

Meteors and Comets

During Columbus' first voyage to the Indies he reported seeing "...a marvelous bolt of fire fall from the heavens into the sea..." This phenomenon was actually a meteor. Learn about meteors. Read the paragraph below and then answer the questions below it.

Meteors are sometimes called "shooting stars," but they are not stars at all. They are chunks of iron and stone that have broken off from asteroids. Meteors fall to Earth very quickly and, unlike comets, they only appear to last for a few seconds. As meteors make their descent, they become hot and begin to glow brightly. Meteors can burn up before they reach the Earth, but occasionally a meteor will hit the ground hard enough to form a crater. When a meteor makes it all the way to Earth, it is then called a meteorite. One famous meteorite crater is in Arizona. The Barringer Meteor Crater is almost 600 feet deep and was made by a giant meteorite weighing more than 500 tons (or one million pounds)!

Other bright objects which can be seen traveling through space are comets. A comet is a ball of dust, ice, and gases that travels in an orbit around the sun. As it speeds along in space, the sun's light and heat cause the comet to lose some of its dust and gas. This dust and gas streams out from behind the comet forming a tail millions of miles long. Probably the most famous comet is Halley's Comet, named after English astronomer Edmund Halley. He observed and studied the comet in 1682; he predicted that it would reappear in 1759. Halley's comet has been seen every 76 years since the year 240 BCE. It was last seen in 1986. In what year will the next sighting take place?

Read each statement below. Write a **T** if the sentence is true; write an **F** if the sentence is false.

1. _____ All meteors burn up before they reach the earth.
2. _____ A comet orbits the earth.
3. _____ Meteors are composed of iron and stone.
4. _____ As meteors fall to the ground they cool off.
5. _____ The Barringer Meteor Crater can be found in Arizona.
6. _____ Comets are the same as meteors.
7. _____ Meteors are stars.
8. _____ Another name for meteor is "shooting star."
9. _____ Halley's Comet was seen in 1999.
10. _____ Some meteorites hit the ground hard enough to form craters.
11. _____ A comet has a tail millions of miles long.
12. _____ Meteors glow brightly as they make their descent.
13. Complete the Venn diagram on the next page comparing meteors and comets.

