

## **Orbitus Prime**

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**Class: 6C**

**Name of the school: IES Södra Änggården**

### **Idea and design description**

Our idea is a space station that can transform just like Optimus prime. For example when there is a meteor shower outside the solar panels can fold in, because solar panels cost a lot to replace. There will be many modules for astronauts to feel good and live in space comfortably, such as a gym, laboratories, sleeping areas, a kitchen, work space, and a place to meet up.

Orbitus Prime is a really cool spaceship for awesome space adventures. It's shiny with blue lights. This spaceship can change its shape. It can go fast or carry stuff.

It has a transformation to protect it. When there's danger, a shield covers the ship and keeps it safe from things like meteors. The whole ship can transform into a super tough block that can take anything. This gives extra protection for the ship and crew when needed. It has escape pods as the feet if any danger happens.

The space station that looks like a robot has all the things needed for survival.

For example:

- oxygen tanks spread in various places in the space station
- water bags to store water
- handlebars to hold onto so that you don't float away
- sleeping pods to sleep in
- radiators to keep warm

### **Målgruppsanalys (for good collaboration, teamwork and success)**

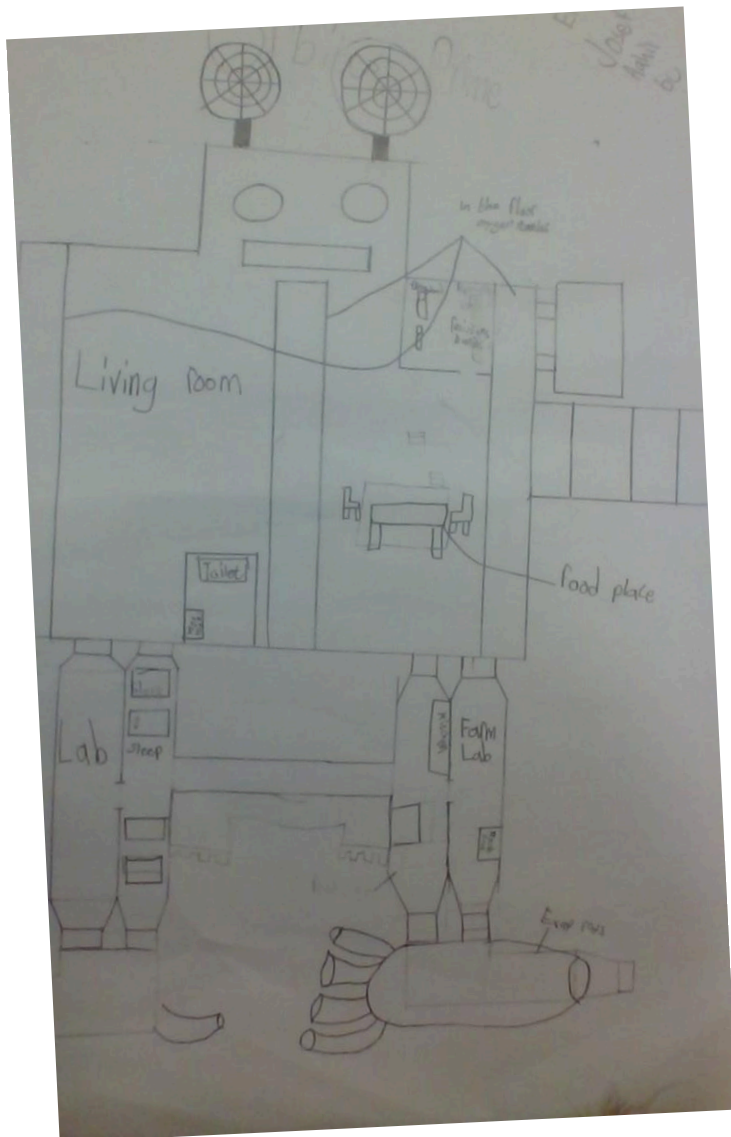
Friend 1: *Be able to work with everyone and be nice and listen to ideas that others do.*

Friend 2: *It takes skill and people that work with different things like being a doctor, planter, lab researcher.*

### **Tekniska lösningar / Technical solutions**

- We will have different sized water packets so that people don't waste water.
- Oxygen pipes that run through the whole space station which provide oxygen to everyone.
- The water from pee can be filtered and reused for growing plants.
- We will test if we can grow trees in space to produce oxygen, human waste can be recycled into fertiliser to grow trees.
- Urine can be filtered thoroughly and sterilised to be safe for drinking.
- our main source of power will be solar power, as in space there is no interference in space so solar power can work very efficiently. The ship is going to have big solar panels to catch the sun because the sun will always shine when our robot is up so we can get electricity all the time.

## Måttatta skisser Dimensional sketches



## Reflektion/Reflection

It was hard to build different parts of the robot and connect them because there are lots of small things and we couldn't get some parts that were supposed to be 3D printed but our printer broke. We also had less time so we need to do very fast build but it was fun.

