

# Meteor showers expected

Annual meteor showers such as the Leonids are the result of the Earth passing through debris left behind by a comet. Most of these cometary fragments are the size of a grain of sand and burn up in the atmosphere as “shooting stars”, while larger objects called meteorites crash to earth

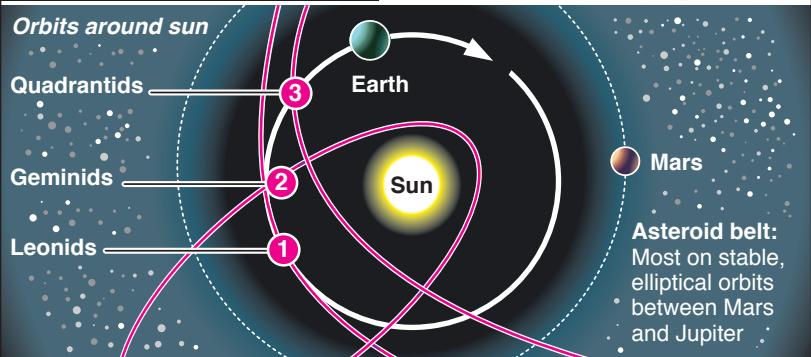
## Meteor shower



A meteor, traveling at about 70km/s, can hit a satellite with the power of a .22 calibre bullet, exploding into a small cloud of charged plasma capable of knocking out electronics



## Orbits around sun



**Asteroid belt:**  
Most on stable, elliptical orbits between Mars and Jupiter

**1 Leonids, Nov 14-21**

**Entry velocity:** 70km/s

**Activity:** 100+ per hour

**Debris origin:** Comet  
**55P/Tempel-Tuttle**

**Orbits sun in:** 33 years

**2 Geminids, Dec 7-17**

35km/s

120 per hour

Asteroid or comet  
**3200 Phaeton**

1.4 years

**3 Quadrantids, Jan 1-5**

41km/s

120 per hour

Believed to be asteroid  
**2003 EH1**

5.5 years