

Name _____

Meteor Size Matters: How Big Can Meteors Get?

Open-Ended Response Answer Key

1. Answers may vary. Example: Larger meteoroids can cause more significant atmospheric disturbances and potential surface damage, while smaller ones may disintegrate harmlessly in the atmosphere.
2. Answers may vary. Example: As a meteoroid, I would embark on a journey from the outer reaches of the solar system. After breaking free from my celestial source, I would hurtle through space until I encounter Earth's gravitational pull. Then, I would enter the atmosphere, igniting in a fiery display, and finally disintegrate, leaving behind a luminous trail.
3. Answers may vary. Example: In ancient cultures, shooting stars were often seen as omens or messages from the gods. They were believed to carry significant meanings, such as foretelling important events or guiding individuals. For example, in Greek mythology, they were associated with the hero Perseus.
4. Answers may vary. Example: Meteorites can provide crucial information about the early solar system's composition and formation. By analyzing their chemical composition, scientists can learn about the materials present in the solar nebula and the conditions that led to the creation of planets and other celestial bodies.

