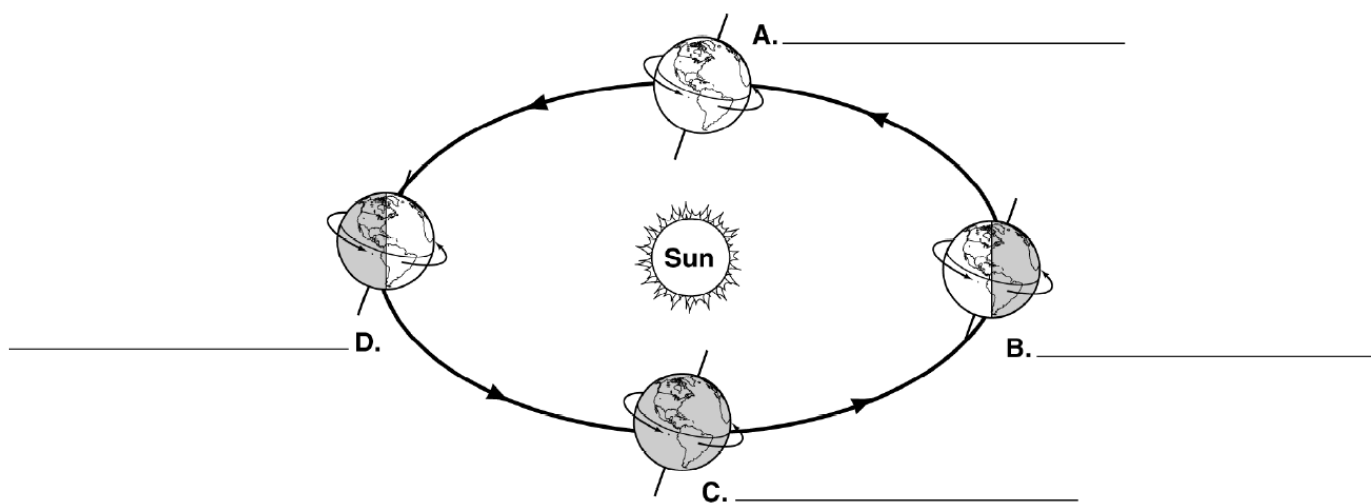
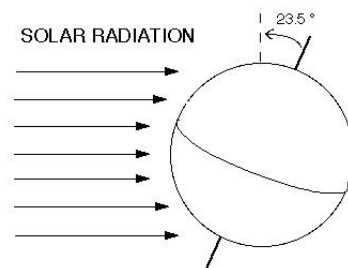
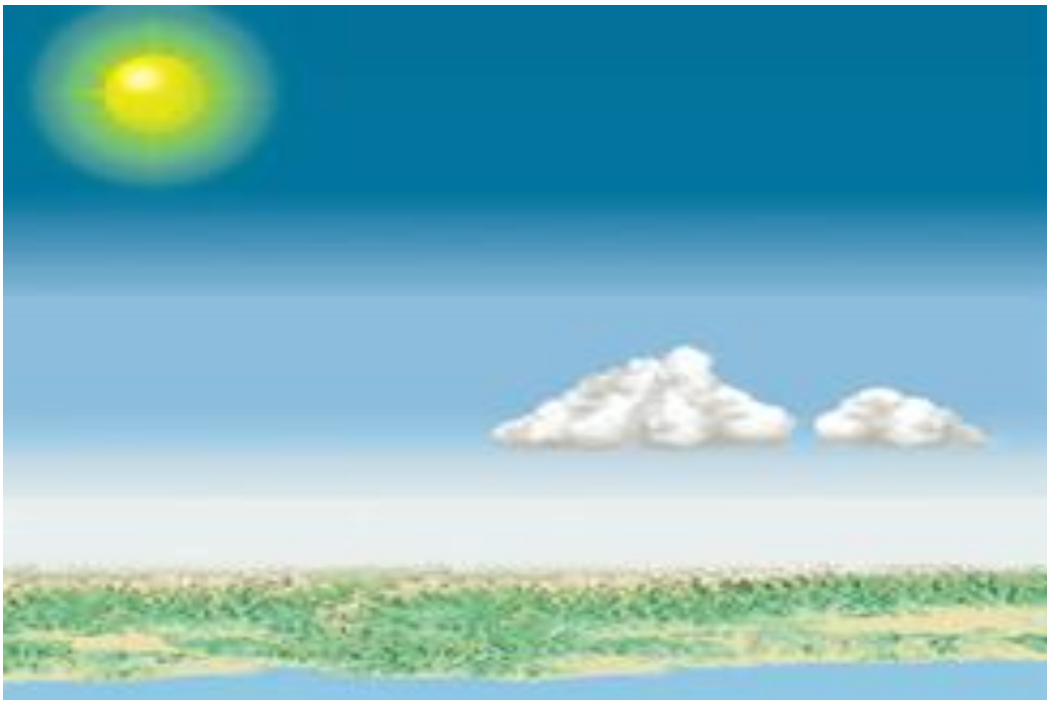


17.1: EARTH'S SEASONS

Earth's Motions

Earth's Seasons





Determining Hours of Daylight

The illustrations show the length of day at every 10° of latitude for the winter and summer solstices in the northern hemisphere. On each figure, begin at the equator, which has daylight hours of 12 hours and 0 minutes, and label every 10 degrees north and south of the equator to the 60° latitude north and south. From this latitude to the poles, the daylight hours remain the same. Use the figures to help you answer the questions.

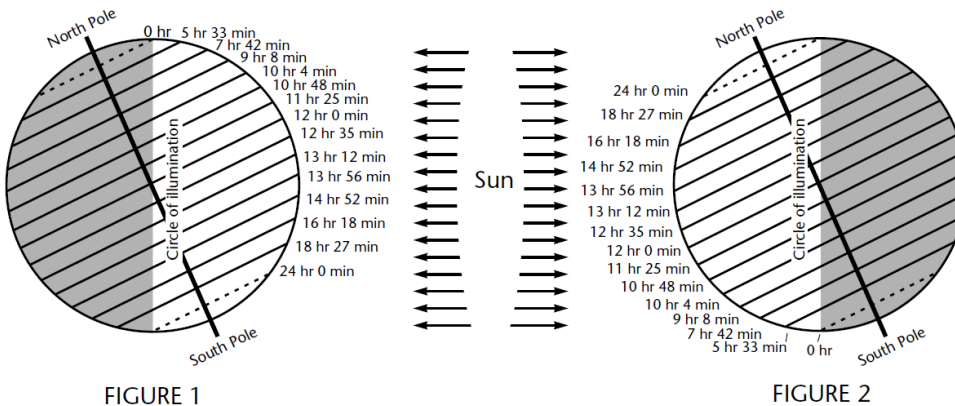


FIGURE 1

FIGURE 2

1. Which figure shows the summer solstice for the northern hemisphere? How do you know?

2. If you lived at 50° north latitude, how many hours of daylight would you have during the summer solstice? During the winter solstice? _____

3. If the figures were used to show the summer and winter solstices in the southern hemisphere, which figure would show the summer solstice in the southern hemisphere? How do you know? _____

4. If you lived at the north pole, how many daylight hours would you have at the summer solstice? At the winter solstice? _____

What causes the seasons?

Lesson Review

Write *true* if the statement is true. If the statement is false, change the underlined term to make the statement true.

- _____ 1. When the North Pole is tilted toward the Sun, the Northern Hemisphere has fewer daylight hours.
- _____ 2. During winter, the combination of fewer daylight hours and less direct rays of the Sun causes lower temperatures.
- _____ 3. When the Northern Hemisphere is tilted toward the Sun, it has summer.
- _____ 4. The seasons are caused in part by the tilt of Earth's axis.
- _____ 5. During summer, the Sun's rays are less direct.
- _____ 6. Direct rays produce more heat than indirect rays.
- _____ 7. The seasons in the Northern Hemisphere and the Southern Hemisphere are the same.