



## Customize Your Challenger Learning Center Expedition Mars Crew

During your visit to the Challenger Learning Center, each student is assigned to be a member of 1 of the 9 Mission teams (COM, ROV, NAV, WX, GEO, BOT, BIO, LS, MED) and assigned to 1 of the 2 Crews (Mission Control or Spacecraft).










Each team usually has one or two students in both Mission Control and Spacecraft throughout the Mission (ex: 2 students on the ROV team in Mission Control and 2 students on the ROV team in Spacecraft). The COM team will only have 1 student in Mission Control and 1 student in Spacecraft.

When you assign students to the Crew (Mission Control or Spacecraft), this represents the location where the student begins the mission. At the mid-point of the mission, students switch Crews to experience the other side of the Mission experience. Remember, each team member in the Mission Control crew must have a corresponding team member in the Spacecraft crew. We recommend filling the teams in a manner that fits the strengths and interests of your students.

1. **Review** the Team Descriptions on the next page.
2. **Review** the Crew Manifest on the third page of this document. The team characteristics listed are included as a reminder of the requirements of each job.
3. **Review** the following Crew Manifest guidelines:
  - A minimum of 8 students are needed to fly Expedition Mars.
  - If a Spacecraft team has a crew member, there must be at least one corresponding team member on the same team in Mission Control.
  - Be sure every team has a member on each crew before assigning a second student to any team.
4. **Follow** the below instructions to complete the Crew Manifest:
  - Start with **Communication (COM)**. Assign a student to ① under Spacecraft.
  - Continue with **COM**. Assign a student to ② under Mission Control.
  - Move to **ROV** and assign a student to ③ and another student to ④.
  - Continue assigning students **following the numbers on the Crew Manifest**.
  - Once you have a student assigned to each team ① - ⑯, move on to assign a second student to the team in slots 19-34. These students will work as partners.
5. On the day of your mission, **bring 2 completed copies** of your Crew Manifest.

## Expedition Mars Team Descriptions

---

<b>Communications (COM):</b>	Students on this team should feel comfortable reading aloud, following quick directives, and answering questions orally.
	SKILLS: reads well, assertive, calm under pressure, organized, able to multitask, leadership
<b>Remotely Operated Vehicle (ROV):</b>	Students on this team should feel comfortable troubleshooting and problem-solving with lab materials and enjoy collaborating with peers.
	SKILLS: collaborative, can perform basic math, closely follows instructions, calm under pressure
<b>Navigation (NAV):</b>	Students on this team should feel comfortable reading aloud, have strong communication skills, and be able to pay close attention to written and oral details.
	SKILLS: can complete multi-step math problems, strong hand-eye coordination, collaborative
<b>Weather (WX):</b>	Students on this team should feel comfortable collecting and analyzing data and making quick decisions based on results.
	SKILLS: map reading and plotting, basic math, closely follows instructions, analyzing data
<b>Geology (GEO):</b>	Students on this team should feel comfortable collecting and analyzing data with their peers and enjoy experimenting to reveal data.
	SKILLS: strong observation abilities, hand-eye coordination, patience, follows procedures
<b>Robotics (BOT):</b>	Students on this team should feel comfortable troubleshooting, problem-solving, and working under pressure with their peers to share and analyze data.
	SKILLS: spatial awareness, computational thinking, basic programming
<b>Biology (BIO):</b>	Students on this team should feel comfortable working on collaborative experiments and making quick decisions based on results.
	SKILLS: following procedures, observation, graphing, drawing conclusions
<b>Life Support (LS):</b>	Students on this team should feel comfortable communicating verbally with their peers to solve problems and enjoy troubleshooting ideas to come to a solution.
	SKILLS: reading gauges, following procedures, calm under pressure, strong observation skills
<b>Medical (MED):</b>	Students on this team should feel comfortable interacting and conducting experiments with their peers.
	SKILLS: interacts well with others, patience for repetitive tasks

---

**If you have questions about completing the Crew Manifest, please contact the Challenger Learning Center.**



# CHALLENGER LEARNING CENTER

## Crew Manifest

<b>Mission Date:</b>	<b>Mission Time:</b>
<b>Teacher Name:</b>	<b>Grade:</b>
<b>School Name:</b>	<b># of Students:</b>
<b>School District/County:</b>	<b>School State:</b>

**Follow the numerical order to assign one student to each crew team.  
Each of the circled numbers must be filled before assigning a second student to a team.**

Team	Spacecraft	Mission Control
<b>COM</b> Communications: skilled reader and oral communicator; able to make quick decisions	① _____	② _____
	19 _____	20 _____
<b>ROV</b> Remotely Operated Vehicle: analytical; skilled oral communicator; able to weigh options	③ _____	④ _____
	19 _____	20 _____
<b>NAV</b> Navigation: strong math skills; attention to detail; skilled reader	⑤ _____	⑥ _____
	21 _____	22 _____
<b>WX</b> Weather: proficient math skills; observant, detail-oriented	⑦ _____	⑧ _____
	23 _____	24 _____
<b>GEO</b> Geology: observant; strong hand-eye coordination; attention to detail	⑨ _____	⑩ _____
	25 _____	26 _____
<b>BOT</b> Robotics: patient, proficient computer skills, strong oral communicator	⑪ _____	⑫ _____
	27 _____	28 _____
<b>BIO</b> Biology: strong observation and monitoring skills; able to interpret data and draw conclusions	⑬ _____	⑭ _____
	29 _____	30 _____
<b>LS</b> Life Support: team player; able to handle stress; strong measurement skills	⑮ _____	⑯ _____
	31 _____	32 _____
<b>MED</b> Medical: proficient measurement skills; attention to detail; able to make quick decisions	⑰ _____	⑱ _____
	33 _____	34 _____

**Please bring two copies of this completed Crew Manifest with you on the day of your Mission.**