

EXAMEN : Baccalauréat général - Série S-SVT ou S-SI	Session 2014
ÉPREUVE : Évaluation spécifique de Langue en section européenne	
PHYSIQUE-CHIMIE en langue ANGLAISE	
Thème : Mécanique	Sujet n°14

HALLEY'S COMET

Halley's Comet is the best-known of the short-period comets and is visible from Earth every 75–76 years. Halley's Comet is the only short-period comet that is clearly visible to the naked eye from Earth, and thus the only naked-eye comet that might appear twice in a human lifetime. Other naked-eye comets may be brighter and more spectacular, but will appear only once in thousands of years.

Halley's Comet returns to the inner Solar System have been observed and recorded by astronomers since at least 240 BC. Clear records of the comet's appearances were made by Chinese, Babylonian, and medieval European chroniclers, but were not recognized as reappearances of the same object at the time. The comet's periodicity was first determined in 1705 by English astronomer Edmond Halley, after whom it is now named. Halley's Comet last appeared in the inner Solar System in 1986 and will next appear in mid-2061.

Like everything else in space, Halley's Comet follows an elliptical orbit. It has a changing velocity, from around 1 km/sec at aphelion* to 100 km/sec or more when it is closest to the Sun.

*aphelion: the point in the orbit of a planet or comet where it is farthest from the Sun



Halley's comet and its tail

From <http://en.wikipedia.org>
<http://wiki.answers.com>
www.space.com

QUESTIONS

1. Present and comment on this document.
2. Present the Kepler's laws involved in the data given in the document.
3. According to you what makes Halley's comet so peculiar ? Is it so important to spend so much money on space exploration?