# Heads Up! It's a Meteor Shower

Smaller than grains of sand, meteors vaporize in a bright streak of light as they hit Earth's atmosphere. Meteor showers come from comets, but the sporadic meteors on other nights are mostly asteroid bits.

### **Observing a Meteor Shower**

- $\checkmark$  You don't need a telescope, just your eyes.
- $\checkmark$  Find a dark spot away from streetlights
- ✓ Get warm layers are good
- $\checkmark$  Lie down on a blanket or reclining chair
- $\checkmark$  Look up! Watch the whole sky.

#### **Tips:**

- ✓ A bright Moon can wash out meteors, making them hard to see.
- ✓ Give your eyes time to adjust to the dark and you will see more faint meteors.

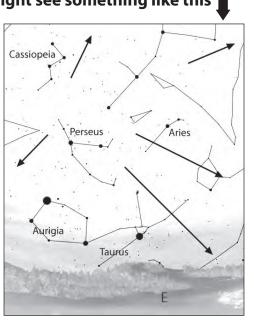
Meteors can be seen all over the sky. If you trace them back, they appear to be radiating from one constellation. That's how they get their names!

## If you get up early on August 12th and look to the east, you might see something like this

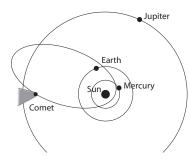
What constellation can you trace the meteors to?

Check the calendar below to see which meteor shower happens in August.

The Perseids appear to radiate from the constellation Perseus



### **Meteor Showers Come From Comets**

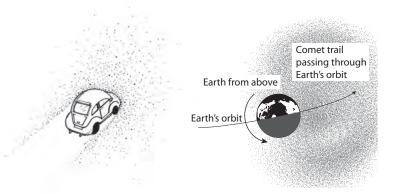


Comets come from the outer Solar System and leave behind a stream of dust as they are warmed by the Sun. Only a few comets pass through Earth's orbit.

The dust left behind by Halley's comet causes the Eta Aquarid and Orionid meteor showers (see calendar below).

Halley's comet passes Earth every 75 years. We will see it again in 2061.

How old will you be the next time it comes around?



**Here's how:** As Earth runs into these particles, it's like bugs hitting Earth's windshield (or atmosphere). But the comet bits hit Earth's atmosphere so fast, the pieces vaporize in bright streaks — making a meteor shower! We see meteor showers better after midnight because that's when we are facing the direction of Earth's orbit.

### **Calendar of Major Meteor Showers**

Meteor showers are best viewed after midnight around the dates listed below.

January 2nd–3rd April 22nd–23rd May 5th–6th July 29th–30th August 11–12th Quadrantids Lyrids Eta Aquarids Delta Aquarids **Perseids**\*

October 21–22nd November 4–5th **November 16–17th December 12–13th** December 22–23rd Orionids Taurids **Leonids\* Geminids\*** Ursids



Check **stardate.org/nightsky/meteors** for this year's viewing suggestions, including Moon phases Find the most exciting astronomy clubs and events: **NightSkyNetwork.org** 

