# **CREW MANIFEST MISSION: Expedition Mars Pioneers**

Mission Date: Mission Time: # of Students: \_\_\_\_\_\_\_\_\_ Grade: \_\_\_\_\_\_\_\_\_

Teacher’s Name(s): School:

Split all students (usually one class, but sometimes two smaller classes) into two groups. Fill out a separate copy of this Crew Manifest for each group (maximum 20 students).  
First assign students to the first column, and then assign additional students to the job as available in the second column. See next page for tips.

Please bring two (2) copies of these completed Crew Manifests with you on the day of the mission.

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|  | TEAM | First fill these slots: | Then fill these slots: |
| 1 | **NAV** *Navigation* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 2 | **ROV** *Rover* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 10.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  17.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 3 | **MED** *Medical* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 11.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  18.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 4 | **COM** *Communications* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 5 | **BIO***Biology* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 6 | **BOT***Robotics* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 14.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 7 | **LS** *Life Support* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 15.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  19.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 8 | **GEO** *Geology* | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 16.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  20.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

# **TEAM DESCRIPTIONS Expedition Mars Pioneers**

Review each of these job descriptions to familiarize yourself with the type of work being conducted during the mission.

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|  | TEAM | DESCRIPTION | JOB TITLES |
| 1 | **NAV**  *Navigation* | Plot the course for the Spacecraft to reach and navigate to Mars. (Extensive reading required.) | Pilot  Commander |
| 2 | **ROV** *Rover* | Build and test a remotely operated vehicle (R.O.V.) to search Mars for signs of water, installing critical equipment and components. (Minimal reading required.) | Mechanical Engineer  Electrical Engineer |
| 3 | **MED** *Medical* | Monitor the health of the crew with a focus on radiation. (Moderate reading required.) | Doctor  Nurse |
| 4 | **COM** *Communications* | Monitor communications satellites and document important events by interviewing teammates. (Minimal reading required.) | Communications Engineer  CAPCOM |
| 5 | **BIO** *Biology* | Check the spacecraft for signs of beneficial or harmful bacteria. (Moderate reading required.) | Biologist |
| 6 | **BOT** *Robotics* | Use robotic arms and program the robotic rover to successfully drive across Martian terrain. (Minimal reading required.) | Computer Scientists  Mechanical Engineer |
| 7 | **LS** *Life Support* | Monitor air and water systems to ensure safe conditions for all team members on the spacecraft. (Moderate reading required.) | Systems Engineer  Technical Specialist |
| 8 | **GEO** *Geology* | Examine different Martian rocks for key elements and minerals. (Moderate reading required.) | Geologist |