Exercise E1: Finding Your Way Around the Sky

Student name: ________________________  Class: ____________ Date: _____________

Check the box with the correct answer.

**Question 1:** What is the orientation of the Big Dipper asterism in winter?
- a. It appears upside down.
- b. It sits with its handle downwards.
- c. It appears to sit upright, resting upon its bowl.
- d. The Big Dipper is not visible in the winter.

**Question 2:** Polaris is part of which constellation? (Hint: Select Constellations from the Settings view to display IAU Boundaries and Show Names).
- a. Cepheus
- b. Draco
- c. Ursa Minor
- d. Ursa Major

**Question 3:** What happens to the position of Polaris in your sky as time advances over a period of a year?
- a. It remains absolutely fixed, and does not change its position.
- b. The north celestial pole revolves about Polaris.
- c. It revolves in a very small circle around the north celestial pole.
- d. Its altitude changes by + and - 23.5 degrees throughout the year because of the tilt of the Earth’s spin axis.
**Question 4:** What is the relationship between the altitude of Polaris and the latitude of the observer?

- **a.** There is no relationship between these two parameters.
- **b.** The altitude of Polaris is almost the same as the latitude of the observer.
- **c.** The altitude of Polaris is almost equal to 90 degrees minus the latitude of the observer.
- **d.** The latitude equals the altitude of Polaris minus the altitude of the North celestial Pole.

**Question 5:** What is the nearest star to the south celestial pole, as shown in the Main Window? (Hint: Use the Search facility to locate these stars and zoom in towards the SCP. Then use the **Angular Separation Tool** to measure their angular distance from the SCP.)

- **a.** Chi Octantis
- **b.** HIP 60041
- **c.** HIP112355
- **d.** Sigma Octantis