

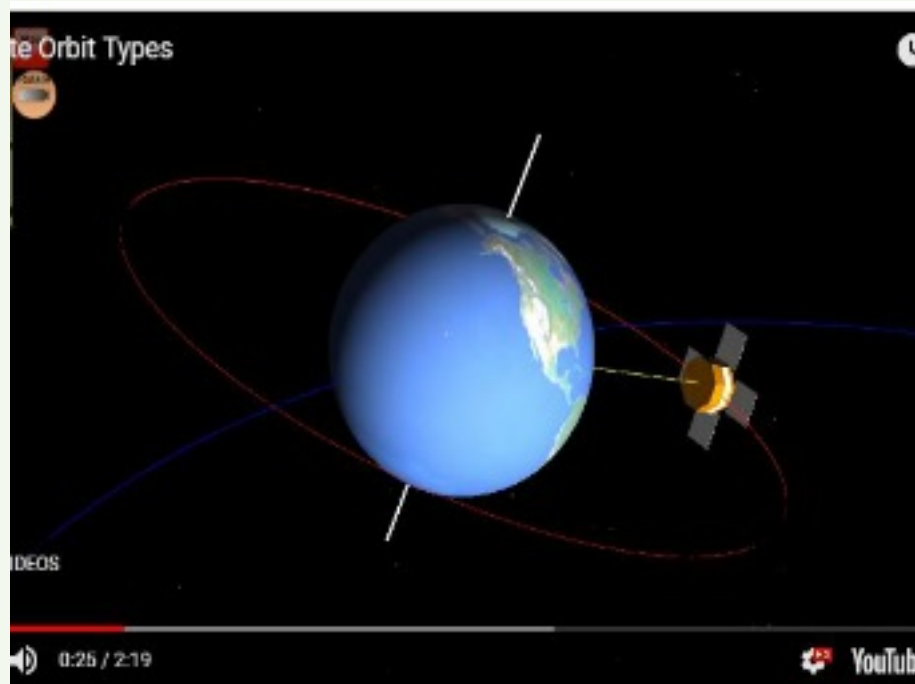
# SATELLITE ORBITS

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# SATELLITE REVOLVES IN ORBIT PATH



- POLAR ORBIT - < 1000KM
- MEDIUM EARTH ORBIT <3000KM
- GEO ORBIT < 0 - 36000KM>

# CIRCULAR AND ELLIPTICAL ORBIT

A satellites orbit the Earth in one of two basic types of orbit.

**Circular satellite orbit:** For a circular orbit, the distance from the Earth remains the same at all times.

**Elliptical satellite orbit:** The elliptical orbit changes the distance to the Earth

# COMPARISON CHART FOR VARIOUS ORBITS

		ABOVE EARTH'S SURFACE)	
Low Earth Orbit	LEO	200 - 1200	
Medium Earth Orbit	MEO	1200 - 35790	
Geosynchronous Orbit	GSO	35790	Orbits once a day, but not necessarily in the same direction as the rotation of the Earth - not necessarily stationary
Geostationary Orbit	GEO	35790	Orbits once a day and moves in the same direction as the Earth and therefore appears stationary above the same point on the Earth's surface. Can only be above the Equator.

# LEARNING BY DOING 1

A geo-stationary satellite orbits around Earth once  
per month  
per week  
**per day**  
per hour

## LEARNING BY DOING 2

Orbital motion of geo-stationary satellite with respect to motion of Earth is

asynchronized

**synchronized**

unsynchronized

same

## LEARNING BY DOING 3

Artificial satellites are objects that orbit around Earth due to

Earth's mass

**gravity**

force

Earth's weight