

MINECRAFT & SCIENCE

EXPLORING THE INTERNATIONAL SPACE STATION

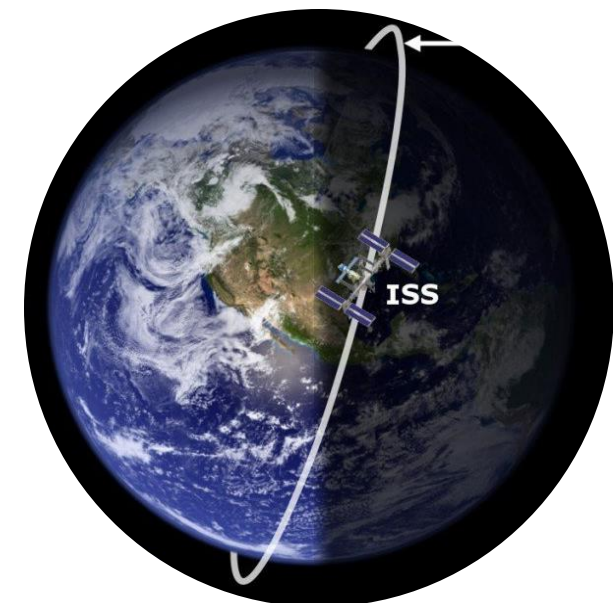
VERSION 1.0

Lesson 1

The International Space Station

THE INTERNATIONAL SPACE STATION (ISS)

- How long do you think humans has been living in space?
 - Humans have been living in space for about 20 years.
 - The International Space Station (ISS) has been continuously occupied since November 2000.
- What is the International Space Station (ISS)?
 - The ISS is a modular space station in low Earth orbit.
- How often does the ISS orbit the Earth?
 - It orbits Earth every 90 minutes

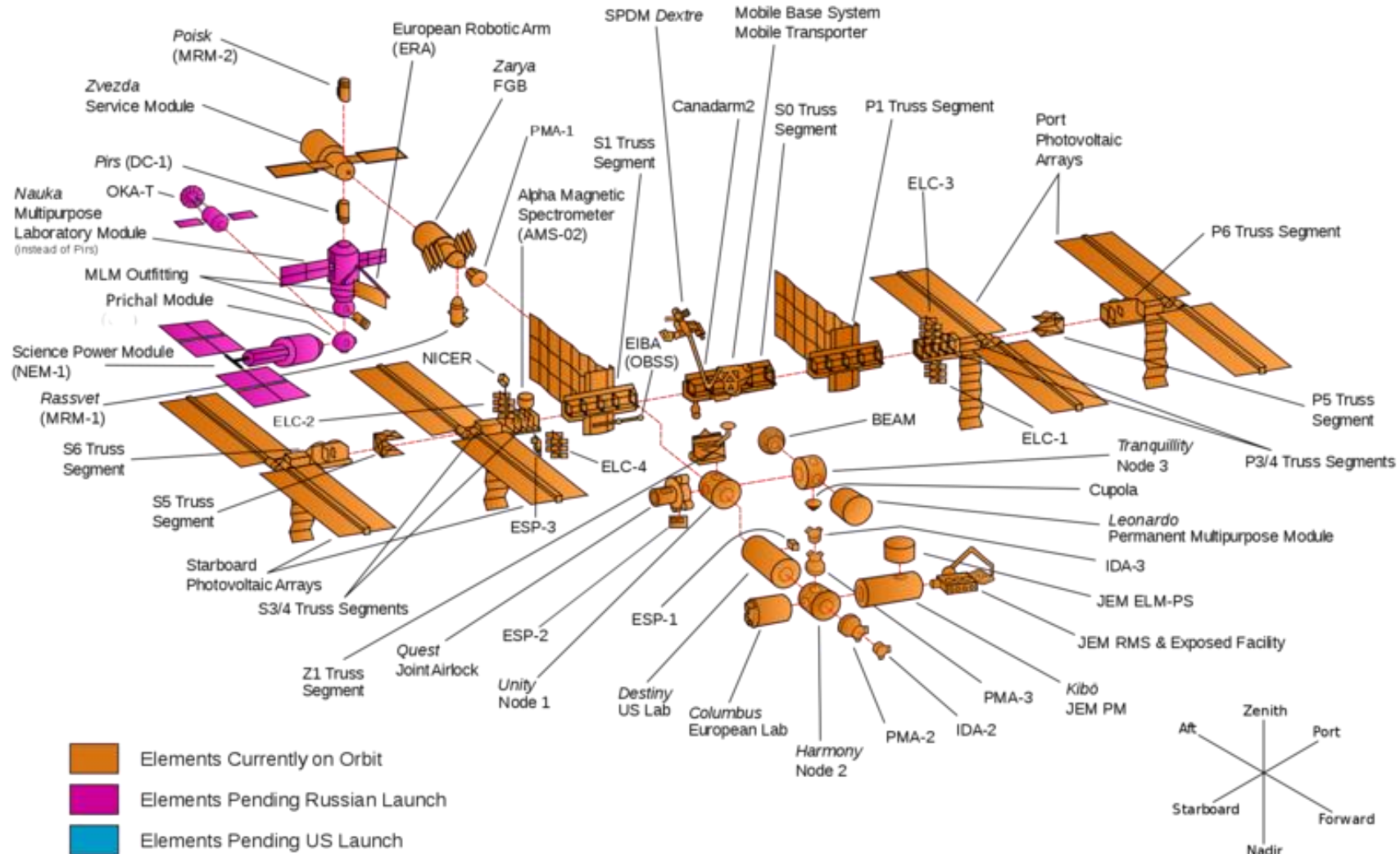


THE MODULES OF THE ISS

- Russian Modules
 - Pirs
 - Zvezda
 - Poisk
 - Rassvet
- Japanese
 - JEM-ELM-PS
 - JEM-PM
- European
 - Columbus
- United States Modules
 - Zarya
 - BEAM
 - Leonardo
 - Harmony
 - Quest
 - Tranquility
 - Unity
 - Cupola
 - Destiny

ISS Configuration

As of June 2017

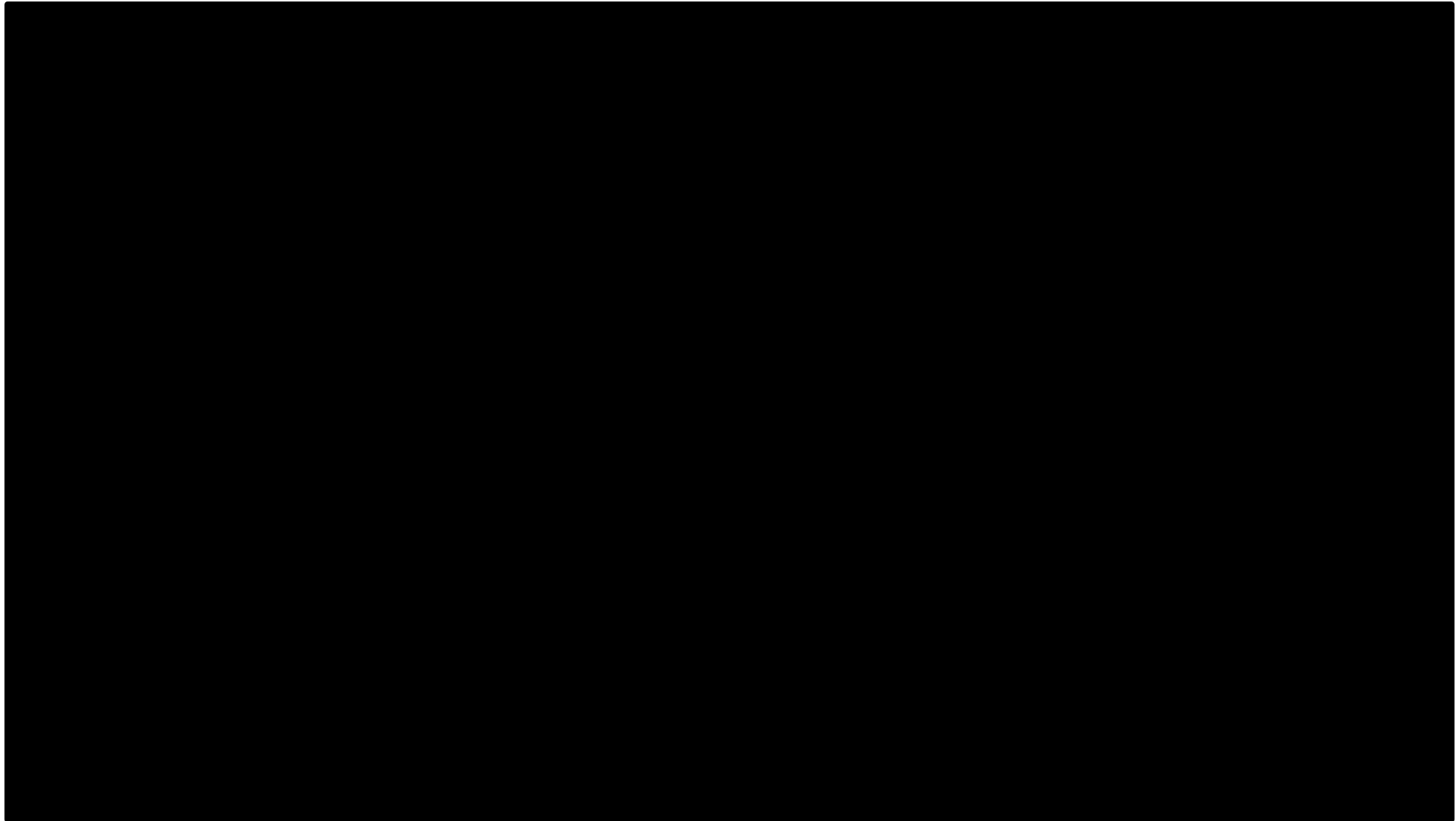


WHAT IS IN THE ISS?

- Sleeping quarters
- Kitchen
- Bathrooms
- Gym
- Laboratories for experiments.
- Researchers from 103 countries have conducted thousands of experiments on the ISS.

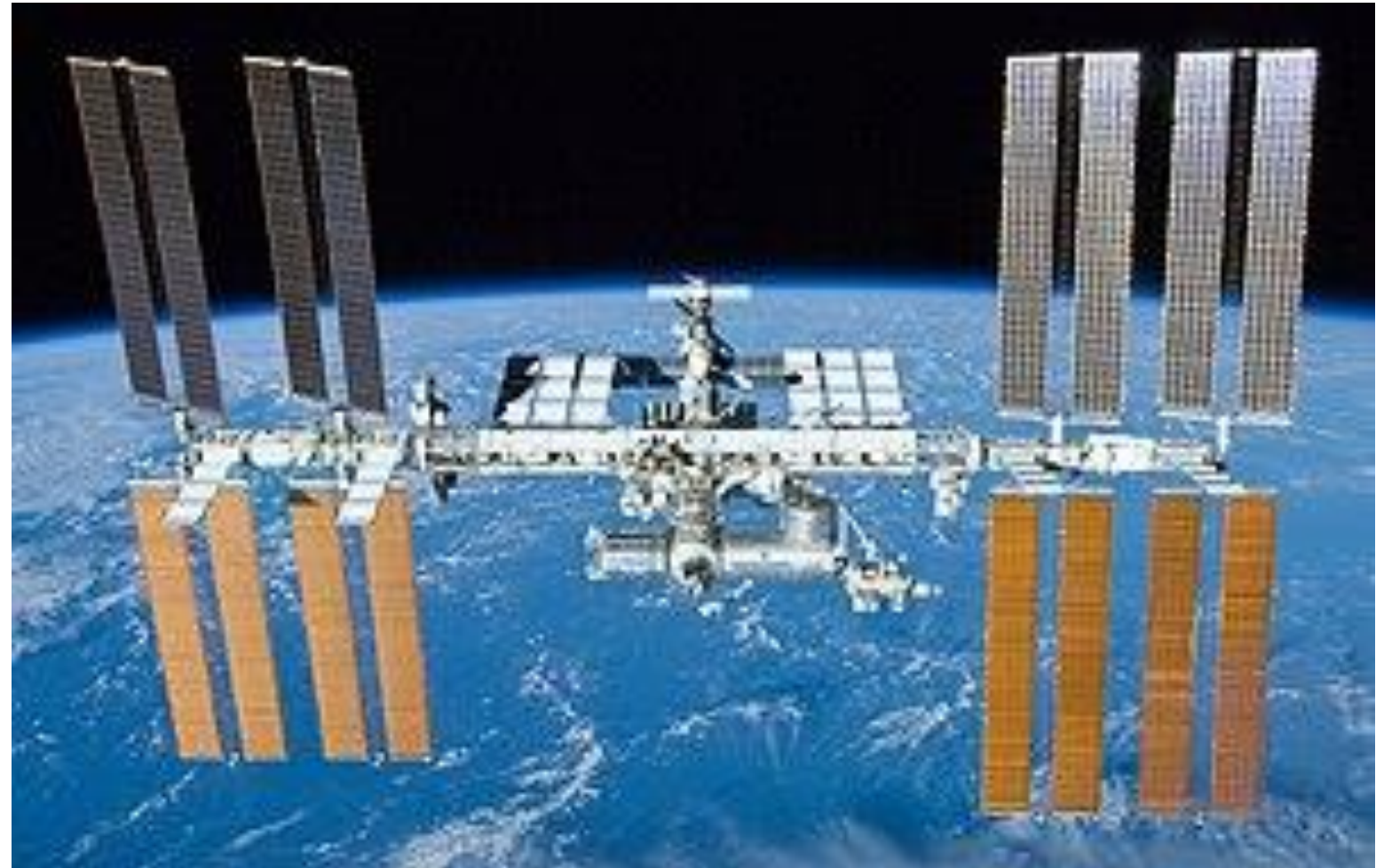


VIDEO TOUR OF THE ISS



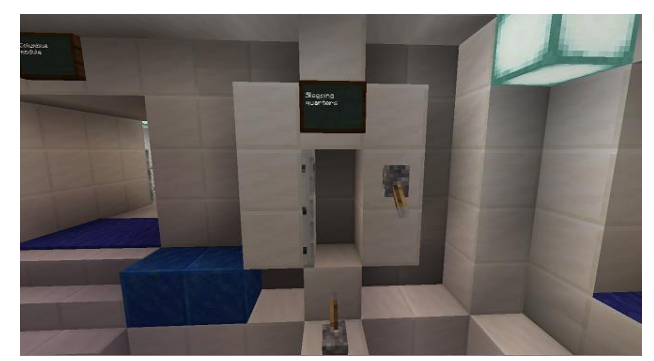
VIDEO DISCUSSION

- What is your favorite part of the video?
- Why is it your favorite?
- What did you learn that you did not know before?
- Why is this important?



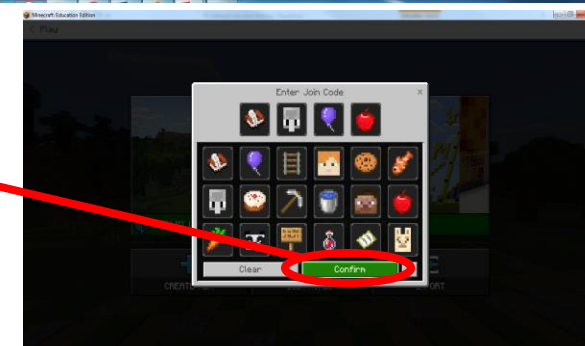
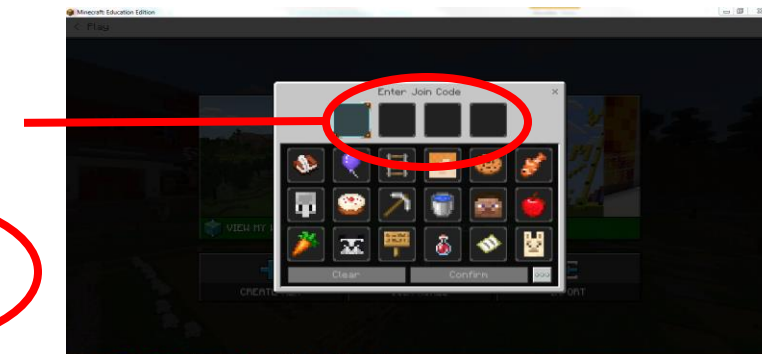
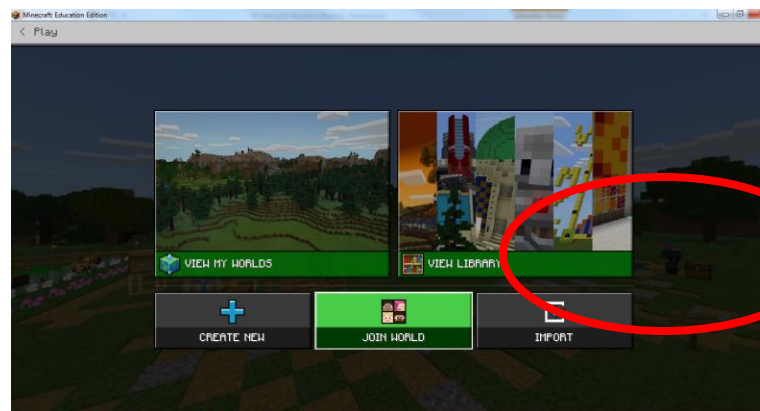
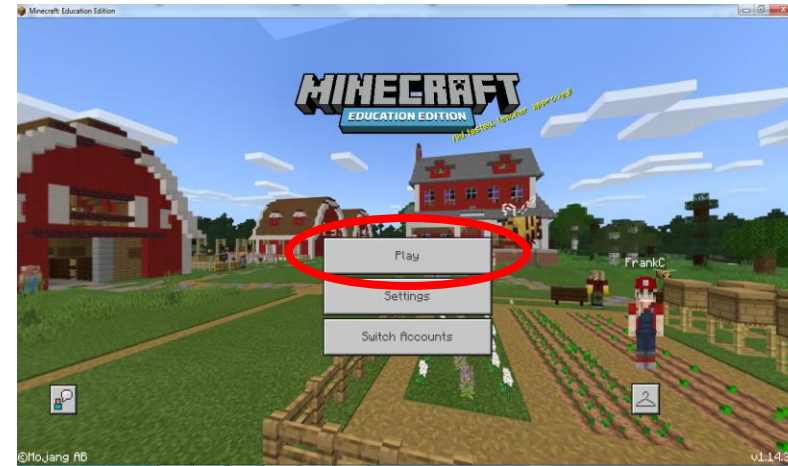
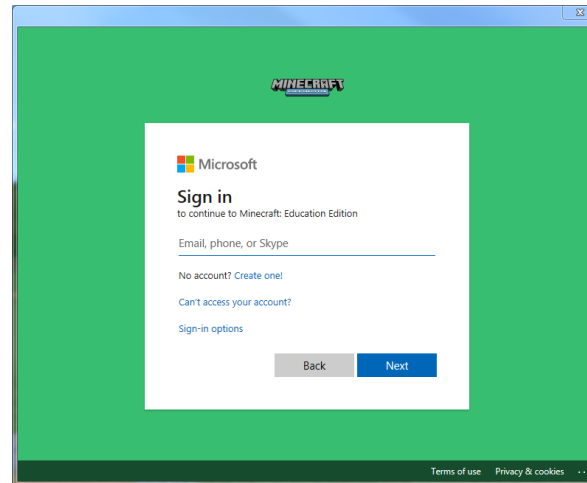
EXPLORING THE ISS

- Join the Minecraft world *ISS Minecraft Challenge.mcworld* hosted by the teacher.
- Explore the ISS and take notes on how it is built.
- Go on a scavenger hunt for:
 - Airlock
 - Cupola
 - Hatch
 - Laboratories
 - Main Hallway
 - Sleeping Quarters



JOINING

- Sign in to Minecraft.
- Click *Play*.
- Click *Join World*.
- Enter the *Join Code*.
- Click *Confirm*.



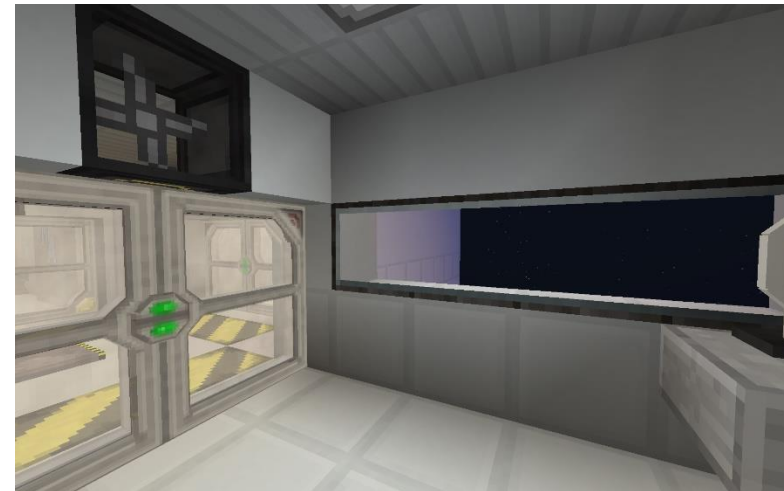
STUDENT ACTIVITY 1 – JOIN CA BORDER WORLD

- Teachers will give students a number
- Join the Minecraft world the teacher hosts
- Go to the area with the number you have been assigned.

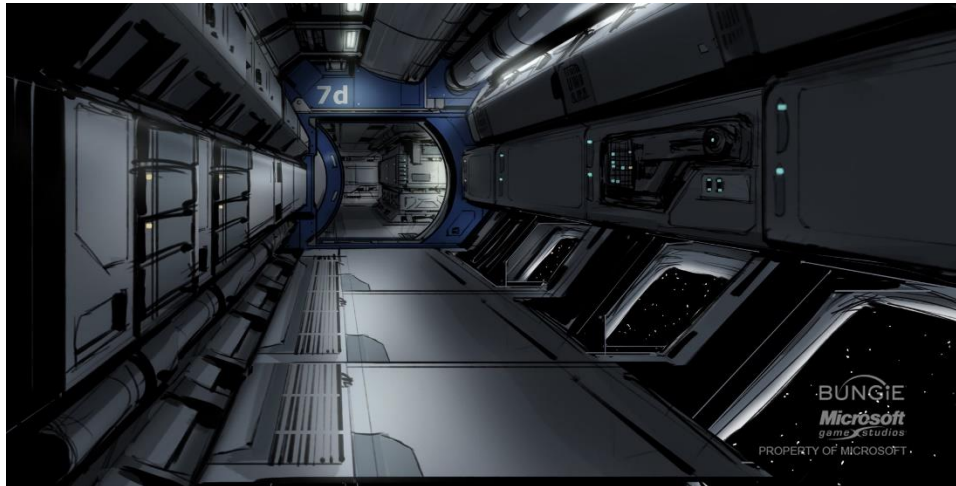


STUDENT ACTIVITY 2 – MAIN HALLWAY

- Build the main hallway of your space station in Minecraft.
- Build your space station at least 50 blocks in the air above the ground.
- The corridor must be at least 3 blocks wide and 3 blocks high.
- This should be at least 45 blocks long.



MAIN HALLWAY IDEAS



STUDENT ACTIVITY 3 – MODULES

- Design and build the modules for your space station in Minecraft.
- Modules include:
 - Kitchen
 - Gym
 - Sleeping quarters



END OF LESSON 1