

The Comet's Tale (key) Name: _____

Astronomer's Review I

History and Exploration

1. What did people think about comets before there were telescopes? (Hint: how did people feel about comets, and what did they think comets were?)

At first, people knew very little about comets, so they made up stories and myths about them. Many ancient people believed that the object they saw in the sky was dangerous, would bring bad luck, or was caused by supernatural beings. Some thought the differences in appearance between one comet and another meant there would be different results, such as the coming of peace and abundance if the comet “looked” favorable, or that war, sickness, and the burning of houses would occur if it did not. At times a comet was thought to foreshadow that a new leader was coming. Some observers wondered if comets entered the earth’s atmosphere, or if they were distant objects like the planets or stars.

2. What did Sir Edmund Halley notice about certain comet sightings, and what important conclusion did he draw from this? (Hint: people did not yet know about comet orbits.)

Sir Edmund Halley noticed that the comets of 1531, 1607, and 1682 all came 76 years apart and was able to determine they were the same comet returning periodically. Being able to accurately predict when a comet would return helped to demystify these events. People learned that comets behaved in a regular way like the planets. Thus, thanks to Halley, comets were viewed with less superstition and could be enjoyed as a fascinating scientific phenomena.

3. Can you name any new comets you might be able to see?

Note: (New comets are being discovered all the time with today’s powerful telescopes and space satellites. With certainty, scientists will continue to release the names of newly detected comets, and their expected date of “visibility” (some comets will be visible with the naked eye alone, while others will be more faint and require binoculars or a telescope to see)).

Comet McNaught-Hartley (discovered October 7th, 1999) is expected to be brightest and most visible in December 2000 or January, 2001.

Astronomers know that **Comet Encke** (EN-key), which has been studied for many years, will be flying by in the year 2003. This is its 59th known visit to the solar system. Comet Encke returns every 3.3 years, but it is not visible from Earth every time. On November 12, 2003 it will return and be visible.

Other new comets are still being discovered and there may be a new one just being announced, so keep an eye on the latest space science news. And if we are patient and willing to wait six decades, we could enjoy an “old” predictable **Comet Halley** in 2063!