

## Sally Ride EarthKAM on the International Space Station



## **Low-Earth Orbit**

Low-Earth orbit (LEO) is a type of orbit. The *International Space Station* (ISS) flies in a low-Earth orbit. The altitude of such an orbit varies from 160 kilometers (100 miles) to 480 kilometers (300 miles) above the Earth's surface. Communication satellites orbit at approximately 40,000 kilometers (25,000 miles) from Earth. Since it takes the ISS about 90 minutes to complete one orbit, it can complete 16 to 17 orbits in 24 hours. On a relative scale, the ISS orbits Earth very close to its surface.



The radius of the Earth is approximately 6,400 kilometers (4,000 miles), or about 16 times larger than the distance from the surface of Earth to where the ISS orbits. If the Earth were the size of a basketball, the ISS would orbit at a thumbnail's distance from the ball's surface.

An object in low-Earth orbit is in an elliptical orbit. A circular orbit is simply a special case of an elliptical orbit.