

Name _____

Unveiling the Cosmic Show: How Astronomers Predict the Appearance of Comets

Short Answer Key

1. Factors influencing comet brightness can include its distance from the Sun, the amount of gas and dust it releases, and its size.
2. Astronomers calculate the comet's path and its closest approach to Earth, determining if it will be visible based on its distance and position in the sky.
3. Keeping records of known comets helps astronomers identify and track comets when they reappear, enabling accurate predictions and understanding of their characteristics.
4. Possible answers could include Comet Hale-Bopp, Comet Halley, or Comet NEOWISE, depending on the timeframe considered.
5. Detecting a new comet allows scientists to study previously unknown objects, contributing to our understanding of the solar system's composition, history, and dynamics.

