

## Storyline (Full)

The Mission: A team of researchers is ready to return to the Moon to explore its surface and establish a second habitat for astronauts to live and work! To get there, they'll launch and fly Blue Origin's reusable launch vehicle, New Glenn, and explore the Moon's surface using Blue Origin's lunar lander, Blue Moon.

Student teams in Mission Control have a critical job: initiate the launch of New Glenn into orbit to land Blue Moon safely on the lunar surface. While in orbit, teams monitor for potentially dangerous space weather and space debris, conduct safety checks on the spacecraft systems, deploy and monitor satellites, and launch payloads.

With the journey underway, Mission Control learns there is an oxygen leak at the original lunar habitat that is putting the astronauts at risk. The team in Mission Control will work with the crew already on the Moon to use the given supplies and fix the oxygen leak. Can they repair the leak using the limited supplies they have on their base? Will the crew repair the leak in time before it threatens their safety on the Moon? A successful mission depends on it.

## Storyline (Short)

Researchers are returning to the Moon to build a second research base for astronauts to live and work. To get there, they'll launch and fly Blue Origin's reusable launch vehicle, New Glenn, and explore the Moon's surface using Blue Origin's lunar lander, Blue Moon.

## **Emergency**

While flying to the Moon, Mission Control learns there is an oxygen leak at the original lunar habitat that is putting the astronauts at risk. Teams need to use their limited supplies and work with the crew on the Moon to fix the oxygen leak in order to keep the astronauts safe and successfully complete the mission.



### **Teams**

- Mapping
- Structure
- Engines
- Tracking

# Teams and Objectives:

### Mapping Team

Main Objectives: Monitor GPS coordinates, system, and identify potential space debris. Select orbital entry point around the moon.



#### Structure Team

Main Objectives: Conduct systems checks on the satellites. Launch GPS satellites. Conduct spacecraft systems checks.



### **Engines Team**

Main Objectives: Conduct engine systems checks. Monitor engine for fuel and heat. Conduct corrections and spacecraft maneuvers during flight.



### **Tracking Team**

Main Objectives: Monitor solar weather. Determine if payloads need midcourse corrections. Monitor moon space debris to ensure a clear orbital path.

