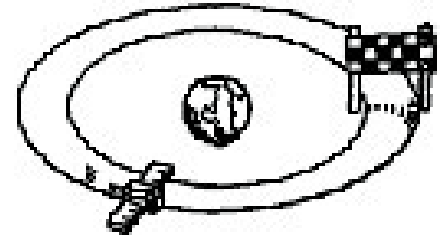




Orbit Around Earth

Orbit

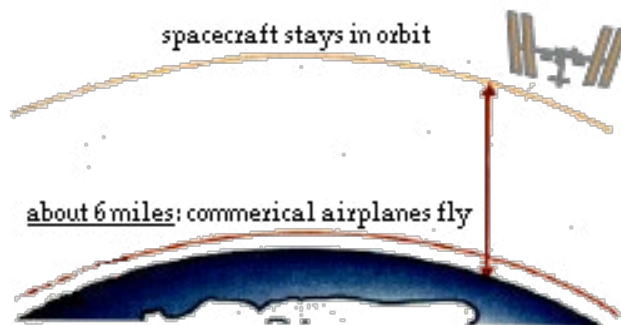
An orbit is a fixed path in space that a planet around a star, a moon around a planet, or a spacecraft around a planet or moon follows. The size, shape, and orientation of spacecraft orbits vary depending on the mission.



Satellite

A satellite is any object in orbit (for example, the Sun, Moon, Earth, a spacecraft, or the *International Space Station*).

- > The laws that determine the orbital motion of a satellite are the same no matter what larger body the satellite orbits.
- > Earth's gravity determines the size and shape of the orbit of a spacecraft circling Earth.
- > The law of gravity causes any spacecraft to orbit in a plane that passes through the center of the Earth.



- > All Earth-orbiting satellites must orbit in space to avoid collisions with trillions of air molecules that are part of Earth's atmosphere.
- > Space begins about 100 kilometers (62 miles) above the surface of the Earth. At that altitude, the air is so thin that it has little effect on a spacecraft.