

Study Guide

Chapter 16 - Comets, Asteroids, and Meteors

GPS: S6E1 - Students will explore current scientific views of the universe and how those views evolved.

f. Describe the characteristics of comets, asteroids, and meteors.

1. Comets are loose collections of ice, dust, and small rocky particles.
2. The shape of most comets are long, narrow ellipse or oval shaped.
3. A comet's head consists of a nucleus and a fuzzy outer layer called the coma.
4. As a comet approaches the Sun and heats up, some of its gas and dust stream outward forming a tail.
5. The tail of a comet always points away from the sun.
6. Asteroids are rocky objects revolving around the sun that are too small and numerous to be considered planets.
7. The asteroid belt is located between Mars and Jupiter.
8. A chunk of rock or dust in space that come from comets or asteroids meteoroids.
9. Meteoroids usually come from comets or asteroids.
10. When a meteoroid enters the Earth's atmosphere, it produces a streak of light called a meteor.
11. A shooting star is actually a meteor.
12. A meteoroid that hits the Earth's surface is called a meteorite.
13. Small asteroid-like bodies that became the building blocks of planets are called planetesimals.
14. Life other than that on Earth is called extraterrestrial life.
15. One of the conditions required for life on Earth is liquid water.
16. Scientists have discovered that life forms on Earth exist in a very wide range of conditions.
17. The hypothesis that Mars may once have had the conditions needed to support life is based in part on evidence of water on the planet.