Discussion questions

Q1: Why do you think astronomers are so worried about undetected rings or moons around Pluto?

Answer: Astronomers are concerned that they might send the New Horizons spacecraft on a collision course with some space debris. They are counting on the spacecraft to send back amazing pictures of our faraway dwarf neighbor, and they do not want New Horizons to be destroyed before it makes its observations of Pluto and other objects in the Kuiper Belt.

Q2: Traditionally, the person finding the celestial object is allowed to name it. If you were the one to find the new moon orbiting Pluto, what would you name it and why?

Answer: Your answer will depend on whether you follow the tradition of naming the moon after mythological figures or choose another inspirational theme. Some students will follow the pattern of using Pluto mythology characters to name the new moon and may choose one of the names suggested in the Star Witness story. Other students may choose to look into the mythology of Pluto and choose a figure not identified in the story. Still others may ignore this tradition and select a name that is inspired by other themes, such as the Disney character Pluto.
Vocabulary words

**Astronomer(s)**
A scientist who studies the universe and the celestial bodies residing in it, including their composition, history, location, and motion. Many of the scientists at the Space Telescope Science Institute are astronomers. Astronomers from all over the world use the Hubble Space Telescope.

**Dwarf planet**
A celestial body within the solar system that shares some of the characteristics of planets. It orbits the Sun, is not a moon, and has a spherical or nearly spherical shape. Unlike a planet, however, a dwarf planet shares its orbit with other objects of similar size. Dwarf planets include Ceres, Pluto, and Eris.

**Kuiper Belt**
A region of icy objects in the outer solar system where many comets originate. This region begins near Neptune’s orbit at 30 astronomical units (AU) and extends to about 50 AU away from the Sun. An astronomical unit is the average distance between Earth and the Sun. The Kuiper Belt may have as many as 100 million objects ranging in size from a few meters to over a thousand kilometers.

**Satellite**
A man-made or naturally occurring object that orbits Earth or another celestial object. Earth is a satellite of the Sun, and the Moon is a satellite of Earth. There are many man-made objects, such as weather satellites, that orbit Earth.