

EXPEDITION MARS: Teacher Tips for Completing Manifest

Jobs	Pace	Reading	Critical Skills	Number of team members	General Description
Navigators	Sets Pace of mission	Informational reading skills. Will read aloud to partner	Able to work at fast pace and with a remote partner and follow verbal directions	One or two team members in Mission Control and the spacecraft	Plot spacecraft course. Use throttle to control descent.
Aeronautical Engineers	Sets pace of mission	Informational reading as well as higher level reading and communication	Ability to work well with a partner (reading procedures over a headset)	Two members in both Mission Control and the spacecraft or one strong individual in each	Installing probe components and reading written instructions aloud
Communication Officers	Needs to respond to and send messages in timely manner	Good speaking skills are necessary	Ability to multi-task and prioritize work as well as organizational skills helpful.	One team member in Mission Control and one in the spacecraft	The communication connection between Mission Control and Space Lab
Space Weather Forecasters	Sets pace of mission, in first half	Need to be comfortable encountering unfamiliar concepts and vocabulary	Need to work at fast pace, Arc 1 MC is time sensitive	One team member in Mission Control and one in the spacecraft	Team members conduct research and monitor for asteroids, meteors, and dust storms
Biologists	Team works at their own pace	Informational reading skills. Continuous reading	Make careful observations, record and analyze data	One team member in each Mission Control and the spacecraft	Hands on experiments regarding bacteria and microbes.
Robotic Specialists	Team works at their own pace, but with remote partner	Informational reading skills. Continuous reading	Work with partner reading and following oral procedures over headset	One team member in each Mission Control and the spacecraft	Find safe route for future rover. If time allows, testing limits of robotic arm
Life Support Specialists	Team works at their own pace	Continuous reading and collection of new information	Will encounter minor emergencies	Works with one or two members in mission control and the spacecraft	Team members work together to read gauges and use basic lab equipment
Geologists	Team works at their own pace	Informational reading skills. Continuous reading	Team members will observe, analyze and record data	One team member in each Mission Control and the spacecraft	Team members will examine rock samples and use robotic arm. May work in a glove box
Medical Doctors	Team works at their own pace	Continuous reading and collection of new information	Good job to pair team members who would benefit from working with a partner	Can work with one or two members in each Mission Control and spacecraft	Access general health of astronauts using radiation level diagnostic tests