

Name \_\_\_\_\_

## What Causes Meteors to Streak Across the Night Sky?

### Multiple Choice Questions

1. What is the main cause of a meteoroid becoming incandescent and vaporizing when it enters Earth's atmosphere?
  - a) Extreme cold temperatures
  - b) The presence of water vapor in the atmosphere
  - c) Intense friction and heating
  - d) The pull of Earth's gravity
  
2. What is the primary source of the debris trails responsible for meteor showers?
  - a) Volcanic eruptions on Earth
  - b) Debris from spacecraft
  - c) Dust from the Moon
  - d) Comets shedding material as they approach the Sun
  
3. Why do faster-moving meteoroids tend to produce brighter meteors?
  - a) Because they are larger in size
  - b) Because they are composed of denser materials
  - c) Because they experience greater heating and friction during atmospheric entry
  - d) Because they are closer to Earth
  
4. What is the main difference between a regular meteor and a meteor shower?
  - a) Regular meteors are smaller.
  - b) Meteor showers occur during the daytime.
  - c) Meteor showers are collective displays of multiple meteors caused by Earth's orbit intersecting with comet debris.
  - d) Regular meteors are caused by the Moon's gravitational pull.
  
5. Which meteor shower is associated with the debris trail of Comet Halley?
  - a) Perseids
  - b) Geminids
  - c) Leonids
  - d) Taurids

