

TEAM CONCEPTS



During your Rendezvous with a Comet mission, your students will be divided into teams that will work on completing specific mission objectives. Although each team is important to the success of the mission, not every student will excel on every team. Listed here is a brief description of each of the eight teams, along with their respective team concepts.

COM – Communication Team (*2)

- The COM team is the integral link between the Spacecraft and Mission Control.
- Responsible for sending ALL verbal messages between Mission Control and the Spacecraft.
- Has the ability to operate video cameras in the Spacecraft.
- Students that usually excel at this position are confident and should be comfortable speaking in front of others. In addition, it sometimes proves advantageous to pair an outgoing student with a more timid student (the timid student will often break out of his/her shell by the end of the mission).
- **Skills/Interests:** reading, clear diction and a high tolerance for frustration.

DATA – Data Team (*2)

- Establishes printed communication between Mission Control and the Spacecraft by sending messages via the computer (similar to e-mail).
- Accesses video images for other teams.
- Above all else, students in this position must be familiar with a computer keyboard and should feel comfortable typing short messages. The DATA team sends many messages throughout the course of the mission, so it is very important that the students will not get frustrated.
- **Skills/Interests:** typing, familiarity with computer keyboards, high frustration tolerance.

TEAM CONCEPTS



ISO – Isolation Team (*2-6)

- The ISO team will use robotic arms to conduct research onboard the Spacecraft. In general, these robots will manipulate materials that are too dangerous to come in contact with the crew.
- Analyzes potentially dangerous chemicals, meteoroid shields and filters in the Spacecraft.
- Using the robotic arms can prove very trying for the students at the ISO station. Although there are clues to manipulate the robot, there is no manual that will tell the students exactly which button to press. All students need some practice with the robot before they feel really comfortable at the controls, so it is important that these students do not get frustrated.
- **Skills/Interests:** fine motor skills, basic math skills and an interest in robots.

LS – Life Support Team (*2-6)

- Monitors the Spacecraft environment to ensure the safety of the flight crew.
- Students must be able to accurately read different gauges (thermometer, barometer and hygrometer) as well as measure volume using beakers and graduated cylinders.
- Students should be familiar with the concept of pH – a way to measure the acidity of a solution.
- Students assigned to the LS team must be prepared to deal with any environmental problems that may arise during the mission. They should be able to think and act quickly and shouldn't panic if a problem should occur.
- **Skills/Interests:** problem-solving, interest in environmental sciences.

MED – Medical Team (*2-4)

- Monitors and analyzes the physical condition of the crew.
- The MED team will perform tests on the other members of the Spacecraft crew. Therefore, it is important that these students are comfortable in giving others direction. In addition, they will need to compute the average of many of the tests; so basic math skills are necessary.
- **Skills/Interests:** speaking skills, familiarity with computer keyboards, basic math proficiency and an interest in biological sciences.



TEAM CONCEPTS

NAV – Navigation Team (*2-4)

- Will locate the best path and trajectory to launch the probe into a comet.
- Will work with X and Y grid coordinates.
- The Spacecraft and Mission Control will stay in constant contact with one another through the use of a headset (similar to talking on the telephone). Mission Control will be giving the instructions to their teammates, so speaking and listening skills are very important.
- Since many of the mission milestones occur as a result of the NAV team completing a task, there is a great opportunity to acknowledge the accomplishments of this team.
- It is often successful to pair one of your brighter students with a student that lacks some self-esteem (since they will be getting positive reinforcement from their teammates).
- **Skills/Interests:** speaking and listening skills, familiarity with computer keyboards, math and an interest in astronomy.

PROBE- Probe Team (*2-4)

- The Spacecraft and Mission Control will stay in constant contact with one another through the use of a headset (similar to talking on the telephone). Mission Control will be giving the instructions to their Spacecraft teammates, so speaking and listening skills are very important.
- Constructs a probe that will be launched to the comet using supplied parts, tests for faulty probe parts and wiring problems.
- **Skills/Interests:** reading, speaking and listening skills, fine motor skills, basic math proficiency and high student initiative.

REM – Remote Team (*2-4)

- The REM team will be working with their hands and arms inside the glovebox onboard the Spacecraft.
- Analyze plants in the greenhouse.
- Collects and analyzes data on mass, volume and magnetism of meteoroid samples.
- Students on the REM team will need to be careful when they work in the glovebox, so it is helpful if they have fully developed fine motor skills.
- **Skills/Interests:** fine motor skills, math, observation and an interest in geology.

(* Recommended total team number, includes Mission Control and Space Craft)