

## Living in Space Note-taking Guide

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*waste, reflective, filters, liquid oxygen, humidity, space, atmosphere,  
greenhouse, gravity, breathe, temperature, oxygen, liquid hydrogen,  
air conditioning, sunlight, water, attach, carbon dioxide*

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Compared to Earth, \_\_\_\_\_ has a very different environment.

The \_\_\_\_\_ in the shadow of a planet or Moon can dip down to  
-459 °F while the temperature can become fatally high in direct  
\_\_\_\_\_.

Space does not have air, so there is no \_\_\_\_\_ to breathe, no ozone to shield  
the Sun's harmful rays, and no \_\_\_\_\_ gases to trap heat.

In addition, there is no \_\_\_\_\_ and very little gravity in space.

What are some of the equipment astronauts will need to maintain Earth-like conditions?

In order to \_\_\_\_\_, they will need the right mix of air. The International Space  
Station carries \_\_\_\_\_ and liquid nitrogen in pressurized  
tanks.

These gases are released in the right proportions in the spacecraft to mimic Earth's  
\_\_\_\_\_.

To keep these gases from escaping, the spacecraft is well sealed. However, being in a  
confined space also traps harmful gases, like \_\_\_\_\_  
exhaled by the astronauts.

Too much carbon dioxide is deadly. This is why \_\_\_\_\_ are used to remove carbon dioxide and other harmful gases from the spacecraft.

\_\_\_\_\_ is used to control the temperature inside a spacecraft.

Absorbing and \_\_\_\_\_ surfaces on the outside regulate the amount of heat affecting the craft and protect it from harmful radiation.

Water is one of the most critical requirements in space. In space, it is made by mixing liquid oxygen and \_\_\_\_\_ found in fuel cells.

Scientists developed the Water Recovery System (WRS). It takes \_\_\_\_\_ water produced from brushing teeth, washing hands, and \_\_\_\_\_ from the air and purifies it through machines.

Another problem that astronauts face in space is that there is very little or zero \_\_\_\_\_.

They often need to \_\_\_\_\_ themselves to a wall or seat when they work or sleep, to keep from floating around and bumping into something.