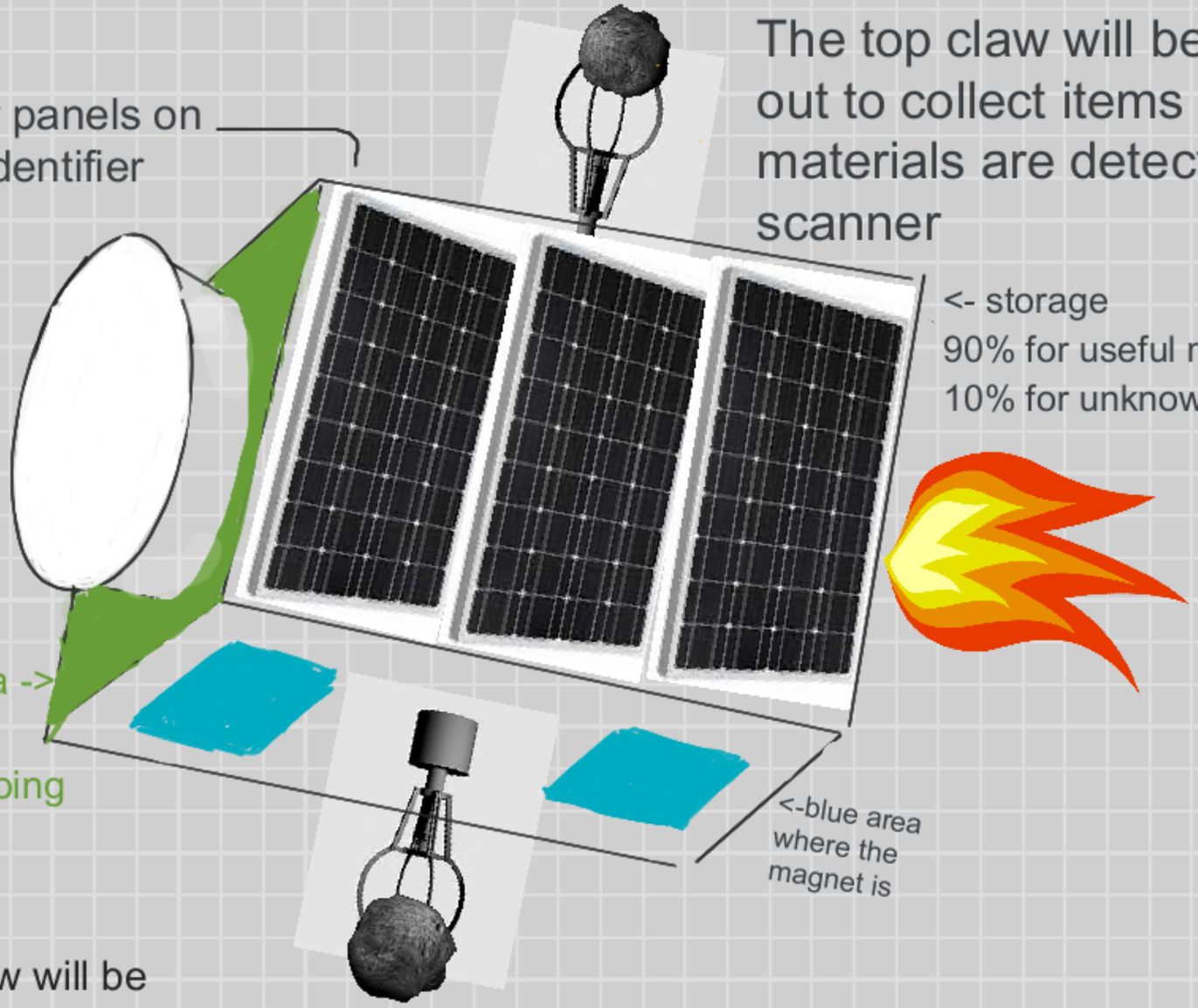
debris identifier

There will be solar panels on both sides of the identifier

The top claw will be extended out to collect items if unknown materials are detected by the scanner



piston -> push away the useless debris identified

<- storage
90% for useful materials
10% for unknown materials

green area -> where the scanner going to be at

<-blue area where the magnet is

The bottom claw will be extended out to collect items if useful resources are detected by the scanner

Elaboration on how the identifier works will be shown on the next page

Elaboration

Most artificial debris in space come from disposed or broken spacecraft such as spaceships, satellites, so we can make use of AIs and teach them to identify and determine whether the debris are considered useful or useless, based on the common artificial debris mentioned. The AIs can be taught based on the usefulness of the raw materials of the spacecraft determined by the space scientists. That artificial debris that can be reused can be beneficial in a way that space scientists and producers can give a second life to them.

As shown from our prototype, we are planning to have the bottom machine claw extended to reach out to the useful debris identified, while the one at the top, which will be made to be stronger to break parts of the identified 'unknown' debris for scientists to do research. Those that are identified as 'useless' will be pushed away from the earth using the piston. When either the 10% of storage for unknown materials or the 90% of storage for useful resources are filled up, the identifier will return to the space station to dispose of the resources collected, before setting off for another journey of identifying and collecting materials again.