7A Quiz



At which latitude can the sun be visible for 24 hours straight in June?

- A. Arctic Circle
- B. Tropic of Cancer
- C. Equator
- D. Tropic of Capricorn
- 2. Which best explains why summer days in Texas are most likely hotter than winter days?
 - F. The Earth's northern axis is tilted toward the Sun.
 - G. There is an increase in sunspots during summer months.
 - H. The Sun gives off more energy during the summer months.
 - J. The elliptical shape of the Earth's orbit moves it closer to the sun.

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The position of Earth relative to the sun's rays in the diagram above shows that it is -

- A. summer throughout the Northern Hemisphere
- B. daylight throughout the Northern Hemisphere
- C. summer throughout the Southern Hemisphere
- D. daylight throughout the Southern Hemisphere
- 4 Look at the diagrams below. They show the tilt of Earth in relation to the sun during two different times of year.



What happens in the hemisphere that is tilted toward the sun?

- F. The days are longer, and the temperatures are colder.
- G. The days are shorter, and the temperatures are colder.
- H. The days are longer, and the temperatures are warmer.



A concept modeled in the diagram above is-

- A. Day and night are caused by Earth's revolution.
- B. The Earth's tilt greatly affects day and night.
- C. The distance between the Sun and Earth has no affect on seasons.
- D. The Sun moves closer to the Earth when the northern hemisphere is experiencing winter.

6. Seasons can be characterized by the quantity of direct, indirect or lack of radiation from the Sun on any specific latitude on Earth. Areas that have a greater length of time of direct sunlight would experience longer daylight hours each day. An area that experiences shorter daylight hours or no daylight would have less direct radiation striking it. Typically, when an area has longer daylight hours, it would reflect the season of summer. Shorter daylight hours would indicate winter.

If a student was researching the seasonal amount of radiation at specific latitudes, they could record the data reflecting the amount of daylight hours for each month of the year. This would be a good indicator of the season at a given time of year for either hemisphere.

Which graph would be the best indicator that an area found at 65 degrees north latitude would be experiencing the season of summer?



- 7. Which of the following statements best explains why the Northern Hemisphere is warmer in July?
 - A. The Sun's rays are more direct on the Northern Hemisphere.
 - B. The Northern Hemisphere is closer to the Sun in the summer.
 - C. In July, the greenhouse effect increases in the Northern Hemisphere.
 - D. During this month, the warm ocean currents flow northward from the tropics.



Earth would not have seasons if it -

- F. no longer tilted on its axis
- G. stopped rotating on its axis
- H. took an additional month to orbit the sun
- J. revolved around the sun in the opposite direction