



Lunar Quest Pre-Mission Vocabulary

CLC Terms

Mission Commander – the person who is in charge of the astronauts onboard a space vehicle

Flight Director – the person who supervises a space mission from Mission Control

Simulator – an artificial environment created to resemble an actual place

Task Cards – a step-by-step set of written instructions for performing a job

Airlock – a device that permits the passage of people and objects between areas while minimizing the change of pressure and loss of air

Communication (COM) – means of sending or receiving information

Navigation (NAV) – the science of getting ships, aircraft, or spacecraft from place to place, especially related to the method of determining position, course, and distance traveled

Medical (MED) – relating to the science of medicine, or to the treatment of illness and injuries

Robotics (BOT) – a branch of engineering that involves the conception, design, manufacture, and operation of robots that can assist humans in a variety of ways

Rover (ROV) – a remotely operated vehicle that is an unmanned tool for exploring distant locations



Lunar Quest Pre-Mission Vocabulary

Geology (GEO) – the science that deals with the history of the earth and its life, especially as recorded in rocks

Biology (BIO) – the branch of science that deals with living organisms and their vital processes

Life Support (LS) – the components of a spacecraft that address the core needs of human life, including air, water, and oxygen supply

Space Weather (SW) – the variable conditions on the sun and in space that can influence the performance of the technology we use on Earth

Moon Mission Terms

Lunar – related to the moon

Docking – joining with a space station or another spacecraft while in space

Translunar Injection – a maneuver that moves a spacecraft from orbit around the Earth onto a trajectory toward the Moon

Lava Tubes – cave formations made by lava flowing either above or below the surface

Moonquake – a quake or series of vibrations on the moon similar to an earthquake

Descent – an action of moving downward, dropping, or falling



Lunar Quest Pre-Mission Vocabulary

Altitude – the vertical elevation of an object above a surface (such as sea level or land) of a planet or natural satellite

Satellite – an artificial body placed in orbit around the Moon, Earth, or another planet in order to collect information for communication

Orbit – the curved path an object follows as it revolves around a celestial body

Crater – a basin resulting from the collision of an object with a planetary surface

Job-Specific Terms

NAVIGATION

Rendezvous – meeting at an appointed or designated place and time

Velocity – the speed at which an object is traveling in a given direction

Trajectory – the path an object takes when moving through space

Propulsion – the action of driving or pushing forward

COMMUNICATION

Encrypt – to convert information into a secret code that hides its true meaning

Decrypt – to make a coded or unclear message intelligible



Lunar Quest Pre-Mission Vocabulary

MEDICAL

Nutrients – substances that promote growth, provide energy, and maintain life

Nutrition – obtaining the substances necessary for growth and good health

Treatment – something that healthcare providers do for their patients to control a health problem, lessen its symptoms, or clear it up

Wellness – the optimal state of health

Deficiency – a lack or shortage of something

Calories – units of energy, often used to express the nutritional value of foods

Microgravity – the condition in which people or objects appear to be weightless

ROBOTICS

Programming – the act of providing instructions to a computer to perform a set of actions without direct human control

Program Nesting – an if-then scenario in which you program an instrument to follow instructions only when certain criteria are met (as in “IF it’s raining, THEN deploy umbrella”)

ROVER

Payload – the object or the entity that is being carried by a vehicle

Bus – the ROV body that holds the core

Assemble – put together



Lunar Quest Pre-Mission Vocabulary

Terrain – the physical features of the ground or surface of an area

Rappel – descent from a place of high elevation to a lower one as from a cliff, using a rope or cable

Skylight – an opening in the roof or top of a cave or lava tube that exposes the subsurface

Tether – a line that is attached to an object or person to secure it in place

Motherboard – a circuit board containing the principal components of a computer or device with connections for other pieces to be slotted

Power – a source or means of supplying electrical energy

Mass – the quantity of matter contained in an object

GEOLOGY

Radiation – energy that moves from one place to another as a wave or stream of high-energy particles

Geothermal – using the heat produced by a planetary body

Density – the amount of mass in a particular space, calculated by dividing the mass of something by its volume



Lunar Quest Pre-Mission Vocabulary

BIOLOGY

Radiation – energy that moves from one place to another as a wave or stream of high-energy particles

Alveoli – small air sacs within the lungs that exchange oxygen with carbon dioxide to help us breathe

Emphysema – a chronic lung disease that damages air sacs in the lungs, making it difficult to breathe

Bronchitis – a condition that causes inflammation of the bronchial tubes, or airways in the lungs

LIFE SUPPORT

Thermostat – the controls used to regulate a heating system

Air Pressure – the pressure exerted by the weight of air on the earth's surface

Configuration – the arrangement of different parts or components in a particular form or combination

Air Filter – a device for filtering particles of dust, smoke, pollen, mold, viruses, etc. from the air

TDS – total dissolved solids; a measure of anything dissolved in water that is not an H₂O molecule

pH – a scale used to specify the acidity or basicity of a liquid



Lunar Quest Pre-Mission Vocabulary

SPACE WEATHER

Deploy – to move or place an instrument in a specific location for use

Voltage – the measure of electrical potential; the measure of how forceful electrons are pushed through a circuit

Current – the measure of the amount of flow of electrical charge

Solar Panel – a panel designed to absorb the sun's rays as a source of energy for generating electricity or heating

Irradiance – the amount of light energy from one thing hitting a square meter of another each second

Ammeter – an instrument used to measure electric current