

Teacher Glossary

apoastron: the point in an extra-Solar planet's revolution when it is furthest away from its star

astronomical unit: the mean distance from the center of the earth to the center of the sun
1 AU = 149.6 million kilometers, 92.9 million mi, or 8.3167463967 light minutes

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

bus: the body of the rover or spacecraft

chassis: the framework of a rover where the suspension attaches

Eberswalde Crater: a partially buried impact crater on Mars just north of Holden Crater. It contains an exhumed delta that was most likely formed by water.

ecliptic plane: the plane of the Earth's orbit

ecliptic pole: the apparent location among the distant stars pointed to by a line perpendicular to the ecliptic plane through the center of the Earth's orbit.

ellipse: the oval-like shape of an orbit. Formally, an ellipse is a locus of points the sum of whose distances from two points (the foci) remains constant. The ellipse is one of the four types of conic section.

focus: the location of a star within a planet's orbit. One of the two points that define the ellipse of an orbit from one place to another

Holden Crater: is an old crater on Mars containing numerous smaller craters, many of which are filled with sediment. This large crater may have been a lake.

light minute: the distance light travels in one minute. One light-minute = 17,987,547.48 kilometers

Mawrth Vallis: is an ancient water outflow channel that contains clay-rich rocks that form only in the presence of water. It is one of the oldest valleys on Mars

Olympus Mons: is a large volcano located in the western hemisphere on Mars. With a height of nearly 22 km, it is the tallest mountain on any planet in the Solar System

periastron: the point in an extra-Solar planet's revolution when it is closest to its star

planetology: is also known as Planetary Science, and is the scientific study of planets and minor bodies; both in the Solar system and elsewhere

power system: the system that produces and distributes electricity on your rover

suspension: the springs, struts and shock absorbers that attach the wheels to the chassis

systems engineering: the engineering specialty used when designing very complex things

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

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

Valles Marineris: is a system of canyons located along the equator of Mars. Is more than 4000km long, 200 km wide, and up to 7km deep, making it one of the larger canyons in the Solar System.