## Exercise H3: Space Based Astronomy

Student name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

Check the box with the correct answer.

Question 1: Which statement best describes the Hubble ultra deep field image?

□ a. It shows very young galaxies in the early universe.

□ b. Most of the galaxies in this field are too faint to be seen from ground-based telescopes.

□ c. This image shows some of the most distant objects detectable in visible light.

 $\Box$  **d.** All of the above.

Question 2: The central plane of the galaxy is characterized in visible light by:

- □ a. Expanding gas bubbles from supernovae explosions.
- **b**. Concentrations of young, hot blue stars.
- **c.** Obscuring clouds of dark gas and dust.
- □ d. An abundance of red giant stars.

**Question 3:** The galactic plane is obscured when observations are made using visible light. What do observations in other wavelengths reveal about this part of the galaxy?

□ a. The whole of the galactic plane is an active region in the Milky Way.

□ **b**. The region of the galactic plane is not visible at any wavelength from Earth because of the Zone of Avoidance.

□ c. The galactic plane shows minimal activity in all wavelengths except for optical wavelengths.

□ **d**. The core of the galaxy is only active in the X-ray and gamma ray parts of the electromagnetic spectrum.