



# **Living and Working in Space: Habitat**

## **Student Assignment**

### **The Sealed Room**



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Earth supplies us with everything we need to live. But what about when we leave Earth? NASA is preparing to send people back to the Moon and to Mars. NASA scientists and engineers have found ways to support humans away from Earth. A space suit, the space shuttle, and the International Space Station are sealed containers. These were designed to provide the things humans need to live in space. But what do we need to live?

Imagine that your classroom has just become sealed with you inside. Nothing comes into the room and nothing leaves the room. Not even air can enter or leave. Imagine that you must remain in the sealed room for two to three years.

What are the challenges to staying healthy and happy?

Write a list of as many challenges as you can.

Share your list with students in your group and listen to the lists they have made.

Within your group, agree on a list that has the most important challenge as the number one, the next most important challenge as number two, and so on.

Present your group's list to the class, and explain your reasons.

Discuss the lists as a class and agree on a list of things necessary for humans to live a healthy life.

## **Living and Working in Space: Habitat, Final Project**

Your final project is to design a research habitat that will allow six researchers to live on the Moon or Mars for an extended period of time. Researchers must be able to maintain physical health and a good quality of life.

Over the next few weeks you will learn more about how Earth supplies us with everything we need to live. You will also learn what NASA scientists and engineers have developed for living in space. Use this knowledge to design a habitat that will meet the needs of the researchers.