

Student Friendly Glossary

Bolded words are the key terms that you will learn throughout the Mars Rover Celebration unit. Words that are not bolded are supplemental words to help you better understand the content.

accurate: measured or calculated precisely and correctly

aerodynamic: having qualities that make something move easily through the air using less fuel

apply: to use what you have learned for some purpose

astrology: the belief that the positions and movements of the stars, moon and planets might influence events and the lives and behaviors of people

astronomical unit: the average distance from the Earth to the Sun

astronomical: (meaning 1) something related to outer space
(meaning 2) a very large number or amount

astronomy: the scientific study of stars, planets and other matter outside the Earth's atmosphere

atmosphere: the mixture of gases that surround a planet

attribute: a quality or feature, usually one that is considered good or desirable

avionics: the electronics that navigate and control a rover, airplane or spacecraft

brainstorm: a group approach to problem solving that starts by generating new and different ideas

bus: the body of the rover or spacecraft

calculate: to solve a problem or figure out an answer using numbers

characteristic: a quality or feature typical of something or someone that is easy to recognize

chassis: the frame of a vehicle to which the other parts are attached (wheels, engine, body)

climate: the typical weather conditions in a particular area

collaborate: working together in a group to solve a problem

composition: the chemical make-up of an object or surface

concise: shorter than the original, with no unnecessary words

conditions: the weather at a particular time or place and how this weather affects everything and everyone

consider: to think about something carefully

control: a test group in which the variable is not altered. The control helps scientists see what difference, if any, that a change in the variable makes

core sample: a round piece from the inside part of something (a planet, a tree, a glacier, etc...) taken out using a hollow drill

crater: a round hole in the ground made by something that has fallen on it or by an explosion

diagram: a simple drawing or plan that shows exactly where something is, what something looks like or how something works

eccentricity: a way to measure how round or oval a planet's orbit is

ellipse: the oval-like shape of an orbit

engineering: the work involved in designing and building things such as roads, bridges, and machines

evaluate: to judge or decide how good, useful, or successful something is

falsify: showing that a theory or model is wrong by making measurements

flow: the steady movement of water, electricity, traffic, people, ideas, etc. from one place to another

focus: the location of a star within a planet's orbit

generate: to produce, create, or come up with something

geology: the study of the rocks and soil that make up the Earth and other planets, and how rocks and soil change over time

hypothesis: a good guess about something that has not yet been proven to be true

impact (meaning 1): when one object strikes another
(meaning 2): the effect or impression something makes

inference: something you think is true based on information that you have and what you already know

ingenuity: cleverness or talent for inventing useful things and thinking of useful new ideas

light minute: a way of measuring very large distances, much bigger than miles or kilometers

main idea: the overall idea of a paragraph or text; a brief statement of what the text says about the topic

manager: a person whose job is to direct or control a business and to deal with the people, equipment, money and problems of that business

measurement: a number that represents the length, weight, temperature, speed, etc. of something

mission: the clearly stated main purpose or goal for a trip or a project

mock-up: a non-working scale or full sized model of something

model: a larger or smaller scaled copy of an object

orbit: the oval path that an object takes in space around a star or planet. Moons have orbits around a planet; planets have orbits around a star.

paraphrase: to state in a shorter, clearer, or different way what someone else has said or written

plagiarism: copying an idea or the written work of someone else without saying where the information came from

planet: an object that orbits a star that is round in shape owing to its own gravity

plausible: something that makes sense and may be true

power system: the system that produces and distributes electricity on a vehicle, building, etc...

prediction: a good guess about something that may happen in the future

problematic: difficult to deal with, fix, or solve

process: a series of actions or steps that are taken in order to do something

professional: well-trained, well-made or well-done

prop: a small object such as a book or a telephone used in a play or skit

prototype: the first model made of something used to test the design or to show what the actual item will look like

refine: to improve something over time by making small changes to it

rehearse: to practice something (like a play or a concert) for a public performance

represent: (meaning 1): to stand for or be something else
(meaning 2): to show something

research: to study something carefully, to get all the necessary facts and information

revolution: a circular movement around something

rotation: when something moves in a circular movement around a central point

rover: a robotic Mars surface lander that can move on the surface

scale: an exact copy of an object that is either larger or smaller than the original

select: to choose carefully

solar system: a solar system is made up of a star and the planets that go around it. A solar system also includes things such as moons, comets, asteroids and space rocks.

solution: a way of dealing with a problem or a difficult situation

standardized: when all of a particular type of item are made to be the same as each other

summarize: to make or write a short statement that gives only the main information and not the details

surface: the outside part or top layer of something

suspension: parts attached to the wheels of a vehicle that make it ride smoother on rough roads and surfaces

systems engineering: the type of engineering used when designing very complex things

technology: the methods and machines used to make things and solve problems

telemetry: the system used to transmit data back to the earth

temperature: a measure of how hot or cold something is.

terrain: an area of land with a particular geology (rocky terrain, desert terrain)

texture: how smooth or rough something is.

thermal control system: the system that keeps your rover from getting too hot or too cold

topic: a subject that people talk or write about

valid: something that is reasonable or makes sense

validate: to prove that something is true or correct by testing it several times using scientific experiments

variable: something that changes or can change

Venn Diagram: a picture of two or more overlapping ovals (circles) that shows how things that are being compared are similar and different