**Instructions:** This is a practice quiz and will not count toward your grade. It is important that you do your best so we can review it prior to the real quiz next week.

1. According to the Earth Science Reference Tables, the Prevailing winds at 45° S latitude are from the

1. southwest

3. southeast

2. northwest

4. northeast

2. What is the name of the warm ocean current that flows along the east coast of the United States?

1. California Current

3. Labrador Current

2. Florida Current

4. North Pacific Current

**3.** Which ocean current cools the climate of locations along the northeastern coastline of North America?

1. Florida Current

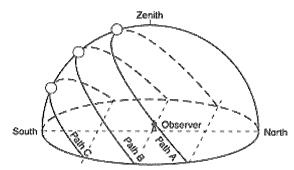
3. Canaries Current

2. Labrador Current

4. Guinea Current

**4.** Base your answer to the following question on the diagram and on your knowledge of Earth science. The diagram shows the apparent paths of the Sun at the beginning of each season for an observer at a location in New York State.

In which compass direction must the observer look to locate the noontime Sun?



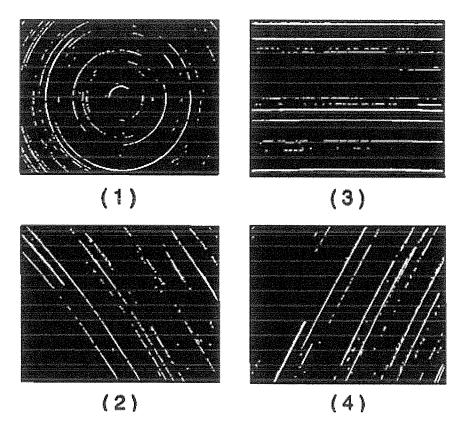
- 1. north
- 2. south

- 3. northeast
- 4. southwest
- 5. To an observer in New York State, the Sun appears to rise each day somewhere along the
  - 1. northern horizon

3. eastern horizon

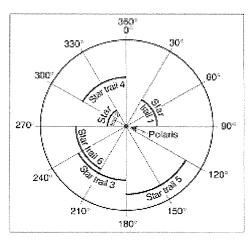
2. southern horizon

- 4. western horizon
- **6.** Which photograph of star trails was taken by an observer facing directly north in New York State?



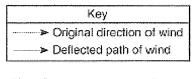
7. A camera was placed outside at night and pointed directly at *Polaris* and several other stars. The lens was kept open and a time-exposure photograph was taken. The diagram (see image) represents that photograph of *Polaris* and star trails with an angular protractor to measure apparent motion

How many hours was the lens kept open to create the star trails in this photograph?



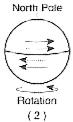
- 1. 1 hour
- **2.** 6 hours

- **3.** 3 hours
- **4.** 4 hours
- 8. Which diagram (see image) correctly shows how surface winds are deflected (curved) in the Northern and Southern Hemispheres due to Earth's rotation?

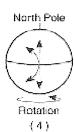




(1)







**9.** At which location will the highest altitude of the star *Polaris* be observed?

1. Equator

3. Arctic Circle

2. Tropic of Cancer

4. central New York State

10. The planetary winds in Earth's Northern Hemisphere generally curve to the right due to Earth's

1. orbit around the Sun

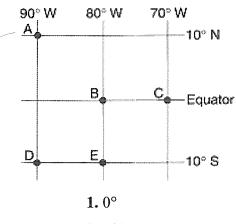
3. magnetic field

2. spin on its axis

4. force of gravity

11. Base your answer on the map (see image), which shows the latitude and longitude of five observers, A, B, C, D, and E, on Earth.

What is the altitude of *Polaris* (the North Star) above the northern horizon for observer A?



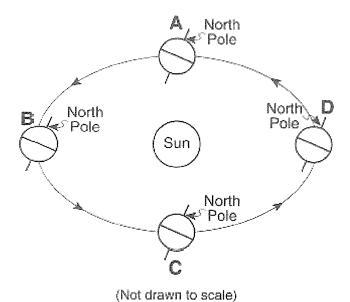
3.80°

2.10°

**4.** 90°

**12.** Base your answer on the accompanying diagram, which represents an exaggerated view of Earth revolving around the Sun. Letters *A*, *B*, *C*, and *D* represent Earth's location in its orbit on the first day of each of the four seasons.

Which observation provides the best evidence that Earth revolves around the Sun?



- 1. Stars seen from Earth appear to circle Polaris.
- 2. Earth's planetary winds are deflected by the Coriolis effect.
- 3. The change from high ocean tide to low ocean tide is a repeating pattern.
- 4. Different star constellations are seen from Earth at different times of the year.
- 13. Which observation provides the best evidence that Earth rotates?
  - 1. The position of the planets among the stars changes during the year.
  - 2. The location of the constellations in relationship to Polaris changes from month swinging pendulum changes during the to month.
- 3. The length of the shadow cast by a flagpole at noontime changes from season to season.
  - **4.** The direction of swing of a freely day.