

Introductory Astronomy

Homework 17: Pluto, Kuiper Belt, Oort Cloud, and Comets Not to be handed in. Homework solutions are posted already.

1. "Let's play *Jeopardy!* For \$100, the answer is: He/she discovered the planet Uranus."

Who is _____, Alex?

- a) Nicolaus Copernicus (1473–1543) b) Galileo Galilei (1564–1642) c) Isaac Newton (1642/3–1727)
 d) William Herschel (1738–1822) e) Caroline Lucretia Herschel (1750–1848).

2. Pluto was discovered on 1930 February 18 by:

- a) Percival Lowell (1855–1916). b) Henrietta Swan Leavitt (1868–1921). c) Edwin Hubble (1889–1953).
 d) Clyde Tombaugh (1906–1997). e) Fred Hoyle (1915–2001).

3. The actual method of Pluto's discovery was:

- a) blink comparison of sky photographs taken at different times. b) radar ranging. c) just visual searching of the sky.
 d) by X-ray observations. e) by psychic power.

4. Pluto's moon, discovered 1978 July 2 by James Christy of the U.S. Naval Observatory, is called:

- a) Sedna. b) Charon. c) Persephone. d) Dante. e) Virgil.

5. Pluto's status is disputable because it is:

- a) too far from the Sun. b) too close to the Sun. c) not a gas giant. d) a gas giant.
 e) probably just a very large Kuiper Belt object. Comparable or larger Kuiper Belt objects may be discovered.

6. The solar system seems to have two reservoirs of icy bodies from which comets originate:

- a) Valles Marineris and Olympus Mons. b) Phobos and Deimos. c) Ishtar Terra and Aphrodite Terra.
 d) the Asteroid Belt and the rings of Saturn. e) the Kuiper Belt and the Oort Cloud.

7. "Let's play *Jeopardy!* For \$100, the answer is: This trans-Neptunian object is named for the Inuit goddess of the underworld sea, aquatic mammals, and the dead."

a) What is _____, Alex?

- a) Sedna, discovered in 2003nov b) Quaoar, discovered in 2002 c) 1950 DA (asteroid 29075), discovered in 1950
 d) Pluto's moon Charon, discovered in 1978 e) Alpha Centauri, discovered in 1996