## The Earth Spins

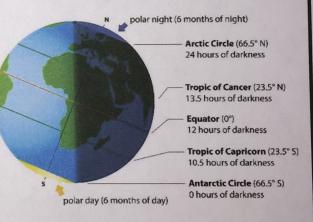
It is easy to mix up the terms "rotate" and "revolve," but the two are very different. Revolving means to go around. The Earth revolves around the Sun, creating our seasons. Rotating means to spin. The Earth rotates on its axis, creating day and night. When our side of the Earth is facing the sun, we are experiencing day. When the Earth rotates away from the Sun, we experience night. It takes about 24 hours for the Earth to make one full rotation. We can't feel the Earth spinning, although sometimes it feels like we can when we look up at the sky and watch the clouds.

Earth rotates counter-clockwise. This rotation is why the Sun appears to rise in the east and set in the west. Also, because the Earth rotates and revolves at the same time, the Sun is in a different place in the sky during the seasons. In the summer, the Sun is high over our heads, while in the winter, the sun seems to be lower in the sky. But, the Sun is not actually moving in the sky.

The Earth's tilt and revolution affect the length of our days and nights. In the summer, when we are tilted toward the Sun, our days are longer than our nights. But in the winter, when we are tilted away from the sun, our nights are longer than our days. Unless you live along the equator, you will not have 12 hours of day and 12 hours of night.

There are some places on Earth that have day and night for six months! In the summer and winter at the poles, there is polar night and polar day, also called midnight sun. At the North Pole, from early October until early March, there is no sunlight. During this same time at the South Pole, the sun

## winter solstice (December 21)



## summer solstice (June 21)

