

Name \_\_\_\_\_

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

### Open-Ended Response Answer Key

1. Answers will vary but may include discussions of ancient beliefs, cultural myths, and historical records of meteor showers inspiring stories and legends. They may also touch on the idea that meteor showers have been seen as omens or messages from the heavens.
2. Meteor showers provide insights into the solar system's history and composition by allowing scientists to study the materials that make up meteoroids. Analysis of meteoroids can reveal information about the early solar system and its building blocks.
3. Answers will vary, but students can describe the sense of wonder, excitement, and connection to the cosmos they feel while watching meteors streak across the night sky.
4. Amateur astronomers contribute to meteor science by observing and recording meteor shower activity. They provide valuable data on meteor rates, brightness, and meteoroid composition, which aids in scientific research. Citizen scientists can participate in meteor counts and report their observations to organizations like the American Meteor Society.

