

Space Explorer Glossary

A.

* Asteroid



~ a rocky object in space that can be a few feet wide to several hundred miles wide. Most asteroids in the Solar System orbit in a belt between Mars and Jupiter.

* Astronaut-



~ a person trained to travel and work in space

* Astronomy



~ the study of stars, planets and space.

* Atmosphere



~ the layers of gases surrounding a planet. There are 5 layers of atmosphere on Earth.

C.

* Comet



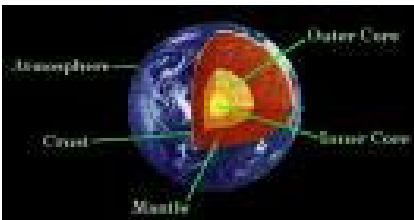
~a small object made up of ice, dust and gas that orbits the sun. Jets of gas and dust form long tails that can be seen from Earth. A comet's tail always points away from the sun. Often called 'dirty snowballs' because of what they are made of.

* Communication



~ the process of transferring information from one person to another. This can be done through speech, writing or signs. In space astronauts communicate with each other through a communication system built into their spacesuits. Space Shuttles can communicate with the ground crew which is transmitted through satellites

* Composition



~ is what the Earth is made of. Earth is a terrestrial planet- meaning that it has a rocky body, unlike Jupiter which is made up of gases. The interior of Earth is made up of layers. On the outside is Earth's Crust, the upper Mantle, the Mantle, liquid Core and the solid inner Core in the centre of Earth.

* Constellation



~ A defined area of space. A pattern formed in the sky by a group of prominent stars that look as if they are close to each other.

D.

* Documentation



~ the process of providing evidence. A document is the material that is used to provide the documentation. The webquest has the Log Book as your document to record your findings, and is the documentation of your exploration into space.

E.

* Exploration



~ the act of looking into or studying something unknown

* Extravehicular Mobility Unit (EMU)



~ another name for an airtight spacesuit worn by astronauts while working outside of the spacecraft in space.

G.

* Galaxy



~ one of the very large groups of stars and other matter that are found throughout the universe. Earth is a planet in the Milky Way Galaxy.

* Gravity



~ the force by which a planet or other body tends to draw objects towards its centre. The force of gravity keeps all of the planets in orbit around the sun.

L.

* Launch



~ to send something on its way, such as when a rocket's engines are ignited to send it from Earth into space.

* Life Support Unit



~equipment that creates a comfortable environment by controlling temperature and air pressure, and by providing oxygen. An astronaut wears a spacesuit that contains a life support system while working outside the space station.

* Lunar Eclipse



~ During a lunar eclipse, Earth comes between the sun and the moon so that all or part of the sun's light is blocked by the moon. During a lunar eclipse, the moon turns a reddish-orange colour.

M.

* Meteor/Meteorite



~ A rock that has fallen to Earth from outer space.

* Mission Control



~ is the organisation that manages space flights and missions usually from the point of liftoff until the landing or end of a mission. They monitor all aspects of the mission and send commands to the space craft through satellite communication. NASA is one such organisation that controls missions.

N.

* NASA



~ National Aeronautics and Space Administration. NASA studies airplanes, Earth, space and space travel.

O.

* Orbit



~ the path followed by a moon, planet or artificial satellite as it travels around another body in space. Earth, like all of the other planets, orbits around the sun, and our moon is in orbit around the Earth.

P.

* Planets



~ large round objects that revolve around a star. Our Solar System has eight planets (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune).

* Propulsion



~ the force that pushes forward or drives an object forward. NASA is studying new types of propulsion to travel farther and faster into space.

R.

* Rocket



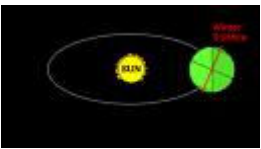
~ a vehicle used to launch people and objects into space. NASA has different rockets to launch human and satellites into space.

* Rotate/Rotation



~ to turn around in a circle; to spin. The Earth rotates on its axis once a day, and takes about 24 hours which is why a day is 24 hours long. Other planets have different rotation periods- we can compare these by studying one day or one rotation of a planet that equals a certain amount of Earth hours/days.

* Revolution



~ the period of revolution is the time it takes for the planet to fully travel around the sun once i.e. a year. We can compare other planets revolution by working out how long it takes to go around the sun in Earth days/years.

S.

* Satellite



~ a natural moon or man-made object that orbits a planet or other object. NASA has put different kinds of satellites in orbit around earth. Our moon is a satellite to Earth.

* Solar/Sun



~ having to do with the sun. The sun is one of over 100 billion stars in the Milky Way galaxy.

* Solar Eclipse



~ During a solar eclipse, the moon comes between the sun and Earth so that all or part of the sun's light is blocked from Earth. Always protect your eyes before watching a solar eclipse.

* Solar Flares



~ storms on the sun that send out both rays and particles. Solar flares can impact radio and television signals transmitted on Earth.

* Solar System



~ the sun and all the planets, moons, comets and asteroids that move around the sun. Our Solar systems star is the sun. The solar system is made up of eight planets, 138 moons and many comets, asteroids and other space rocks.

* Space



~ the region beyond Earth's atmosphere.

* Space Shuttle



~ a reusable spacecraft designed to take people and cargo between Earth and space. It is made up of the external tank, two solid rocket boosters, and the orbiter with the three space shuttle main engines. The first space shuttle launched in 1981, and is not made to go to the moon or Mars.

* Space Station



~ a vehicle that stays in space and circles earth for a long time so that experiments can be done Sixteen countries from around the world are working to build the International Space Station. Astronauts live and work on the ISS and have been living on the International Space Station since the year 2000.

* Spacesuit



~ a suit that protects astronauts from the dangers of space. The first spacesuits NASA astronauts wore were a shiny silver colour. Astronauts must wear a spacesuit when they go outside their spacecraft. See Extravehicular Mobility Unit (EMU).

* Spacewalk



~ any activity done outside the spacecraft. Astronaut Ed White made the first American spacewalk in 1965.

* Star



~ massive luminous ball of energy that is held together by gravity. The nearest star to Earth is the sun, which is the source of most of the energy on Earth. Other stars are visible in the night sky when they are not outshone by the sun. Some of the most prominent stars are grouped together into constellations. The brightest stars were given names.

T.

* Temperature



~is a measure of the energy of particles in matter (solids, liquids, gases) that is measured by a thermometer. Temperature is the physical property that underlies the common idea of hot and cold. A planets temperature is governed by its closeness to the sun, the type and age of that sun, and the planets internal and surface characteristics.

* Terrain



~is the general term for the physical geography of land surface. It is expressed as slope (how steep it is), elevation (how high) and orientation (position or location) of terrain features.

* Thermal Protection System



~ a system used to protect the space shuttle or other spacecraft from temperatures that are too hot or too cold. The Thermal Protection System protects the shuttle so it can return to Earth safely. The underside of a space shuttle is covered with the tiles that make up the thermal protection system.

*** Thrust**



~ the forward force produced by the engines of a plane or rocket The thrust of the engines sent the rockets into

U.

*** Universe**



~ all matter and energy, including Earth, the galaxies and the contents of space. NASA uses space telescopes to study the universe.

<http://www.nasa.gov/audience/forstudents/k-4/dictionary/index.html>

(Wikipedia)