Exercise A13: Precession and Nutation

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: What is the precession period of the Earth's spin axis?

- ☐ **a.** 6,000 years
- ☐ **b.** 11,600 years
- ☐ **c.** 25,600 years
- ☐ **d.** 22,000 years

Question 2: What is significant about the diameter of the precession circle?

- ☐ **a.** It is equal to twice the angular tilt of the Earth's spin axis.
- ☐ **b.** It is equal to the angular tilt of the Earth's spin axis.
- ☐ **c.** It is equal to one-half the angular tilt of the Earth's spin axis.
- ☐ **d.** It is equal to the separation between Polaris and the North Ecliptic Pole.

Question 3: At what time in the past was Vega the North Star?

- ☐ **a.** 1,000 BC
- ☐ **b.** 5,000 BC
- ☐ **c.** 11,750 BC
- ☐ **d.** 15,000 BC

Question 4: When Hipparchus made his observation in the second century BC, in what constellation was the Vernal equinox in?

- ☐ **a.** Aquarius
- ☐ **b.** Capricornus
- ☐ **c.** Aries
- ☐ **d.** Scorpius

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Question 5: What is the period of nutation?

- ☐ **a.** 5 years
- ☐ **b.** 10 years
- ☐ **c.** 19 years
- ☐ **d.** 40 years