Exercise C5: The Dwarf Planets

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: Apart from low mass and large distance from the Sun, what other reason is there for Pluto's removal from the list of major planets?

- □ **a**. It is too far from the Sun to be a planet.
- □ **b**. Its overall shape in not spherical.
- □ c. Its orbit is highly inclined to the plane of the ecliptic.
- □ **d**. Its spin direction is opposite to all of the major planets.

Question 2: Which of the following features of Pluto's motion in its orbit is NOT true?

- □ a. The orbit is more eccentric than the orbit of any gas giant planet.
- □ b. It is sometimes closer to the Sun than Neptune.
- □ c. The orbit is an ellipse with the Sun at one focus.
- □ d. Pluto's orbital speed is constant as it moves along its orbit.

Question 3: How far is the center of Pluto from the center of mass point for the Pluto-Charon system?

- 🗆 **a.** 2,128 km
- □ **b.** 212.8 km
- 🗆 **c.** 17,443 km
- 🗆 **d.** 2.128 km

Question 4: How does the position of the center of mass compare with Pluto's radius of about 1200 km?

- □ a. The two have about the same value, the center of mass is on Pluto's surface.
- □ **b.** The center of mass is inside Pluto.
- □ c. The center of mass is a long way from Pluto's surface since it is closer to Charon.
- □ d. The center of mass is above the surface of Pluto.

Question 5: What is the perihelion distance of Eris?

- □ a. 38 AU □ b. 3.8 AU □ c. 67.75 AU
- 🗆 **d.** 97.5 AU