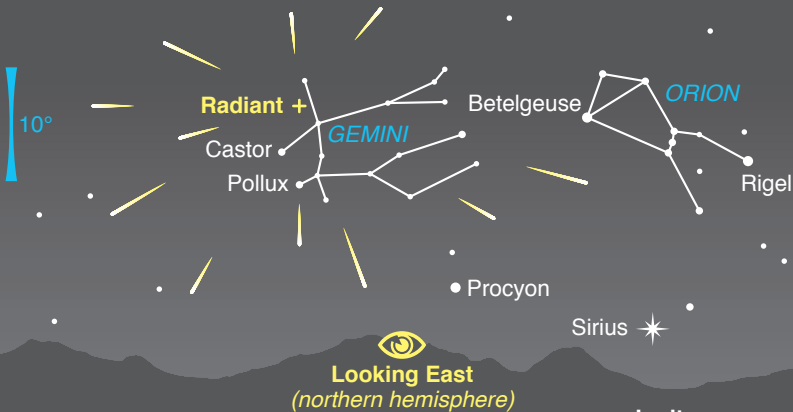


Geminid meteor shower 2019

The Geminid meteor shower occurs when the Earth crosses the orbital path of a mysterious object called *3200 Phaethon*

► HOW TO SEE METEORS

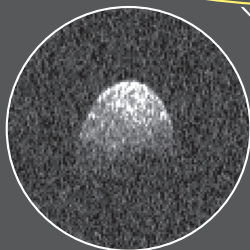
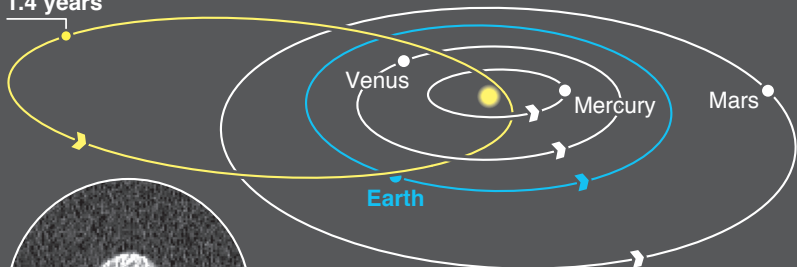
Dec 13-14: Look from 9pm – peak around 2am



► WHY WE SEE THEM

3200 Phaethon
Orbits sun every
1.4 years

Gravitational force: Meteors are growing stronger because gas giant's gravity is drawing particles from *3200 Phaethon* ever closer to **Earth**



► **Dec 17, 2017:** Radar image of 3200 Phaethon generated at **Arecibo Observatory** in Puerto Rico. Unusually, object is referred to as **rock comet** since it shares characteristics with both asteroids and comets