

Name _____

What Is A Meteor?

Open-Ended Response Answer Key

1. Answers will vary but may include discussions about the captivating nature of meteors, their role in human storytelling and mythology, and their connection to wishes and dreams.
2. The study of meteorites contributes to our understanding of the cosmos by providing direct samples of the solar system's building blocks. Analyzing their composition, age, and origin helps scientists piece together the puzzle of our solar system's formation and early history.
3. Answers will vary, but students may describe the excitement, awe, and wonder of witnessing a meteor shower, the sense of connection to the cosmos, and the thoughts of exploring the universe.
4. Studying meteoroids that could potentially impact Earth is essential for planetary defense. Detection methods, such as early warning systems and asteroid tracking, can help identify potential threats and provide time for mitigation efforts, such as deflection missions or evacuation plans.

