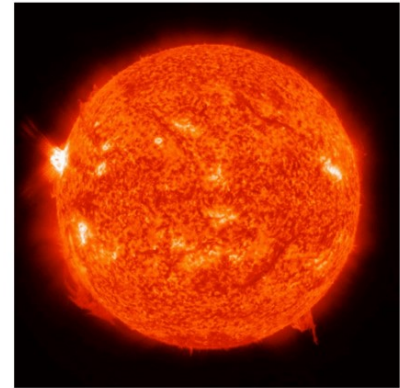


Apr. 20

What is in the Solar System?

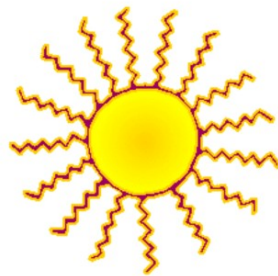
Sun - is the center of the solar system

- Earth's main source of heat and energy
- All other things reflect the sun's light
- Closes star to Earth

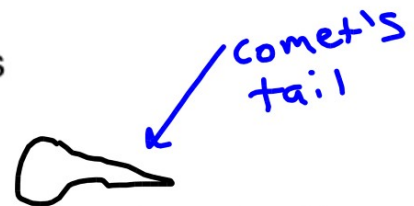
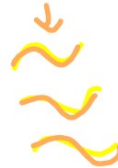


Comets: One of the most spectacular things to see in the night sky. The center is a chunk of ice, gas and dust. Usually a few kilometers in diameter. Comets are small compared to stars and planets. They travel far beyond the planets, at the edge of the solar system (Very long orbit around the sun).

When a comet comes close to the sun, the sun's heat causes the gas to start to evaporate from its surface, As the huge cloud of dust and gas starts to grow around it, and a tail of dust starts to spread away from it, Sunlight reflects off the dust and gas particles, making the comet shine. Bright comets visible the naked eye appear about once every 10 - 20 years



solar winds



melting of gas, dust blown away from sun and comet by solar winds forming a tail

*Orbit the sun but takes a very long time to do so

[What are comets? \(youtube.com\)](https://www.youtube.com/watch?v=...)

Halley's Comet was last seen in 1986 and take 75 years to revolve around the sun. When will it be seen again?



$$\begin{array}{r} \overset{1}{1} \overset{1}{9} \overset{1}{8} 6 \\ + \quad \quad 75 \\ \hline 2061 \end{array}$$

Meteoroids:

* Are irregular shaped pieces of rock zipping around space. Broken off pieces of a comet. (Smaller orbit than a comet)

* Meteoroids that glow are called Meteors. This happens when a meteoroid falls into the earth's atmosphere, it will bangs up against particles and this friction will make it heat up and glow leaving a tail of burning gas behind them.

* Orbit the sun but takes a shorter time to do so when compared to a Comet



Meteor Hits Russia Feb 15, 2013 - Event Archive

[Russian City Hit by Meteor: 1,200 People Hurt - YouTube](#)

Definition

Orbit - is a path an object follows

During a meteor shower, you may see several streaks of light every minute. The brightest meteors are caused by meteoroids that are only a few centimeters in diameters. The smallest meteoroids are just specks of dusk or pebble-sized. Pieces of rock left behind by a passing comet.

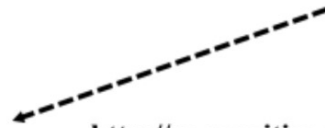
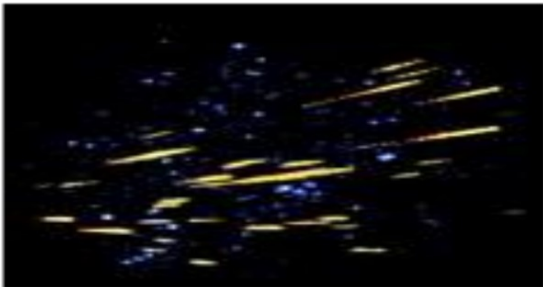


Lyrid Meteor Shower 2013



Perseid meteor shower in 2015

A bright streak of light across the sky is a meteor.



<http://ca.geocities.com/spacephysicsis/>

If the meteor hits the earth before vaporizing it is called a meteorite.



SATELLITES

Are bodies orbiting around a planet

The Moon is earth's natural satellites.



There are man-made or artificial satellites such as the International Space Station.



[What Life Inside The International Space Station is Like \(13 min\)](#)

Reading on how many

[How Do We Launch Satellites Into Space? - YouTube](#)

[How did the Space Shuttle launch work?](#)

[How many satellites are there in Space? \(youtube.com\)](#)

