposite put people at ease and made people feel at home. It was also compostable, so when humans tired of their structures, they could recycle them.

The algae was delicious and eaten directly with many new recipes but it was also processed through artificial rumen flow reactors producing tasty, animal free hamburgers.

Gardeners grew more typical vegetables - carrots, peas - in the community gardens within the home quarter.

1 revolution per minute for 1 gravity, g



1 revolution per minute for 1 gravity, g

Chapter 4
Everyone had a chance to enjoy the benefits of new reflectivism. Some called it a renewed enlightenment. The circular economy worked.

With an exponentially growing renewable solar energy supply, the habitats had plentiful energy and food. Exports to Earth and trade with other habitats meant that a new solar-based crypto-currency was established which quickly became the most valuable form of credit. No taxes were ever paid. Everyone had access to free healthcare, education and housing. At the same time, no-one was ever short of money as everyone was paid an equity dividend, directly into their accounts.

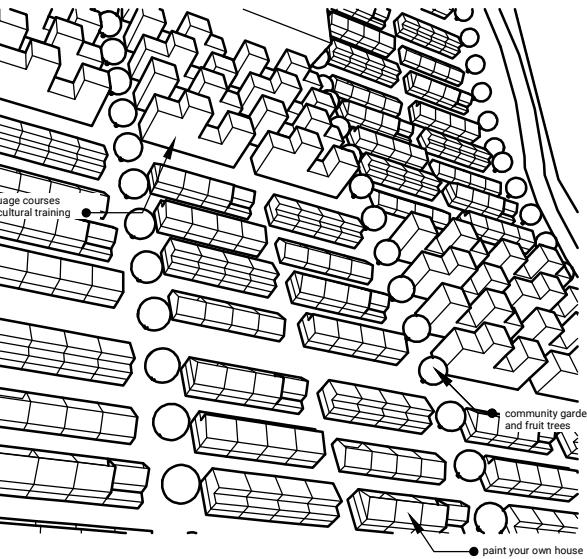
Kid-citizens celebrated the democratic process and worked to improve it. The invention of secure, highspeed physical mail piped directly to your home offered many advantages over blockchain. Citizens conveniently sent an auditable, paper ballot through the tube system and voila - a tyrannical leadership dethroned before lunchtime!

Animals other than humans who consented to residence in an orbital habitat (including horses, dogs and cats) lived among us. They were each provided with stylish robotic pet-diapers to take care of any droppings automatically - sterilizing, composting and returning nutrient rich soil to a nearby garden.

1 g was made a universal human right.

Humans had everything you would expect: day and night, 4 seasons, rain, even wind. But habitats weren't Earth. Stardust holidays to the space cottage were so much better knowing you had a safe and healthy Earth to return home to.

We still wondered about other stars. Not wanting to intrude, we listened and we waited for an invitation. Do you think our celestial neighbours like potlucks?



Craft time!
Trim the edge off this sheet. Design your habitat. Tape it into a ring.

Other materials:
1. globe
2. aluminum foil or mirror
3. a smaller ball for the Moon
4. a flashlight

Share your creation! #howtobuildaspaceship

