



Customize Your Challenger Learning Center Operation Crew

During your visit to the Challenger Learning Center, each student is assigned to be a member of one of the 9 Mission teams: COM, ROV, NAV, WX, GEO, BOT, BIO, LS, and MED. Each student will also be assigned to one of the two 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 one student in Mission Control and one student in Spacecraft.

When you assign students to either the Mission Control crew or the Spacecraft crew, this represents the location where the student begins the mission. At the mid-point of the mission, each crew switches location to participate in 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 Member 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 10 students are needed to fly Operation Comet.
 - 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 **based on the numbers in the Crew Manifest**.
 - Once you have filled slots ① - ⑱, move on to assign students to slots 19-34.
5. On the day of your mission, **bring two completed copies** of your Crew Manifest.

Operation Comet Team Member Descriptions

Communications



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

Remotely Operated Vehicle



Students on this team should feel comfortable troubleshooting and problem-solving with lab materials and enjoy collaborating with peers.

SKILLS: collaborative, proficient math skills, closely follows instructions, calm under pressure

Navigation



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: completes multi-step math problems, strong hand-eye coordination, collaborative

Weather



Students on this team should feel comfortable collecting and analyzing data and making quick decisions based on results.

SKILLS: map reading, proficient math skills, closely follows instructions, analyzes data

Geology



Students on this team should feel comfortable collecting and analyzing data with their peers and enjoy experimenting to reveal data.

SKILLS: strong observation skills, hand-eye coordination, patience, follows procedures

Robotics



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

Biology



Students on this team should feel comfortable working on collaborative experiments and making quick decisions based on results.

SKILLS: follows procedures, strong observation skills, graphing, drawing conclusions

Life Support



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: reads gauges, follows procedures, calm under pressure, strong observation skills

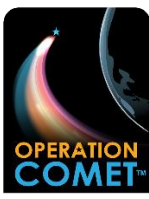
Medical



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, contact the Challenger Learning Center.



CHALLENGER LEARNING CENTER

Crew Manifest

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

Follow the numerical order to assign one student to each crew for each team. Each circled number must be filled first. Then, assign a second student to each crew.

Team	Spacecraft Crew	Mission Control Crew
COM skilled reader and oral communicator, able to make quick decisions	① _____	② _____
	19 _____	20 _____
ROV analytical, skilled oral communicator, able to weigh options	③ _____	④ _____
	19 _____	20 _____
NAV strong math skills, attention to detail, skilled reader	⑤ _____	⑥ _____
	21 _____	22 _____
WX proficient math skills, observant, detail-oriented	⑦ _____	⑧ _____
	23 _____	24 _____
GEO observant, strong hand-eye coordination, attention to detail	⑨ _____	⑩ _____
	25 _____	26 _____
BOT patient, proficient computer skills, strong oral communicator	⑪ _____	⑫ _____
	27 _____	28 _____
BIO strong observation and monitoring skills, able to interpret data and draw conclusions	⑬ _____	⑭ _____
	29 _____	30 _____
LS team player, able to handle stress, strong measurement skills	⑮ _____	⑯ _____
	31 _____	32 _____
MED 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.