

Name: _____

Date: _____

1. The length of daylight changes as the seasons change during the year. What causes these changes in daylight?

- A. Earth's tilt on its axis
- B. the Sun's tilt on its axis
- C. Earth spinning on its axis
- D. the Sun spinning on its axis

2. In Alaska, there are fewer hours of daylight in the winter than in the summer.

Which statement *best* explains why this difference occurs?

- A. The Sun burns hotter in the summer.
- B. The Sun moves below the horizon in the summer.
- C. The Northern Hemisphere is closer to the Sun in the winter.
- D. The Northern Hemisphere is tilted away from the Sun in the winter.

3. When and where would the number of daylight hours each day be *greatest*?

- A. during the winter near the equator
- B. during the summer near the equator
- C. during the winter near the North Pole
- D. during the summer near the North Pole

4. The Earth in the Solar System

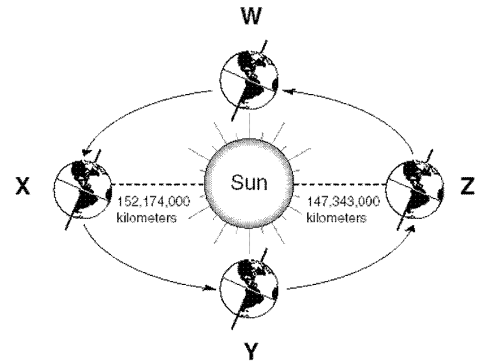


Diagram not drawn to scale.

The Earth is tilted $23\frac{1}{2}$ degrees on its axis. The direction of the Earth's tilt does not change throughout its orbit.

At which position of Earth is it summer in the northern hemisphere?

- A. W
- B. X
- C. Y
- D. Z

5. Summer is warmer than other seasons in the Northern Hemisphere because

- A. Earth is closer to the Sun.
- B. rays of sunlight are more direct.
- C. the Moon blocks fewer of the Sun's warming rays.
- D. more wind tends to come from warm areas near the equator.

6. Approximately how long does Earth take to complete its orbit around the Sun?

- A. one day
- B. one month
- C. one year
- D. one century

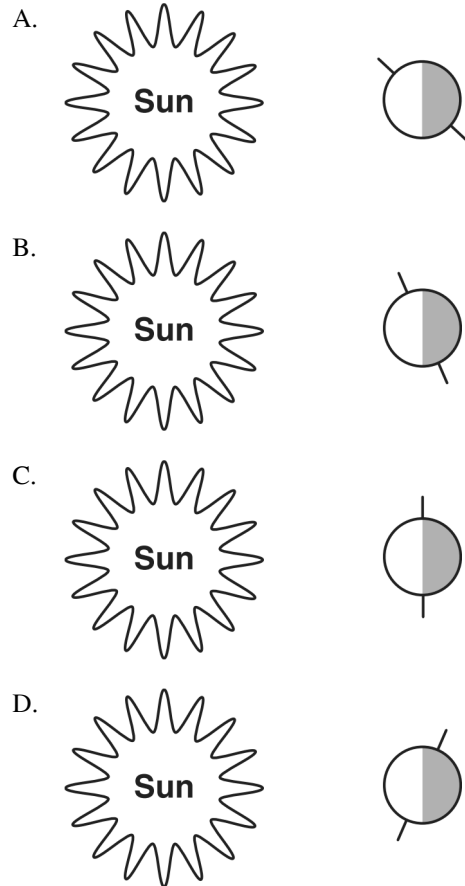
7. The diagram below shows the relative positions of Earth and the Sun at a certain time of year.



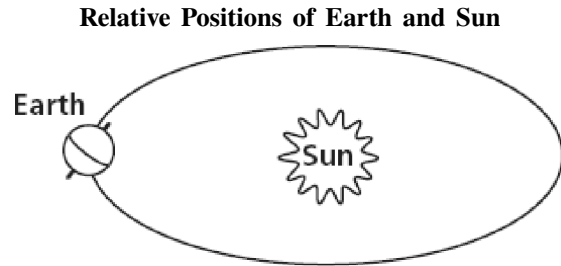
Based on the diagram, which season is occurring in the Southern Hemisphere of Earth?

- A. winter B. spring
 C. summer D. fall
8. The Sun appears to move across the sky each day, rising in the east and setting in the west. What causes this apparent motion?
- A. the rotation of Earth on its axis
 B. the revolution of the Sun around Earth
 C. the Earth's distance from the Sun
 D. the properties of Earth's atmosphere

9. The diagrams below show the tilt of a planet's axis relative to a star it is orbiting. This planet has an orbit that is similar to Earth's. In which diagram does the planet have no seasons?



10. The following diagram shows the relative positions of Earth and the sun at a particular time of year.



Which of these describes the length of day and night in the Northern and Southern Hemispheres at this time of year?

- A. Both hemispheres: Days are longer than nights.
- B. Both hemispheres: Days are shorter than nights.
- C. Northern Hemisphere: Days are shorter than nights. Southern Hemisphere: Days are longer than nights.
- D. Northern Hemisphere: Days are longer than nights. Southern Hemisphere: Days are shorter than nights.