

Destination Moon Skills Overview Document

Team Names and Objectives

Mapping Team:

- Monitor and analyze weather conditions to prepare for launch and capsule recovery
- Analyze orbital paths to identify location for payload launch
- Conduct tests of mapping sensors to prepare for lunar lander exploration

Tracking Team:

- Conduct health system checks on sensors, transponders, and communication systems
- Monitor and command Stage 1 descent to Earth
- Monitor and analyze data for potential space debris

Structure Team:

- Conduct health system checks on fuel levels and engine components
- Initiate and monitor payload separation from spacecraft
- Launch and monitor GPS satellites

Engines Team:

- Monitor and command launch
- Monitor and command Stage 1 and 2 engine separations
- Perform Blue Moon descent burn to land on the lunar surface

Destination Moon Skills and Expectations:

Destination Moon is intended for a middle school audience (7th-8th grade students). To complete the mission, students are expected to perform the following skills independently:

- Read independently at a 6th grade reading level
- Average a set of data
- Estimate angle measurements
- Identify coordinates for latitude and longitude
- Identify shape and numerical patterns
- Solve for "x" in an equation
- Calculate ratios to solve for "x"
- Participate in collaborative discussions with their teammates
- Think critically and be reflective about their work