Preparing a Crew Manifest

Communications Team   *2

The Communications Team works very well with one team member in Mars Control and one team member in the Mars Transport Vehicle. Team members need to speak clearly, concisely, and articulately. Team members must also possess strong reading skills and have the ability to multitask. A high frustration tolerance is helpful. (Critical team for mission).

Space Weather Team   *2 - 4

The Space Weather Team works very well with one team member in Mars Control and one team member in the Mars Transport Vehicle. Team members need working vocabulary about sunspots, solar storms, the Earth's magnetosphere, and coronal mass ejections (CME). Team members will also need strong informational reading skills as well as the ability to analyze mathematical graphs of satellite imagery and scientific data. Independent workers excel at this station.

Navigation Team   2 - *4

The Navigation Team works very well with two team members in Mars Control and two team members in the Mars Transport Vehicle. Team members will utilize computers to locate proper latitudes and longitudes as well as use math skills to triangulate position. Strong informational reading skills are very helpful. (Critical team for mission).

Probe Team   2 - *4

The Probe Team works very well with two team members in Mars Control and two team members in the Mars Transport Vehicle. Strong informational reading skills and articulate communication skills are necessary. Ability to build with parts (mechanical skills) is helpful. (Critical team for mission).

Medical Team   2 - *4

The Medical Team works very well with two team members in Mars Control and two team members in the Mars Transport Vehicle. Team members require math skills (finding average), analytical skills, recording skills, and researching skills. Preflight exposure to information about vision, hearing, blood pressure, and skin temperature is helpful. Furthermore, keyboarding skills are helpful as well.

Preparing a Crew Manifest

Isolation Team   *2 - 6*

The Isolation Team requires working vocabulary knowledge about mass, radiation, volume, changes in states of matter, Kelvin, ultra-violet rays, and meteoroids. The isolation team members should have good hand-eye coordination; know how to read of scales in grams; prior experience using robotic arms; and high frustration tolerance. Team members also will require math skills, especially when finding for averages. Kinesthetic learners do well on this station; this is a station that allows students with reading difficulties to excel.

Life Support Team   *2 – 6 (*4)*

The Life Support Team works very well with two team members in Mars Control and two team members in the Mars Transport Vehicle. Team members require working vocabulary knowledge about humidity, nutritional ratings, oxygen, pH scale, total dissolved solids, air pressure, and air temperature. The team members need to know what hygrometers, barometers, and thermometers measure. Background knowledge and prior use of lab equipment is necessary: test tube, beaker, graduated cylinder, eyedropper, etc. Observation, math, and higher-level reading skills are prerequisites for this position.

Remote Team   *2 - *4*

The Remote team works very well with two team members in Mars Control and two team members in the Mars Transport Vehicle. Team members require the ability to observe, analyze, and record data. Good written communication skills using descriptive phrases are helpful. Team members need to be familiar with vocabulary that includes mass, luster, color, and magnetism. Students also need background information about classifying items according to shared characteristics, specifically rock samples. Team members require math skills for finding averages and graphing coordinates.

Preparation Tips

1. Place a good reader with a student who might need help with written directions.

2. Place a student with strong descriptive writing skills with a weak writer.

3. ISO supports special needs students well.

4. ISOLATION and LIFE SUPPORT can support 6 team members if necessary.